



2009 POLICY ACTIVITY WRAPUP - FUEL CELLS & HYDROGEN

This wrap-up includes 2009 legislation and policy only. Visit our free searchable State Fuel Cell and Hydrogen database (<http://www.fuelcells.org/info/statedatabase.html>) for a comprehensive compilation of all state fuel cell and hydrogen policies, initiatives and incentives as well as stationary fuel cell installations, fuel cell vehicle demonstrations and hydrogen fueling stations.

ALABAMA

AlabamaSAVES (Sustainable and Verifiable Energy Savings) – AlabamaSAVES is an energy revolving loan fund for existing industries and businesses within the state. The program, initially capitalized through the American Recovery and Reinvestment Act (ARRA) and boosted by private lending, provides low cost financing solutions for commercial and industrial energy-efficiency and renewable-energy projects in Alabama. The program is available to all companies with a place of business in the State of Alabama that are duly organized and/or qualified to do business in the State, and that own or lease one or more existing commercial or industrial facilities in the State. Eligible renewable energy systems may employ solar, biomass, biofuels, geothermal, micro-hydroelectric, methane capture and use and/or fuel cell technologies.

CALIFORNIA

Feed-In Tariff - The Feed-In Tariff allows eligible customer-generators to enter into 10-, 15- or 20-year standard contracts with their utilities to sell the electricity produced by small renewable energy systems - up to 3 MW - at time-differentiated market-based prices. All investor-owned utilities and publicly-owned utilities with 75,000 or more customers must make a standard feed-in tariff available to their customers. As the feed-in tariff is meant to help the utilities meet California's renewable portfolio standard. Fuel cells using renewable fuels are eligible. The tariffs will be available until the combined statewide cumulative capacity of eligible generation installed equals 750 MW.

DISTRICT OF COLUMBIA

Interconnection Standard - In 2006 the District of Columbia Public Service Commission (PSC) initiated an inquiry into the development of uniform interconnection procedures for on-site distributed generation systems and final rules were issued in February 2009. The PSC adopted net-metering rules in 2005 for residential, commercial and industrial electric customers with renewable-energy systems, fuel cells and microturbines up to 100 kW.

FLORIDA

Alternative Fuels Production Incentive - The Innovation Incentive Program was created in 2009 within the Florida Office of Tourism, Trade, and Economic Development, to provide resources for business projects that allow the state to effectively compete for high-value research and development, including alternative and renewable energy projects. To qualify, an alternative and renewable energy project must involve collaboration with an institution of higher education; provide the state a minimum full return on investment within a 20-year period; include matching funds provided by the applicant or other available sources; and be located in the state of Florida. Hydrogen and fuel cells are included in the definition of alternative and renewable energy.

HAWAII

Renewable Portfolio Standard - In 2009, Hawaii's RPS was expanded to increase the amount of renewable electrical energy generation required by utilities:

- 10% of its net electricity sales by December 31, 2010;
- 15% of its net electricity sales by December 31, 2015;
- 25% of its net electricity sales by December 31, 2020; and
- 40% of its net electricity sales by December 31, 2030.

Hydrogen fuels derived from renewable energy, or fuel cells where the fuel is derived from renewable sources, are eligible resources and technologies under the standard. Where biofuels, hydrogen, or fuel cell fuels are produced by a combination of renewable and non-renewable means, the proportion attributable to the renewable means are to be credited as renewable energy.

ILLINOIS

Executive Order to Reduce the Environmental Impact of State Government Operations - The Order stipulates that agencies are to increase their purchase of energy certified by Green-e or generated from renewable energy sources in Illinois, including wind, solar thermal, photovoltaics, sustainably managed biomass, geothermal, methane waste and fuel cells. Fifty percent of the overall annual electrical energy requirements of buildings owned or leased by agencies must be met through these technologies by July 1, 2015, increasing to 100 percent by July 1, 2025.

KANSAS

Renewable Energy Standard - The Renewable Energy Standards Act of May 2009 requires public utilities, but not municipal utilities, to purchase or generate energy from renewable sources. Fuel cells using hydrogen made from renewable energy are eligible. The Portfolio requirements require net renewable energy generation of no less than:

- 10% in years 2011-2015,
- 15% in years 2016-2019, and
- 20% each year after 2020.

