

REPORT OF THE DEMAND-SIDE RESOURCES & SMART GRID COMMITTEE

This report summarizes a selection of legislative and regulatory developments at the federal and state level in the areas of Smart Grid and demand-side resources during 2012.*

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I. SMART GRID DEVELOPMENTS

A. Federal Activity

1. FERC

On February 14, 2012, FERC Chair Jon Wellinghoff wrote letters to the Congressional Appropriations Committees providing “a second statement of actions taken in response to the U.S. Government Accountability Office (GAO) report ELECTRICITY GRID MODERNIZATION: Progress Being Made on Cybersecurity Guidelines, but Key Challenges Remain to be Addressed (GAO-

* The following Committee members contributed to this report: Contributing editor – H. Russell Frisby, Jr.; Contributors: Florence Davis, Linda Evers, Peter Floyd, Jennifer J. Kubicek and Jamie Blackburn.

11-117).”¹ The Chairman noted that since the FERC’s “initial statement of action prepared in March [2011]” the agency had “issued an order declining to institute a rulemaking proceeding to adopt specific interoperability standards.”² “Applying the ‘sufficient consensus’ test specified in the relevant statute, the Commission determined that there was insufficient consensus to institute such a proceeding at that time.”³ He noted that “[since] then, Commission staff have continued meeting with state regulators and other stakeholders to discuss the interoperability framework process.”⁴

2. Department of Energy (DOE)

The Federal Smart Grid Task Force, led by the DOE’s Office of Electricity Delivery and Energy Reliability, announced that it would convene a stakeholder process to develop and implement enforceable privacy policies based on the White House’s Consumer Privacy Bill of Rights Report, which was released in February 2012.⁵ The proposed Smart Grid data privacy code would apply solely to utilities and their customers.⁶

The White House Report set forth a Consumer Privacy Bill of Rights based on the following principles:

- Individual Control: Consumers have a right to exercise control over what personal data companies collect from them and how they use it.
- Transparency: Consumers have a right to easily understandable and accessible information about privacy and security practices.
- Respect for Context: Consumers have a right to expect that companies will collect, use, and disclose personal data in ways that are consistent with the context in which consumers provide the data.
- Security: Consumers have a right to secure and responsible handling of personal data.
- Access and Accuracy: Consumers have a right to access and correct personal data in usable formats, in a manner that is appropriate to the sensitivity of the data and the risk of adverse consequences to consumers if the data is inaccurate.

1. Letter from Jon Wellinghoff, Chairman, FERC, to Hon. Harold Rogers, Chairman, Comm. on Appropriations, U.S. H.R. & Hon. Norman D. Dicks, Ranking Member, Comm. on Appropriations, U.S. H.R. (Feb. 14, 2012), *available at* <http://www.ferc.gov/industries/electric/indus-act/smart-grid/rogers-dicks.pdf>; Letter from Jon Wellinghoff, Chairman, FERC, to Hon. Daniel K. Inouye, Chairman, Comm. on Appropriations, U.S. S. & Hon. Thad Cochran, Ranking Member, Comm. on Appropriations, U.S. S. (Feb. 14, 2012), *available at* <http://www.ferc.gov/industries/electric/indus-act/smart-grid/inouye-cochran.pdf> [collectively hereinafter Wellinghoff Letters to Congress].

2. Wellinghoff Letters to Congress, *supra* note 1, at 2.

3. *Id.*

4. *Id.*

5. WHITE HOUSE, EXEC. OFFICE OF THE PRESIDENT, CONSUMER DATA PRIVACY IN A NETWORKED WORLD: A FRAMEWORK FOR PROTECTING PRIVACY AND PROMOTING INNOVATION IN THE GLOBAL DIGITAL ECONOMY (Feb. 2012) [hereinafter WHITE HOUSE REPORT], *available at* <http://www.whitehouse.gov/sites/default/files/privacy-final.pdf>. For information on the progress of the stakeholder process, see *DOE Addresses Privacy for Data Enabled by Smart Grid Technologies: Convenes Multistakeholder Process to Develop Voluntary Code of Conduct*, SMARTGRID.GOV, <http://www.smartgrid.gov/privacy> (last visited Mar. 21, 2013).

6. *DOE Addresses Privacy for Data Enabled by Smart Grid Technologies: Convenes Multistakeholder Process to Develop Voluntary Code of Conduct*, *supra* note 5.

