



Fossil Fuels and Nuclear Power Do Not Belong in a Renewable Electricity Standard

Some members of Congress have suggested that a national renewable electricity standard (RES) include support for advanced nuclear power and coal integrated gasification and combined cycle (IGCC) technologies. Fossil fuels and nuclear power are not renewable resources, and they should not be included in a policy that is designed to support clean, sustainable energy sources like wind, solar, bioenergy, geothermal, and ocean power.

The RES should diversify the fuel sources in our energy portfolio.

A primary objective of the RES is that it increases the diversity of our nation's electricity mix. Currently, fossil fuels and nuclear power constitute about 90 percent of the fuel sources for electricity in the United States. A national RES that just includes renewable energy technologies would create new competitors to fossil fuels and nuclear power, reducing consumer and industrial energy bills in the process. The more that new competitors are available to be rapidly deployed, the less vulnerable our economy is to potential energy supply shortages or interruptions, price spikes, price increases or price manipulation as a result of our current dependence on a limited supply of a limited number of fuels.

Developing advanced technologies that use existing fuels is also important, but does not contribute to the objective of diversifying energy sources. Because both objectives—developing new fuel sources, and developing advanced technologies using dominant fuels—are important, one policy, such as the RES, should not be used to create a zero-sum game where achieving one objective competes with achieving the other objective.

The RES should not include resources that pose serious environmental, safety and security risks.

All energy sources, including renewable energy, have environmental impacts. However, while renewable energy impacts tend to be local, temporary and reversible, fossil fuel and nuclear power impacts have the potential to be global, permanent and irreversible.

Nuclear power plants, like renewable energy sources, do not produce carbon emissions—the primary contributor to climate change—during the power generation process. Yet, nuclear plants have a unique potential for catastrophic risks from accidents, sabotage or terrorism, and produce very long-lived radioactive wastes. To be on a level environmental playing field with renewable energy, coal IGCC would have to be coupled with carbon capture and storage. Even with carbon capture and storage, coal IGCC poses the same fuel cycle environmental impacts from mining and transportation as existing pulverized coal technologies.

In stark contrast to advanced nuclear power and fossil fuel technologies, renewable resources are non-interruptible and non-depletable; they do not present attractive targets for terrorists; and they avoid the risk of high future environmental and safety regulatory costs.

The RES is not a substitute for research and development.

An early deployment mechanism, like a RES, is not a substitute for R&D. Carbon capture and storage still requires significant R&D to determine if it can be effective and economical. Advanced

nuclear technologies require considerable R&D to resolve safety, security, waste disposal and economic issues before they are ready to consider for deployment.

Inserting coal and nuclear power into the RES may not work to actually encourage deployment of these new technologies.

The RES works to increase the use of true renewable energy resources because it creates competition between renewable projects, particularly allowing many smaller-scale projects to compete to fulfill a relatively minor piece of the overall electricity load. It is not clear whether such a mechanism would work effectively with the much larger sizes associated with proposed advanced fossil fuel and nuclear power projects. Larger projects would create lumpy additions to utility rates, and are not likely to be financeable using a market-based mechanism such as tradable credits, especially for initial deployment of new technologies.

Energy efficiency is critical, and deserves its own policy support outside of the RES.

Improving energy efficiency is a critical national objective, but one that should not compete with or displace the need to develop new supply-side competitors to coal, nuclear power, and natural gas. The United States needs both improved energy efficiency and new supply options. There are many very inexpensive efficiency options that are not being implemented because of market barriers in the electricity industry. Sound energy policy should ensure that those cost-effective efficiency options are implemented without putting them in competition with and compromising the objective of developing new supply options.

Including coal and nuclear power in a RES would reduce the benefits of this important program—particularly to rural economies.

Increasing the use of renewables under the provisions of the RES will create 91,000 new jobs, produce \$755 million in lease payments to farmers, and save consumers \$28.1 billion on their energy bills.