Net Metering - New net metering standards were established for Kansas in 2009 to include micro-combined heat and power systems to be eligible for net metering. Fuel cells powered by hydrogen obtained by one of the other renewable methods listed in the bill are eligible.

Interconnection Standard - 2009 legislation established general standards for the interconnection (and net metering) of customer-owned electricity-generating systems. The standards apply to fuel cells using hydrogen produced by an eligible renewable technology. The standards apply to net-metered systems with a rated capacity of 25 kW or less for residential customers and 200 kW or less for non-residential customers. The Kansas Corporation Commission will establish rules to implement net metering and interconnection by May 2010.

MAINE

Net Metering - Since 1987, Maine has permitted net metering of commercial, industrial and residential systems up to 100 kW, but has subsequently issued new rules for the resources and technologies defined in the state's electricity restructuring legislation: fuel cells, tidal power, solar, wind, geothermal, hydroelectric, biomass, and generators fueled by municipal solid waste in conjunction with recycling. In April 2009 the Governor signed a new law stating that micro-combined heat and power generation should also be allowed under the State's net metering laws. There are no restrictions on fuel type, or generation technology. The system must have an electric generating capacity rating of at least 1 kW and not more than 30 kW and a fuel system efficiency of not less than 80% in the production of heat and electricity, or has an electric generating capacity of at least 31 kilowatts and not more than 660 kilowatts and a fuel system efficiency of not less than 65% in the production of heat and electricity.

Community Based Renewable Energy Production Incentive – Established in June 2009, Maine's Community-based Renewable Energy Pilot Program to encourage the development of locally owned, in-state renewable energy resources. Legislation mandates that up to 50 MW of generating capacity will be permitted under the program, and individual participants may not exceed 10 MW. Of the 50 MW cap, 10 MW must be reserved specifically for small program participants (with generating capacity less than 100 kW) or for participants located in a service territory of a cooperative transmission and distribution utility. Fuel cell technology is eligible. Program rules will be developed and administered by the Maine Public Utilities Commission (PUC).

MASSACHUSETTS

Renewable Portfolio Standard - Massachusetts' RPS was established in 2002. New regulations in 2009 stipulate that retail electricity suppliers must provide 3.6% of kWh sales to end-use customers in Massachusetts from Class II renewables each year starting in 2009. Fuel cells utilizing renewable fuels are an eligible Class II renewable. A separate Class II Waste Energy Minimum Standard requires retail electricity suppliers to annually provide 3.5% of kWh sales to end-use customers in Massachusetts from waste energy starting in 2009. The state's Alternative Portfolio Standard (APS) took effect January 1, 2009, requiring retail electricity suppliers to provide annually a minimum percentage of kWh sales to end-use customers in Massachusetts from "alternative energy generating sources." In 2009 the goal is 1% and increases to 5% by 2020. Alternative energy generating resources include: gasification with

capture and permanent sequestration of carbon dioxide; combined heat and power (CHP); flywheel energy storage; any facility which substitutes any portion of its fossil fuel source with an equal to or greater portion of an approved alternative, paper-derived fuel source; energy efficient steam technology; and any other alternative energy technology approved by the Massachusetts Department of Energy Resources. State energy goals include: (1) meeting at least 25% of the state's electric load, including both capacity and energy, by 2020 with demand-side resources including energy efficiency, load management, demand response and generation located behind a customer's meter; and (2) meeting at least 20% of the state's electric load by 2020 through new renewable and alternative energy generation.

Alternative Fueled Vehicles Pilot Grant Program - \$300 million in grants was offered to state and local governments and/or metropolitan transportation authorities in collaboration with an existing Clean Cities coalition to be used to purchase and demonstrate alternatively fueled vehicles that utilize fuel cell, electric, or hybrid drive system technologies.

NEVADA

Renewable Energy Producers Property Tax Abatement - This tax abatement has gone through several revisions since its inception in 1997. Most recently, AB 522, signed in May 2009, raised the capacity minimum for eligible projects from 10 kW to 10 MW. It also increased the abatement from 50% for 10 years to 55% for 20 years, and extended it to additional technologies. New or expanded businesses in Nevada may apply for a property tax abatement of up to 55% for up to 20 years for real and personal property used to generate electricity from renewable energy resources including solar, wind, biomass, fuel cells, geothermal or hydro. Generation facilities must have a capacity of at least 10 MW. There are several job creation and job quality requirements that must be met for a project to receive an abatement.