- Focused Collection: Consumers have a right to reasonable limits on the personal data that companies collect and retain.
- Accountability: Consumers have a right to have personal data handled by companies with appropriate measures in place to assure they adhere to the Consumer Privacy Bill of Rights.⁷

The White House Report proposes that “individual companies, industry groups, privacy advocates, consumer groups, . . . academics,” and state and federal officials “participate in multistakeholder processes to develop [specific industry] codes of conduct that implement these general principles.”⁸ Once a company has signed on to a code of conduct, its commitment “will become enforceable under Section 5 of the FTC Act.”⁹ Moreover, even those companies which had not signed might be subject to FTC enforcement action under existing law for “[failing] to use reasonable security measures to protect personal information about consumers.”¹⁰

The Stakeholder process is to begin after January 1, 2013.¹¹

3. FCC

In its *Universal Service Fund Contribution Methodology* Further Notice of Proposed Rulemaking (Notice), the Federal Communications Commission (FCC) raised the question of whether Smart Meter/Smart Grid “Machine-to-Machine Connections” should continue to be exempted from being assessed Universal Service Fund (USF) fees.¹² The USF contribution system pays for rural Telco subsidies and other USF programs such as the Schools and Libraries Fund and the Lifeline program.¹³ In the Notice, the FCC states that it is “[seeking] comment on ways to reform the USF contribution system in an effort to promote efficiency, fairness and sustainability.”¹⁴ Among the questions on which the FCC focuses are “who should contribute” and “how contributions should be assessed.”¹⁵

The FCC is looking for ways to spread the USF Fund’s \$8.1 billion contribution costs beyond the current interstate telecommunications provider contributors.¹⁶ The long-term viability of the USF Fund is in question because assessments are based on these companies’ sharply declining long distance voice revenues.¹⁷

7. WHITE HOUSE REPORT, *supra* note 5, at 1.

8. *Id.* at 23.

9. *Id.* at 27.

10. *Id.* at 29.

11. *DOE Addresses Privacy for Data Enabled by Smart Grid Technologies: Convenes Multistakeholder Process to Develop Voluntary Code of Conduct*, *supra* note 5.

12. *In re* Universal Serv. Contribution Methodology: A Nat’l Broadband Plan For Our Future, Further Notice of Proposed Rulemaking, WC Docket No. 06-122, FCC 12-46, ¶¶ 87-91 (Apr. 30, 2012) [hereinafter Universal Notice]; Universal Service Contribution Methodology: A National Broadband Plan for Our Future, 77 Fed. Reg. 33,896, 33,917 (proposed June 7, 2012) (to be codified at 47 C.F.R. pt. 54).

13. *Universal Service*, FED. COMM’NS COMM’N (Jan. 7, 2013), http://transition.fcc.gov/wcb/tapd/universal_service.

14. Universal Notice, *supra* note 12, ¶ 5.

15. *Id.*

16. *Id.* ¶¶ 20, 28-30.

17. *Id.* ¶¶ 19-21.

In its attempt to determine who should contribute to universal service, the FCC is considering replacing its current list of assessed services with an alternative approach “that would specify which ‘providers of interstate telecommunications’ must contribute, without enumerating the specific services subject to assessment.”¹⁸ Specifically, the FCC proposes to adopt the following rule: “Any interstate information service or interstate telecommunications is assessable if the provider also provides the transmission (wired or wireless), directly or indirectly through an affiliate, to end users.”¹⁹

Since this proposed rule is intended to encompass only entities that provide transmission to their users, whether using their own facilities or by utilizing transmission service purchased from other entities, the FCC asks whether it should exclude “machine-to-machine communications such as smart meter/smart grids, remote health monitoring, or remote home security systems.”²⁰

In examining the question of how USF fees should be assessed, the FCC asks whether, in the event that it does not exempt machine-to-machine connections, they should “be assessed at the same level, or flat rate, as other connections” (e.g., \$1) or “[i]f not, how [they should] be assessed.”²¹

Comments have been filed. As of the date of this report the FCC had not taken any action.

B. State Activities

1. The Northeast

i. Connecticut

In October 2012, the Connecticut Department of Energy and Environmental Protection (CT DEEP) issued its draft 2012 Comprehensive Energy Strategy for Connecticut (Draft Strategy).²² The Draft Strategy calls for an expanded commitment to incentivize the state’s utilities to meet efficiency goals through decoupling and performance based rates of return and for new building efficiency standards.²³ The Draft Strategy also recommends that Connecticut invest in Smart Grid technologies that would allow residents to manage costs by lowering peak demand.²⁴

In June 2012, Connecticut passed SB 25.²⁵ The bill requires the Clean Energy Finance and Investment Authority (CEFIA) to “establish a renewable energy and efficient energy finance program” to “make grants, investments, loans or other forms of financial assistance . . . for the purchase and installation of (1) renewable energy sources, including solar energy, geothermal energy and

18. *Id.* ¶ 74.

19. *Id.* ¶ 75.

20. *Id.* ¶ 87.

21. *Id.* ¶ 252.

22. CONN. DEP’T OF ENERGY AND ENVTL. PROT., 2012 COMPREHENSIVE ENERGY STRATEGY FOR CONNECTICUT, DRAFT FOR PUBLIC COMMENT (Oct. 5, 2012), available at http://www.ct.gov/deep/lib/deep/energy/cep/deep_draft_connecticut_comprehensive_energy_strategy.pdf.

23. *Id.* at 2.

24. *Id.* at 84-85.

25. An Act Authorizing and Adjusting Bonds of the State for Capital Improvements, Transportation and Other Purposes, Pub. Act No. 12-189 (Conn. 2012).

fuel cells or other energy-efficient hydrogen-fueled energy, or (2) energy-efficient generation sources.”²⁶ It transfers an existing \$18 million bond authorization for the municipal grant program, which the Bond Commission never allocated, to the CEFA for the financing program.²⁷

Also in June 2012, Connecticut passed SB 23, a bill that addresses emergency preparedness of electric and gas utilities.²⁸ The bill directed CT DEEP to “establish a microgrid grant and loan pilot program to support local distributed energy generation for critical facilities.”²⁹ The grants and loans are to be used to assist with “the cost of design, engineering services and interconnection infrastructure for [microgrids]” in “small, medium and large municipalities.”³⁰

ii. Maine

In response to customers’ challenge of Central Maine Power’s (CMP) roll-out of mandatory Smart Meters, the Maine Public Utility Commission (MPUC) ordered CMP to allow customers to choose not to have wireless Smart Meters.³¹ CMP implemented a plan that allowed customers to opt-out, for a fee.³² Complainants then took their case to the Maine Supreme Court.³³ In July 2012, the Maine Supreme Court affirmed the validity of CMP’s Smart Meter opt-out program, but remanded the case for consideration of the health effects of the meters.³⁴

iii. Massachusetts

In August 2012, Massachusetts passed S. 2395, which includes a number of efficiency components.³⁵ The bill creates a new “energy policy review commission” to analyze further steps in energy efficiency and to explore other renewable energy sources.³⁶ The bill also establishes an energy efficiency rebate pilot program for the five largest gas and electric users in each service territory.³⁷

iv. New Hampshire

In June 2012, the legislature passed HB 1490, allowing the state to leave the Regional Greenhouse Gas Initiative (RGGI).³⁸ The bill also replaces the Greenhouse Gas Initiatives Reduction Fund with an Energy Efficiency Fund.³⁹

26. *Id.* § 36.

27. *Id.* § 38. This total does not include an additional \$50 million allocated for Department of the Navy and Department of Defense infrastructure projects.

28. An Act Enhancing Emergency Preparedness and Response, Pub. Act No. 12-148 (Conn. 2012).

29. *Id.* § 7.

30. *Id.*

31. *Ed Friedman v. Pub. Utils. Comm’n*, 48 A.3d 794, 796 (Me. 2012).

32. *Id.*

33. *Id.* at 797.

34. *Id.* at 802.

35. S. 2395, 187th Gen. Ct. (Mass. 2012).

36. *Id.* § 41.

37. *Id.* § 5.

38. H.B. 1490, Gen. Ct. § 281:17 (N.H. 2012).

39. *Id.* § 281:4.

Furthermore, under HB 1490, RGGI auction proceeds would be directed both towards energy efficiency programs and as rebates to ratepayers.⁴⁰

v. New York

In August 2012, New York City completed its first year of benchmarking for the Greener, Greater Buildings Plan.⁴¹ Local Law 84, one of four laws passed under the plan, requires that large commercial and government buildings be benchmarked, using EPA's Energy Star Portfolio Manager tool, with the information publicly available.⁴²

In December 2012, Governor Cuomo issued an Executive Order "directing state agencies and authorities to improve the energy efficiency of state buildings" by at least 20% by April 1, 2020.⁴³ The Governor's office called the plan "one of the most ambitious initiatives in the nation that will save millions of dollars for taxpayers and create thousands of jobs while significantly reducing greenhouse gas emissions."⁴⁴ "The Governor [simultaneously] launched 'Build Smart NY,' a plan to strategically implement the Executive Order by accelerating priority improvements in energy performance."⁴⁵

vi. Rhode Island

In May 2012, the Rhode Island legislature passed H. 8233, a bill that requires local electric utilities to provide greater support for combined heat and power (CHP) projects "at commercial, institutional, municipal, and industrial facilities."⁴⁶

vii. Vermont

In May 2012, the Vermont legislature passed renewable energy projects legislation that includes a provision prohibiting utilities from charging fees to customers who choose not to have Smart Meters installed in their homes or businesses.⁴⁷ The bill, S. 214, makes Vermont the first state to allow for a no-fee opt-out on Smart Meters, and was pushed by a group of citizens concerned about the effects of Smart Meters.⁴⁸

40. *Id.*

41. LAURIE KERR ET AL., N.Y. CITY MAYOR'S OFFICE OF LONG-TERM PLANNING AND SUSTAINABILITY, N.Y. CITY LOCAL LAW 84 BENCHMARKING REP. 7 (Aug. 2012), available at http://www.nyc.gov/html/gbee/downloads/pdf/nyc_ll84_benchmarking_report_2012.pdf.

42. *Id.* at 7-9.

43. Governor Andrew M. Cuomo, Exec. Order No. 88 (N.Y. Dec. 28, 2012), available at <http://www.governor.ny.gov/executiveorder/88>.

44. Press Release, State of N.Y. Office of the Governor, Governor Cuomo Launches "Build Smart NY" Initiative with Executive Order (Dec. 28, 2012), <http://www.governor.ny.gov/press/12282012-smartny>.

45. *Id.*

46. H.B. 8233, Gen. Assemb. (R.I. 2012).

47. An Act Relating to the Vermont Energy Act of 2012, S. 214, Act No. 170, § 15 (Vt. 2012).

48. Dave Gram, *With Growing Opposition to 'Smart Meters,' Vt. Favors Free Opt-Out*, BOSTON GLOBE (May 14, 2012), <http://www.bostonglobe.com/metro/2012/05/13/vermont-utilities-see-growing-smart-meter-opposition/ghETkZMHPV1UPFvZEK52EI/story.html>.

2. South and West

i. California

On March 20, 2012, the California Public Utilities Commission (CPUC) issued a decision, in Rulemaking 08012-009, adopting nineteen metrics to measure the Smart Grid deployment of Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company.⁴⁹ The companies are to provide data on a quarterly basis and the staff and the parties are to participate in “four Technical Working Groups to revise consensus metrics, to develop cyber-security metrics, to develop environmental measures and to develop four Smart Grid goals.”⁵⁰ A number of metrics were chosen in each of the following categories: Customer/AMI, Plug-in Electric Vehicles, Storage, and Grid Operations.⁵¹

On September 27, 2012, the CPUC adopted a Resolution directing the state’s investor-owned utilities (IOUs) to begin making the Smart Meters’ built-in “[Home Area Network (HAN)] functionality and benefits generally accessible to customers on a consistent, statewide basis, and [to enable] a third party market that allows customers to utilize HAN devices of their own choice, independently of the Utility, to monitor their energy consumption.”⁵²

ii. Florida

Florida HB 5001 became effective on July 1, 2012.⁵³ This appropriations bill allocates over \$650,000 of the federal stimulus money provided by the American Recovery and Reinvestment Act of 2009 to Smart Grid technology,⁵⁴ including strengthening and expanding Florida’s energy assurance capabilities and planning for Smart Grid applications and resiliency.⁵⁵ The Florida Office of Energy is tasked with dispersing the funds through grants awarded for specific energy programs or projects.⁵⁶

iii. Georgia

Perhaps more a “non-development” than a development, it is notable that while SB 459 passed the Senate on March 7, 2012, it thereafter moved to the House Energy Subcommittee where it lacked the necessary votes to move forward and is now considered dead.⁵⁷ If SB 459 had passed, the bill would have allowed consumers to opt-out “of any investor owned electric light and

49. Proposed Decision Adopting Metrics to Measure the Smart Grid Deployments of Pac. Gas and Elec. Co., S. Cal. Edison Co. and San Diego Gas & Elec. Co., R08-12-009 (Cal. P.U.C. Mar. 20, 2012).

50. *Id.* at 39.

51. *Id.* at 6-8.

52. Resolution Directing Pac. Gas and Elec., S. Cal. Edison, and San Diego Gas & Elec. Co. to Revise their Respective “Home Area Network (HAN) Implementation Plan” Filings, E-4527, at 10 (Cal. P.U.C. Sept. 27, 2012).

53. H.B. 5001, 2012 Leg., Reg. Sess. (Fla.).

54. *Id.* § 5 (1422).

55. RON RUSSO, OFFICE OF INSPECTOR GEN., OPERATIONAL AUDIT OF THE FLORIDA OFFICE OF ENERGY, NO. IA 1112-02, at 15 (July 2012).

56. *Id.* at 11.

57. *Status History*, S.B. 459, 151st Gen. Assemb., Reg. Sess. (Ga. 2012), <http://www.legis.ga.gov/Legislation/en-US/display/20112012/SB/459>.

power [company's]" Smart Meter program and elect not to use Smart Meters.⁵⁸ The bill would have also prevented the Georgia PSC from creating and/or regulating any "surcharge for consumers who made such an election."⁵⁹

Georgia Power has completed the conversion of its 2.4 million customers to Smart Meters.⁶⁰ "This six-year initiative to enhance its metering service began in January 2007."⁶¹ Several municipal and electric membership utilities have completed Smart Grid/Meter projects as of 2012, including a first of its kind "beta" smart grid project by the City of Norcross, which has outsourced its metering and certain other operations to ECG Smart Grid, LLC and General Electric Company through a cloud based system designed to make Smart Grid technology cost effective for small-to-medium sized utility systems, especially those with multiple utilities (e.g., electric, gas, water, sewerage, and telecom).⁶²

iv. Kentucky

The Kentucky Public Service Commission (KPSC) has once again initiated "an administrative proceeding to consider the implementation of Smart Grid and Smart Meter technologies and time-of-use pricing."⁶³ In the Order, the KPSC specified that the purpose of the proceeding would "be to address all aspects of a Smart Grid system from hardware and software issues to reliability improvement, cost recovery issues, and dynamic pricing."⁶⁴ "All of the jurisdictional electric utilities were made parties to" the proceeding, which is ongoing.⁶⁵

