



FAST FACTS

RENEWABLE ELECTRICITY Policies Should Encourage Renewable Electricity and Keep Consumer Bills Affordable

Electric Cooperatives are Leaders in Providing Renewable Electricity to Consumers

Electric cooperatives are proven leaders in the renewable electricity arena. Approximately 11 percent of the electricity co-ops distribute is generated using renewable energy sources. Of this amount, approximately nine percent comes from hydropower and two percent comes from other renewable sources. This allows 755 co-ops (nearly 90 percent) to offer renewable energy options to consumer-owners.

Renewable Energy Development through Incentives

Electric co-ops support the use of incentives to encourage investment in renewable electricity. For example, co-ops worked with Congress to establish the Clean Renewable Energy Bonds Program (CREBs) as part of the Energy Policy Act of 2005. Most co-ops cannot use the Production Tax Credit available to for-profit entities for renewable investments. CREBs are designed to give the not-for-profit utility sector a comparable incentive for building renewable electricity projects. Electric co-ops are participating in 88 CREBs-based renewable resource projects. Electric co-ops also support other financing programs to stimulate the development of renewable resource projects. The American Recovery and Reinvestment Act provides loan guarantees for renewable resource projects; moreover, thanks to amendments to the 2008 Farm Bill, co-ops have greater access to Rural Utilities Service funding for building or acquiring renewable generation resources.

Electric co-ops are going beyond simply tapping federal programs. A significant number of co-ops have joined the recently-formed National Renewables Cooperative Organization (NRCO). NRCO is designed to facilitate the development and deployment of renewable resources for electric distribution and generation co-ops. NRCO allows member co-ops to invest in or purchase power from renewable energy generation projects, no matter their location. This helps get renewable electricity into the nation's fuel mix, while reducing its cost for co-ops in areas that have less access to affordable renewable electricity.

A Renewable Electricity Standard is a Mandate for Distribution Utilities

A Renewable Electricity Standard (RES), also known as a Renewable Portfolio Standard, is a mandate. An RES tells a distribution utility to sell electricity based on solar, wind, biofuels, geothermal and other approved renewable energy sources as a set percentage of its total annual retail electricity sales. For instance, some proposals require that as much as 25 percent of the electricity sold in a particular year consist of approved renewable energy sources. Moreover, federal RES proposals fail to include hydropower as a renewable energy source, which disadvantages co-ops that use this resource. If the utility cannot meet the mandate, it must buy credits on the open market or pay a fee to the government. By telling utilities how to achieve these reductions and which renewable energy sources to purchase, the additional RES mandate will reduce a utility's flexibility and raise costs for consumers.

RES Challenges: Availability and Transmission

Challenge #1: Renewable Electricity Supplies Not Uniformly Available

In some parts of the country, significant renewable resources are not readily available and therefore

cannot help satisfy a renewable energy mandate. For example, the Southeast lacks adequate wind or solar resources and there is not enough biomass to address the difference. The Midwest cannot rely on consistent sunshine for solar power. Even where sun and wind are plentiful, the intermittent nature of the supply means it must be complemented with other generation, usually gas turbines.

Challenge #2: Renewable Electricity is Costlier

Electricity produced from renewable sources can be considerably more expensive than electricity produced from traditional sources. While new coal and natural gas-fired plants produce electricity, on average, for less than seven cents per kilowatt-hour (kWh), generating electricity from new renewable electric plants is significantly more costly. For example, electricity produced with biomass costs over 9 cents per kWh. Moreover, wind energy costs 11 cents per kWh and solar thermal energy costs 21 cents per kWh (before taking into account generous production and investment tax credits that co-ops cannot tap). Those calculations are based on capacity cost and fuel price assumptions from the Department of Energy's 2009 Annual Energy Outlook.

Challenge #3: Nation Lacks Adequate Transmission to Deliver Increased Renewable Electricity Supplies

Transporting significant new quantities of renewable power between the "have" and "have-not" regions will require costly upgrades to the interstate transmission system. A recent study examined the current grid serving the eastern half of the country and concluded that if the "U.S. wants to get 20 percent of its electricity from renewable [sources] by 2024, ...it would be necessary to build a new electricity circulatory system, including 15,000 circuit miles of extremely high voltage lines." Such a system would cost up to \$100 billion. Transmission to handle the new renewable energy supplies should be in place before policies can be developed to accommodate the new demand for renewable energy. To increase transmission, Congress must solve the tough questions of siting, planning and cost allocation in an appropriate manner.

Legislative Status. The House passed energy legislation (H.R. 2454) that includes a RES mandate that starts at 6 percent in 2012, increases to 8.5 percent in 2014, and rises to 20 percent in 2025. Between 25 percent and 40 percent of the RES for any year can be satisfied through energy efficiency savings. Utilities with annual retail sales of less than 4 million megawatt-hours (MWh) are exempt. Sales of electricity based on some types of hydropower, new nuclear plants, and plants using carbon capture and sequestration technology are "backed out" from the baseline. This means that a utility only calculates its obligation to sell renewable energy based on its sales of all other forms of non-renewable generation.

A Senate Energy and Natural Resources Committee bill now pending floor debate includes an RES that starts at 3 percent in 2011, increases to 6 percent in 2014, and rises to 15 percent by 2021. Up to 26 percent of that mandate can be met through energy efficiency gains. The Senate bill also exempts electric utilities with sales of less than 4 million MWh from the mandate. Sales of electricity based on some types of hydropower and municipal solid waste are backed-out from the baseline.

NRECA Position. NRECA urges Congress to ensure that any RES legislation considered includes a small electric utility exemption of 4 million MWh, allows efficiency to count for at least 40 percent of the mandate's requirement and allows states to define "eligible renewable resources."

for more information

Montee Wynn, NRECA

703.907.5819

montee.wynn@nreca.coop

<http://www.nreca.coop>



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