Renewable Energy Sales and Use Tax Abatement – This tax abatement applies to sales and use taxes. New or expanded businesses in Nevada may apply for sales and use tax abatement for qualifying renewable energy technologies. The purchaser is only required to pay sales and use taxes imposed in Nevada at the rate of 2.6 % (effective through June 30, 2011) and at the rate of 2.25 % (effective July 01, 2011 - June 30, 2049). Fuel cell systems apply under this tax abatement.

NEW YORK

Renewable Portfolio Standard - In December 2009, the Public Service Commission (PSC) expanded the state's RPS goal to increase the proportion of renewable electricity consumed by New Yorkers from 25% to 30% by 2015. Main Tier eligible resources include fuel cells. Under the Customer-Sited Tier, a fuel cell incentive offers up to \$1 million per fuel cell system (available through Program Opportunity Notice 1150).

Net Metering - A new law (August 2009) extended net metering to residential CHP and fuel cell systems up to 10 kW. Current standards apply to distributed generation in general, including CHP and fuel cells, but some portions of the regulations apply specifically to different types of net metered systems.

According to the DSIRE Database of State Incentives for Renewables & Efficiency, it is likely that the New York Public Service Commission will need to revise the certain sections of the current rules to incorporate residential fuel cells and CHP systems.

Municipal Sustainable Energy Programs - Property-Assessed Clean Energy (PACE) financing is available for property owners to make energy improvements, typically repaid by special assessment on the property over several years. This legislation supports the state's RPS goals, which includes fuel cells in the customer-sited tier. Interested persons should contact their local government (county, town, city or village) to find out if a PACE financing program has been established.

OHIO

Fuel Cell Roadmap – Ohio's Fuel Cell Roadmap was updated in 2009. The report indicated that: the Ohio fuel cell strategy has been successful in building an Ohio fuel cell cluster; fuel cell technologies are achieving performance and cost objectives, and entry markets are developing; Ohio fuel cell companies and suppliers are well positioned to compete for both near-term and longer term markets; and Ohio needs to continue an aggressive program to support its fuel cell cluster. New strategies and activities are outline in the report to continue building the state's fuel cell industry.

OREGON

Interconnection Standards - Oregon has two separate interconnection standards: one for net-metered systems and one for small generator facilities (non net-metered systems). Oregon has also established separate net-metering requirements and interconnection standards for the state's primary investor-owned utilities (PGE and PacifiCorp), and for its municipal utilities and electric cooperatives. Fuel cells are eligible. In June 2009, the state's Public Utilities Commission adopted rules for the interconnection of small generator facilities up to 10 MW. There are four tiers of review for small generating facilities, based on system capacity: 25 kW, 2 MW, non-exporting systems up to 10 MW, and other systems.

Business Energy Tax Credit - The Oregon Department of Energy offers the Business Energy Tax Credit to those who invest in energy conservation, recycling or renewable energy resources. Fuel cell projects are eligible for the tax credit. The Business Energy Tax Credit is also available to those who invest in less-polluting transportation fuels - hydrogen fuel is eligible. The credit of 35% of eligible project costs includes all costs directly related to the project, including equipment cost, engineering and design fees, materials, supplies and installation costs.

RHODE ISLAND

Renewable Energy Standard - Enacted in 2004, Rhode Island's Renewable Energy Standard requires retail electricity providers to supply 3% of their retail electricity sales from renewable resources by the end of 2007, and escalates to 16% by the end of 2019. Eligible renewable technologies include fuel cells operating with renewable resources. A separate standard enacted in June 2009 requires electric distribution companies to solicit proposals and enter into long-term contracts for capacity, energy, and attributes from new renewable energy facilities. 90 MW in capacity of in-state generation is required by

2014, given the following benchmarks (provided acceptable, commercially reasonable proposals have been received):

- 22.5 MW contracted by 12/30/2010;
- 45 MW contracted by 12/30/2011;
- 67.5 MW contracted by 12/30/2012; and
- 90 MW contracted by 12/30/2013.