The KPSC had twice before considered the implementation of Smart Grid technologies, first in 2006, and later in 2011.⁶⁶ Specifically, the KPSC had considered adopting federal Smart Grid standards set forth in the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007.⁶⁷ While the KPSC did adopt some time-of-use pricing standards in connection with the 2006 proceeding, it did not adopt the federal Smart Grid standards that it examined on either occasion.⁶⁸

58. S.B. 459, 151st Gen. Assemb., Reg. Sess. (Ga. 2012).

59. *Id.*

60. *Smart Meter*, GEORGIA POWER, <http://www.georgiapower.com/residential/products-programs/smart-meter/home.cshhtml?WT.svl=sm1> (last visited Feb. 10, 2013).

61. *Id.*

62. Press Release, Gen. Elec., GE's Grid IQ 'Solutions as a Service' is Key Internet Technology Helping Utilities to Develop Modern Grid (Nov. 29, 2012), <http://www.genewscenter.com/Press-Releases/GE-s-Grid-IQ-Solutions-as-a-Service-is-Key-Internet-Technology-Helping-Utilities-to-Develop-Modern-Grid-3cb1.aspx>.

63. *In re* Consideration of the Implementation of Smart Grid and Smart Meter Technologies, Case No. 2012-00428 (Ky. P.U.C. Oct. 1, 2012).

64. *Id.* at 1-2.

65. *Id.* at 1, n.1.

66. *Id.* at 2, 5.

67. *Id.* at 2, 4.

68. *Id.* at 3.

3. State Smart Meter Opt-Out Policies

According to an Edison Foundation Report,⁶⁹ thirty-six million Smart Meters⁷⁰ were deployed as of May 2012, and more than forty-three million Smart Meters were projected to be deployed by December 2012.⁷¹ Most of the meters installed by the utilities received little customer resistance.⁷² However, the demands of a small but very vocal coalition of customers have made a significant impact on regulatory policy. Despite the benefits of Smart Meters, the grass roots efforts of those opposing the meters have spread across the United States, leaving a trail of opt-out policies. Here is an overview of some of the interesting cases from 2012:

i. California

The CPUC modified Southern California Edison (SCE), San Diego Gas & Electric (SDG&E), and Pacific Gas and Electric's (PG&E) advanced metering programs to include an option for those residential customers who do not wish to have a wireless Smart Meter installed at their location.⁷³ Customers participating in the opt-out option will "be assessed an initial fee of \$75 and a monthly charge of \$10" thereafter.⁷⁴ Customers enrolled in the CPUC's low income program (California Alternate Rates for Energy (CARE)) electing to opt-out will "be assessed an initial fee of \$10 and a monthly charge of \$5."⁷⁵ The CPUC cautioned that the initial fee and monthly charge are interim to allow

69. INSTITUTE FOR ELEC. EFFICIENCY, UTILITY-SCALE SMART METER DEPLOYMENTS, PLANS, & PROPOSALS 1 (May 2012) [hereinafter IEE REPORT], available at http://www.edisonfoundation.net/iee/Documents/IEE_SmartMeterRollouts_0512.pdf.

70. Smart Meters are "digital electric [meters] that [measure] and [record] usage data hourly, or more frequently, and [allow] for two-way communications between the utility and the customer." *Id.* These meters can communicate with devices behind the customer's meter including a Home Area Network (HAN) and represent one component of the Advanced Metering infrastructure (AMI). ELEC. POWER RESEARCH INST., ADVANCED METERING INFRASTRUCTURE (AMI) 1 (Feb. 2007), available at <http://www.ferc.gov/eventcalendar/Files/20070423091846-EPRI%20-%20Advanced%20Metering.pdf>. "Smart Meters enable a utility to provide customers with detailed information about their energy usage at different times of the day, which in turn enables customers to manage their energy use more proactively." *The Benefits of Smart Meters*, CAL. P.U.C. (Mar. 30, 2010), <http://www.cpuc.ca.gov/PUC/energy/Demand+Response/benefits>.

