Energy Efficiency Resource Standard

Description:

Energy efficiency is often an objective of our public utilities - yet, because it means selling less electricity and reducing revenues, there may not be an incentive for the utility to make their consumers more productive or efficient users of electricity. If legislatures want to ensure a more productive and efficient system that is taking advantage of the latest technological innovations, they may want to require a utility demonstrate a percent reduction in demand through efficiency programs or “demand side” programs. This is an energy efficiency resource standard (EERS) or energy efficiency target - for example: x utility will achieve a 10% reduction in demand (or demand growth) over the next 10 years.

Discussion of the Policy:

An EERS establishes a percentage of energy demand reduction that a utility will achieve by a specific date or on an annual basis through demand reduction programs. States can achieve reductions in a variety of ways, and targets can be set through legislation or by directing the state’s utility commission to set energy efficiency targets. EERSs are often based on these three common models: adopting resource-specific targets, fuel-neutral goals, or multiple-goal approaches that incorporate resource-specific and fuel-neutral goals. As new climate goals are established and regulations change, policymakers are shaping their states’ EERSs to reflect the benefits of energy efficiency: improved air quality, reduced greenhouse gas emissions, and improved public health.

While EERSs usually take the form of mandatory targets or voluntary goals, there are a few exceptions. In North Carolina, energy efficiency is an eligible resource under the state’s renewable portfolio standard. In Nevada, while Senate Bill 150 requires utilities to set certain goals, utilities are not penalized for failing to meet these goals and are instead incentivized to exceed the goals. Targets can also vary greatly, from less than .5% of retail sales per year in Texas to 2% or more per year in Vermont, Rhode Island, and Massachusetts. The majority of states that have implemented EERSs have been successful at achieving savings at or above target goals and also enjoy the economic benefits of additional energy efficiency jobs.

Example State Programs:

Currently, 23 states have a mandatory EERS, and nine states and the District of Columbia have voluntary programs or goals (see map next page).

- Efficiency Vermont: https://www.efficiencyvermont.com/about
Regional energy efficiency organizations work with policymakers, utilities, and other stakeholders to provide technical policy design and implementation support to help states and local governments achieve all cost-effective energy efficiency.

**Key Components:**

EERSs may take a variety of forms; however, they usually have the following components:

- **Annual percentage energy demand reduction** over a period of time, or cumulative reduction over a period of time.

- **Mechanism for cost recovery of utility lost revenues.** Often, public utilities commissions (PUCs) will allow a utility to earn a higher rate of return for efficiency measures. More aggressively, legislatures could allow a bonus on overall rate of return earned if utilities meet or exceed specific efficiency objectives.

- **Third party management.** Because there is an inherent conflict for a utility to encourage customers to buy less of their product by becoming more efficient, many states use a third party to manage demand-side management (DSM) programs and require that this third-party report savings annually or biannually to the PUC.

- **Cost effectiveness criteria.** Most states have some cost effectiveness criteria that ensures only technologies that meet a cost effectiveness threshold/standard will be included in DSM offerings. The type of standard chosen is very important - many states have opted for a “Total Resource Cost Test” (TRC). However, the TRC has frequently proven an unreliable and poor measure of the true cost
effectiveness of the measure to the ratepayers. For more information, see ‘Modified Energy Efficiency Cost/Benefit Tests’.

- Requirement to implement all cost-effective measures. Measures with a well-established high payback may be required as standard practice.

- Some EERSs may specifically target other technologies and programs, including demand side generation and storage that reduces load on the system, demand response programs, consumer behavioral programs, and/or building improvements.

More Information:

