Fuel Cells and RPSs: An Introduction

Warren Leon Clean Energy States Alliance June 9, 2011



This Webinar

- Part of a series sponsored and organized by:
 - US Department of Energy Fuel Cell Technologies Program
 - Clean Energy States Alliance
 - Technology Transition Corporation
- Also briefing papers and materials for state policymakers and others on the Hydrogen and Fuel Cells Project page at <u>www.cleanenergystates.org</u>
- To get on the Hydrogen listserv, send an email with your contact info to <u>Maria@cleanegroup.org</u> with "Hydrogen Listserv" in the subject.



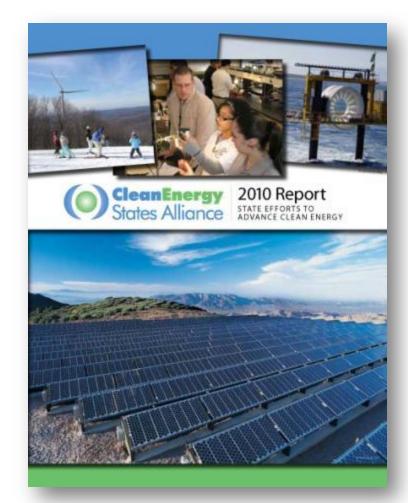
- The State-Federal RPS Collaborative
 - Webinars, monthly newsletter, annual RPS Summit
 - For state policymakers and others
 - Funded by US DOE and the Energy Foundation
- See more information on the State-Federal RPS Collaborative Project page on the CESA website (<u>www.cleanenergystates.org</u>).
- To get on the RSP Collaborative listserv, send an email with your contact info to <u>Maria@cleanegroup.org</u> with "RPS Listserv" in the subject.



What is CESA?

A nonprofit coalition of state and sub-national clean energy funds and programs working together to develop and promote clean energy technologies and markets.

www.cleanenergystates.org





Renewable Portfolio Standards

- Require that a certain share of electricity come from specified clean energy sources
- Sometimes called Renewable Electricity Standards
- In 29 states, plus the District of Columbia and Puerto Rico
- Currently, the most important state-based policy mechanism for promoting clean energy generation



RPSs and Fuel Cells

- Many states allow fuel cells to qualify when they use renewable fuels
- Only six states (CT, ME, MN, NY, OH, PA) allow fuel cells that use natural gas as the fuel
- The timing may be right for more states to consider including natural gas-powered fuel cells



The Argument against Including Natural Gas Fuel Cells in an RPS

Natural gas is a fossil fuel





The Argument for Including Natural Gas Fuel Cells in an RPS

- Can be cleaner, more climate friendly than other fossil fuel generation
- States highly interested in economic development and local jobs from clean energy
- The Commerce Clause of the Constitution can make it difficult to focus an RPS on in-state projects (see recent CESA report)
- An emphasis on distributed generation (DG) can be a way to focus on in-state projects
- Natural gas fuel cells can be a way to expand the range of eligible DG technologies
 - Few constraints on location
 - A way for businesses and institutions to benefit from the RPS
 - Base-load power



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