71. IEE REPORT, *supra* note 69, at 1 fig.1. This figure represents "the number of smart meters that are funded through the Smart Grid Investment Grant (SGIG) program that are installed and operational." *Advanced Metering Infrastructure and Customer Systems*, SMARTGRID.GOV (Jan. 7, 2013), http://sgstage.nrel.gov/recovery_act/deployment_status/ami_and_customer_systems. Some smart meters may have been deployed outside of the SGIG program. As a result, the total number of operational smart meters may be much higher. *Id.*

72. See, e.g., Christina Nunez, *Who's Watching? Privacy Concerns Persist as Smart Meters Roll Out*, NAT'L GEOGRAPHIC NEWS (Dec. 12, 2012), <http://news.nationalgeographic.com/news/energy/2012/12/121212-smart-meter-privacy/>. For example, in Maine, Central Main Power has 550,000 customers of which nineteen filed a joint formal complaint about Smart Meters. *Ed Friedman v. Pub. Utils. Comm'n*, 48 A.3d 794 (Me. 2012).

73. Decision Modifying Decision 08-09-039 and Adopting an Opt-Out Program for S. Cal. Edison Co.'s Edison Smartconnect Program, Decision No. D12-04-018 (Cal. P.U.C. Apr. 19, 2012); Decision Modifying Decision 07-04-043 and Adopting an Opt-Out Program for San Diego Gas & Elec. Co., Decision No. D12-04-019 (Cal. P.U.C. Apr. 19, 2012); Decision Modifying Pac. Gas and Elec. Co.'s Smartmeter Program to Include an Opt-Out Option, Decision No. D12-02-014 (Cal. P.U.C. Feb. 1, 2012) [collectively hereinafter Cal P.U.C. Opt Out Decisions].

74. Cal P.U.C. Opt Out Decisions, *supra* note 73, at 2-3.

75. *Id.* at 3.

residential customers to begin selecting the opt-out option immediately.⁷⁶ The costs are subject to adjustment upon conclusion of a second phase where issues concerning the actual costs associated with offering an analog opt-out option will be addressed.⁷⁷ The opt-out option is for residential customers only; the CPUC declined a request to allow commercial customers an opt-out option.⁷⁸ The CPUC explains in all three decisions that the opt-out option is a service:

This opt-out option is a service because the standard for metering has been transitioned throughout the country and for the most part the world from the older technology, analog meters, to today's technology, smart meters. In this decision we are not reversing that transition, however, we do approve an option for those customers who, for whatever reason, would prefer to not have a wireless smart meter. . . . As a result, this decision further finds that customers electing the opt-out option shall be responsible for costs associated with providing the option.⁷⁹

In June 2012, the CPUC issued a ruling to begin phase two and raised two additional unique issues in addition to the usual costs and cost allocation issues associated with requiring the utilities to offer an analog opt-out option.⁸⁰ Stakeholders were asked to comment on the appropriateness of the opt-out fees in light of the Americans with Disabilities Act and whether the scope of the opt-out should be expanded to provide a community wide opt-out option.⁸¹ Evidentiary hearings were held in November 2012 and five public participation hearings were held throughout December 2012.⁸² A decision is expected in May 2013.⁸³

ii. Maine

Despite being the first Commission to adopt an opt-out policy, on July 12, 2012, the Maine Supreme Judicial Court told the Maine Public Utility Commission (MPUC) that it failed to adequately resolve the health and safety concerns raised regarding Smart Meters.⁸⁴ The decision stems from an appeal taken by customers of Central Maine Power (CMP) over a dismissed complaint regarding the MPUC's opt-out order.⁸⁵ The complaint requested a new investigation due to "new and important evidence specifically addressing non-ionizing radiation of the type emitted by smart meters."⁸⁶ The MPUC concluded "the appropriate entity to consider potential RF health impacts is the [FCC] in consultation with the Food and Drug Administration" and therefore "[made] no determination on the merits of health, safety, privacy or security concerns"

76. *Id.*

77. *Id.*

78. Decision Modifying Decision 07-04-043 and Adopting an Opt-Out Program for San Diego Gas & Elec. Co., No. D11-03-015, at 17 (Cal. P.U.C. Apr. 19, 2012).

79. Cal P.U.C. Opt Out Decisions, *supra* note 73, at 2.

80. Assigned Commissioner's Ruling Amending Scope of Proceeding to Add a Second Phase, Proceeding Nos. A11-03-014, A11-03-015, A11-07-020, at 5-6 (Cal. P.U.C. June 8, 2012).

81. *Id.*

82. *Id.* at 8.

83. *Id.* at 9.

84. *Ed Friedman v. Pub. Utils. Comm'n*, 48 A.3d 794, 800-01 (Me. 2012).

85. *Id.* at 797 (internal quotations omitted).