All energy and capacity purchased must be immediately sold by the electric distribution utility into the wholesale spot market.

SOUTH DAKOTA

Interconnection Standard – Adopted in May 2009, South Dakota’s interconnection standards for distributed generation apply to customers of investor-owned utilities. The rules provide for four levels of interconnection for systems up to 10 megawatts (MW) in capacity:

- Tier 1 applies to inverter-based systems up to 10 kilowatts (kW) in capacity that use lab-tested equipment.
- Tier 2 applies to systems up to 2 MW in capacity that use lab-tested equipment.
- Tier 3 applies to systems up to 2 MW in capacity that do not export electricity.
- Tier 4 applies to systems up to 10 MW in capacity that do not meet the requirements of Tier 1, Tier 2 or Tier 3.

Fuel cell technology is eligible.

TEXAS

Texas Hydrogen Roadmap – Issued in January 2009, the roadmap calls for the state to develop additional hydrogen infrastructure, including storage and distribution, and act now to reduce barriers and support near-term hydrogen projects. The Roadmap identifies three routes toward State hydrogen destinations, with different speeds, complexity, and challenges.

UTAH

Net Metering – In 2002, Utah first passed net metering standards, requiring the only investor-owned utility, Rocky Mountain Power (RMP), and most electric cooperatives to offer net metering to customers who generate electricity using solar energy, wind energy, hydropower, hydrogen, biomass, landfill gas or geothermal energy. In 2009 the aggregate enrollment capacity for RMP was raised to 20% of their 2007 peak demand. In establishing a significantly higher enrollment limit, the Public Service Commission also requires RMP to submit an annual net metering report, due by April 30 of every year, informing the commission of the number of net metering systems, the capacity of each installation, the total capacity of net metering systems, and any unforeseen problems or barriers in the net metering tariff.

VERMONT

Vermont Energy Act - The Vermont Energy Act was passed in May 2009, significantly amending the Sustainably Priced Energy Enterprise Development (SPEED) program to create "standard offer" contracts and "feed in tariffs" for SPEED resources of less than 2.2 MW. The SPEED program was created by the state's legislature in 2005 to encourage long-term contracts for electricity from renewable sources. Subsequent legislation (2008) established a goal that 20% of total statewide electric retail sales before July 1, 2017, be generated by SPEED projects. Eligible renewable energy resources under the program include hydropower; methane (from landfill gas, anaerobic digesters, sewage-treatment facilities and farms); geothermal; solar energy, wind, and CHP or fuel cells that rely on one of these fuel sources.

WEST VIRGINIA

Alternative and Renewable Energy Portfolio - In July 2009 West Virginia's Alternative and Renewable Energy Portfolio Standard became effective. The act requires utilities to purchase credits of renewable energy generation to offset specific proportions of electrical energy sold each year. Fuel cells are considered a renewable source of energy under this act. The Portfolio standards require credits in the amount of 10% between 2015 –2019, 15% between 2020 – 2024, and 25% after 2025.

WASHINGTON

Renewable Energy Sales and Use Tax Exemption –Tax does not apply to the sales of equipment used to generate electricity using fuel cells, wind, sun, biomass energy, tidal or wave energy, geothermal, anaerobic digestion or landfill gas. The tax exemption applies to labor and services related to the installation of the equipment, as well as to the sale of equipment and machinery. Eligible systems are those with a generating capacity of at least 1 kilowatt (kW). With the passage of this legislation, the sales and use tax exemption was extended to June 30, 2011 for systems generating electricity using fuel cells, wind, sun, biomass energy, tidal or wave energy, geothermal, anaerobic digestion or landfill gas. Purchasers of the systems listed above may claim an exemption in the form of a remittance. From July 1, 2011 to June 30, 2013, the exemption for the systems described above will be reduced from 100% of the sales and use tax to 75% of the sales and use tax.

WISCONSIN

Wisconsin Power and Light Advanced Renewables Tariff - Wisconsin Power and Light (subsidiary of Alliant Energy) offers its retail electric customers a production incentive for electricity production from renewable energy sources as defined by statute, which includes fuel cells that operate using renewable fuels. The production incentive is only available for facilities placed in service on or after January 1, 2007.