86. *Id.* (internal quotations omitted).

regarding wireless Smart Meters.⁸⁷ The appellate court held that the MPUC erred in dismissing the complaint because it did not adequately resolve the health and safety concerns.⁸⁸ Without considering the health and safety issues, the court concluded the MPUC could not find the opt-out fee was not reasonable.⁸⁹ A scheduling order entered indicates hearings on the remand will take place in May 2013.⁹⁰

iii. New Hampshire

On June 7, 2012, Senate Bill 266 became law, providing New Hampshire with one of the most restrictive approaches to Smart Meter deployment.⁹¹ The bill amended RSA 374 to require that customers opt-in by providing written permission.⁹² The new RSA 374:62 provides in part:

- II. (a) No electric utility that sells or provides electricity within the state of New Hampshire shall install a smart meter gateway device on or in a person's home or business without the written consent of the person or persons who own the home or business.
- (b) An electric utility selling or providing electricity shall create a form that the person or persons who own the home or business must sign to opt-in to having a smart meter gateway device installed on or in his or her home or business.⁹³

The New Hampshire Public Utilities Commission (NHPUC) was provided with a quick opportunity to interpret the new law when it received a request by Ms. Wirth, a residential electric customer served by the New Hampshire Electric Cooperative (NHEC), to opt-out of the Smart Meter being installed by NHEC.⁹⁴ The request was denied because the NHPUC found that the meters installed by the NHEC are not subject to the opt-in requirements of RSA 374:62 and therefore not Smart Meter gateway devices as defined in the law.⁹⁵ “The statutory definition of a Smart Meter gateway device requires that the meter communicate with, monitor or control appliances, equipment or devices within the residence or business.”⁹⁶ Although the meters being installed by NHEC communicate wirelessly, they “cannot communicate with devices behind the

87. *Id.* at 799-800 (internal quotations omitted).

88. *Id.* at 800-01.

89. *Id.* at 800.

90. Procedural Order (Scheduling), *Ed Friedman, et al., Request for Comm'n Investigation Into Smart Meters and Smart Meter Opt-Out*, No. 2011-00262 (Me. P.U.C. Dec. 11, 2012).

91. S. 266, Gen. Ct. (N.H. 2012) (amending RSA 374:62).

92. *Id.* § 150:1.

93. *Id.*

94. Order No. 25,409, *New Hampshire Elec. Coop.*, No. DE 12-245, at 2 (N.H. P.U.C. Sept. 6, 2012).

95. *Id.* at 9.

RSA 374:62 defines a smart meter gateway device as follows: ‘any electric utility meter, electric utility meter component, electric utility load control device, or device ancillary to the electric utility meter, which is located at an end-user’s residence or business, and which serves as a communications gateway or portal to electrical appliances, electrical equipment, or electrical devices within the end-user’s residence or business, or which otherwise communicates with, monitors, or controls such electrical appliances, electrical equipment, or electrical devices.’

Id. (quoting N.H. REV. STAT. § 374:62(I)(a) (2012)).

96. *Id.* at 9.

customer meter.”⁹⁷ The NHPUC also held the meters met the FCC’s limits on exposure to radio frequency (RF) radiation.⁹⁸ The NHPUC then set out to determine whether or not to accept the FCC’s standard or adopt a separate RF standard for New Hampshire.⁹⁹ The NHPUC relied on case law regarding RF limits and the cell phone industry to ultimately conclude “that the FCC limits pre-empt a separate and potentially conflicting state standard.”¹⁰⁰

iv. Vermont

The Vermont Energy Act of 2012 became law on May 18, 2012.¹⁰¹ It covers many energy-related issues including updated renewable energy standards.¹⁰² It also requires an electric utility company to offer a free opt-out option, specifying that utilities must:

- (1) [Provide] prior written notice to the customer indicating that the meter will use radio or other wireless means for two-way communication between the meter and informing the customer of his or her rights . . . ;
- (2) [Allow] a customer to choose not to have a wireless smart meter installed, at no additional monthly or other charge; and
- (3) [Allow] a customer to require removal of a previously installed wireless smart meter for any reason and at an agreed-upon time without incurring any charge for the removal.¹⁰³

The issue regarding Smart Meters in Vermont is far from over. On December 13, 2012, the Vermont Public Service Department issued a request for proposal (RFP) “to conduct a report on health effects related to Smart Meter radio-frequency emissions.”¹⁰⁴ The consultant selected through the RFP process must submit a report by December 1, 2013.¹⁰⁵

These summaries are not exhaustive of opt-out activity across the United States. They are highlighted because they offer a unique view on some of the issues.

97. *Id.* These meters are called AMR meters (Automated Meter Reading). Because they communicate wirelessly they are considered advanced meters. However, they lack the two-way communication that is a key feature of what is generally considered a Smart Meter. When it comes to meters, you can be advanced but not smart. *See generally Today in Energy, Advanced Electric Meter Installations Rising in Homes and Businesses*, U.S. ENERGY INFO. ADMIN. (Mar. 15, 2011), <http://www.eia.gov/todayinenergy/detail.cfm?id=510> (describing the difference between AMR and Smart Meters (Advanced Metering Infrastructure, or AMI)).

98. Order No. 25,409, *supra* note 94, at 9.

99. *Id.* at 6.

100. *Id.* at 8.

101. An Act Relating to the Vermont Energy Act of 2012, Act No. 170 (Vt. 2012).

102. *Id.*

103. *Id.* § 15 (adding VT. STAT. ANN. tit. 30, § 2811(b)). The law does not state how many times a customer is allowed to change his or her mind free of charge.

104. VERMONT PUB. SERV. DEP’T, REQUEST FOR PROPOSALS: SMART METER RF STUDY (2012), available at http://publicservice.vermont.gov/sites/psd/files/Announcements/RFPs/RF_RFP_FINAL_121312.pdf.

105. *Id.* at 2.

II. DEMAND RESPONSE DEVELOPMENTS

A. *Federal Activities*

In February 2012, the FERC issued an order denying rehearing of Order No. 745-A, which provides clarification on Order No. 745, which in turn requires “that a demand response resource participating in an organized wholesale energy market must be compensated for the service it provides at the market price for energy” under certain circumstances.¹⁰⁶ The FERC reiterated that demand response cost allocation compliance concerns will be addressed in individual Regional Transmission Organization (RTO) and Independent System Operator (ISO) compliance filings.¹⁰⁷ No one set of cost allocation, measurement, and verification programs is required and variations may be appropriate based on the facts and circumstances surrounding an RTO/ISO-administered wholesale energy market.¹⁰⁸

The FERC issued a notice of proposed rulemaking (NOPR) in April 2012 proposing to incorporate into its regulations the North American Energy Standards Board’s (NAESB) business practice standards for “the measurement and verification of demand response and energy efficiency resources participating in [RTO/ISO] markets.”¹⁰⁹ The FERC intends for the standards to improve accuracy, consistency, and transparency when RTOs/ISOs measure and credit demand response and energy efficiency resources.¹¹⁰ The demand response standards in particular would further detail existing standards on meter data reporting, advanced notification, and telemetry and meter accuracy.¹¹¹ The resulting standards would provide a framework for “[developing] performance evaluation methodologies for specific Demand Response services.”¹¹² The FERC requested comments on the level of specificity any additional or modified standards should possess as well as what role the FERC, the NAESB and the RTOs/ISOs should play in measuring and verifying demand response resources moving forward.¹¹³

In December 2012, FERC staff issued its seventh annual Staff Report assessing demand response and advanced metering.¹¹⁴ FERC staff analyzed

106. Order No. 745-B, *Demand Response Compensation in Organized Wholesale Energy Markets*, 138 F.E.R.C. ¶ 61,148 at P 1 (2012).

107. *Id.* at P 6.

108. *Id.* at P 6, n.12.

109. Notice of Proposed Rulemaking, *Standards for Bus. Practices and Comm’n Protocols for Pub. Utils.*, 139 F.E.R.C. STATS. & REGS. ¶ 61,041, 77 Fed. Reg. 24,427 (Apr. 19, 2012) (codified at 18 C.F.R. pt. 38).

110. *Id.* at P 15 (citing Order No. 676-F, *Standards of Bus. Practices and Comm’n Protocols for Pub. Utils.*, 139 F.E.R.C. STATS. & REGS. ¶ 31,309 at P 34, 77 Fed. Reg. 24,427 (Apr. 22, 2010) (codified at 18 C.F.R. pt. 38)).

111. *Id.* at P 8.

112. *Id.* at P 14 (citation omitted).

113. *Id.* at P 11. The NOPR’s public comment period ended in July 2012. At the time of this report’s publication the FERC had not yet issued a final rulemaking in the proceeding. *See generally* FERC Docket No. RM05-5-020.

114. FERC STAFF, ASSESSMENT OF DEMAND RESPONSE AND ADVANCED METERING: STAFF REPORT (Dec. 2012) [hereinafter FERC STAFF REPORT], available at <http://www.ferc.gov/legal/staff-reports/12-20-12-demand-response.pdf>. The report fulfills an Energy Policy Act of 2005 requirement that the FERC prepare and

information voluntarily submitted by respondents to the 2012 Demand Response and Advanced Metering Survey.¹¹⁵ The report notes that there has been significant progress in the demand response and advanced metering landscape over the last year, with state and federal regulators as well as industry participants and customers playing influential roles in furthering demand response and advanced metering efforts.¹¹⁶ Based on the information collected, demand response resources represent approximately “9.2[%] of U.S. peak demand” (estimated at roughly 72,000 MW).¹¹⁷ The Midwest-to-Mid-Atlantic, Southeast, and Upper Midwest regions have the most demand response capabilities.¹¹⁸ Advanced metering penetration has also improved, up from 8.7% in 2009 to 22.9% based on 2011 data.¹¹⁹ Florida, Texas, and the West lead the nation with over 30% advanced metering penetration while electric cooperatives lead all organizational types with nearly 31%.¹²⁰

publish an annual report assessing demand response resources, including those available from consumer classes. *Id.* at 3.

115. *Id.* at 4.

116. *Id.* at 1.

117. *Id.*

118. *Id.*

119. FERC STAFF REPORT, *supra* note 114, at 1.

120. *Id.*

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