

This brief was prepared by Ryan Black, under the direction of Professor Tjossem, as part of an ongoing series of internal outputs produced for the *Workshop in Applied Policy Analysis*, Columbia University, School of International and Public Affairs. Clients: ARE and EarthAction.

FEDERAL AND STATE POLICIES

How can the REP legislation currently being proposed in the US Congress work with proposed REP legislation in various states?

Background

In May 2008, Congressman Jay Inslee from the state of Washington introduced the first national renewable energy payments (REP) bill on Capitol Hill (Rickerson et. al, 2008, 11). Inslee, known as a “champion of clean energy”, holds two influential positions within the US Congress, one on the Energy and Commerce Committee and a second on the Select Committee on Energy Independence and Global Warming (David Roberts, 2007). The latter committee was created in 2007, and since then, renewable energy has taken center stage in the effort to lessen the United States’ dependence on fossil fuels. Inslee proposed the national REP bill to test the interest within Congress for this innovative renewable energy financing mechanism at the federal level. However, the first incarnation of the national REP bill lacked support on the hill so Inslee’s staff will revise the proposal in 2009 and try again to encourage enthusiasm for national renewable energy payments.

Federal Policy Structure

The 2008 national REP bill included three main elements drawn from successful European feed-in tariff models:

1. Guaranteed grid connections;
2. 20-year mandatory purchase contracts; and
3. Regional cost sharing (Rickerson et. al, 2008, 11)

The maximum project size under this policy was 20 MW, with the Federal Energy Regulatory Commission (FERC) given considerable, controversial power to set standards for interconnection, transmission, and rates (Rickerson et. al, 2008, 12). FERC was required to set rates at different levels for different technologies based on cost, while providing all renewable energy generators a 10% internal rate of return on their investment (Rickerson et. al, 2008, 12).

In theory, the costs of a national REP would ideally be shared by every consumer of electricity in the US to equally distribute the financial burden of the transition to green energy, but for reasons of feasibility and political support, cost burdens would be administered and applied regionally through regional cost sharing programs based loosely around existing grid boundaries (Figure 1). Regional cost sharing promotes investment in the

most cost-effective technologies in each region while quieting complaints over transfers of wealth (WFC, 2009). Concerning wealth transfers, some opponents of REP policies argue that less endowed states would ultimately fund large investments in the Midwest and Southwest where huge potentials exist for wind and solar respectively. Regional cost sharing programs keep renewable energy investments somewhat localized, thereby creating economic growth from renewable energy in each region (WFC, 2009).

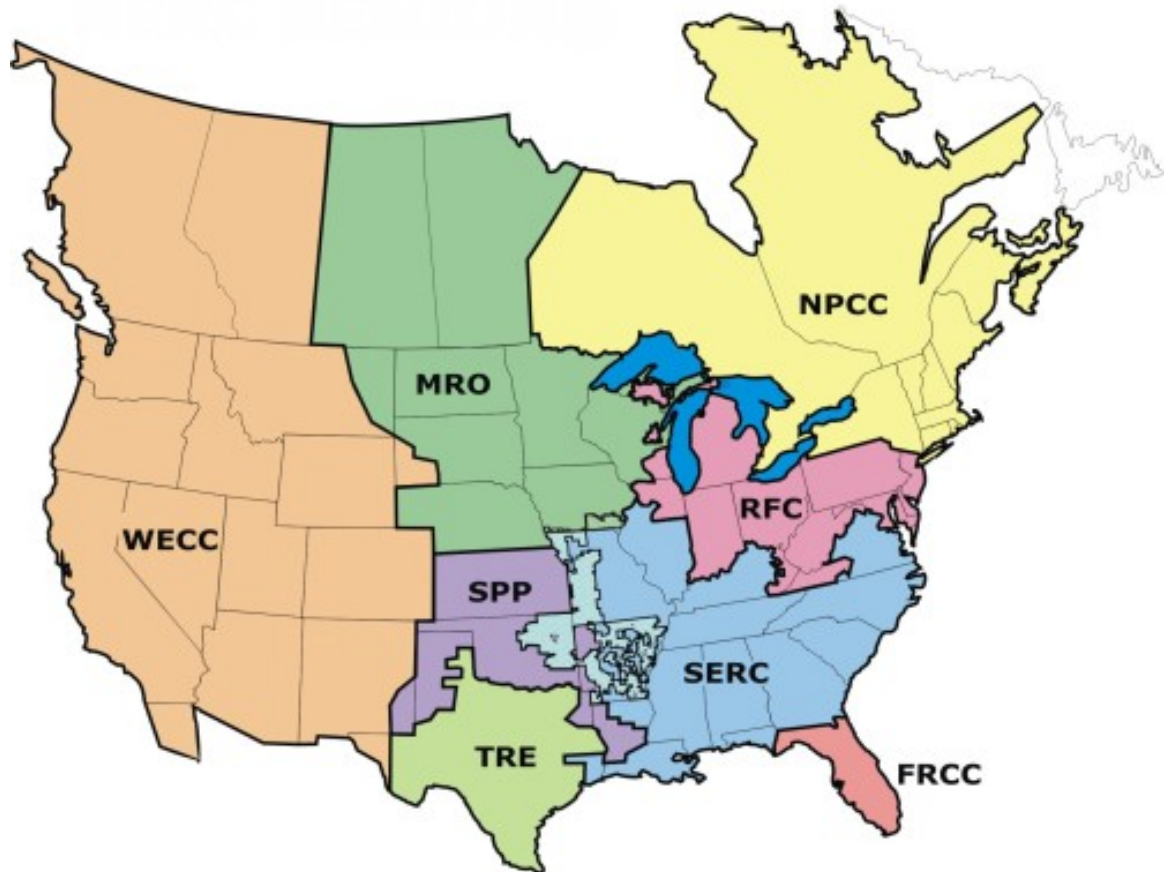


Figure 1: North American Electric Reliability Corporation Regions That Cost Sharing Regions Could Emerge From
Source: Energy Information Administration,
< http://www.eia.doe.gov/cneaf/electricity/chg_str_fuel/html/fig02.html >

High-hanging Fruit

The passage of any federal policy requires broad support from both houses of the United States Congress. A federal Renewable Energy Payment bill faces three significant obstacles to being voted into law:

- States opposed to transfer of power to the federal government (FERC)
- Misunderstanding of REP's complex financial mechanism
- Resistance from coal interests and states with poor renewable energy resources (WFC, 2009)

Southeastern states possessing relatively modest renewable energy endowments will likely show strong resistance to federal REP legislation because they feel that it represents a federal mandate requiring them to subsidize renewable energy investments in neighboring states. Even worse, with the potential intersection of a national REP and a national

Renewable Energy Standard (RES), these states envision being forced to buy energy from other states at unacceptable premiums, while being told how much renewable energy they must buy (WFC, 2009). Understandably these states want to first and foremost protect state rights before allowing the federal government to pass sweeping legislative mandates that seize control of program cash flows away from them (WFC, 2009).

But support for climate change legislation continues to grow, and the political will to pass a federal REP policy may materialize unexpectedly. The recently released draft of the American Clean Energy and Security Act of 2009 includes a proposal for a cap-and-trade system and also a national RES (American Clean Energy And Security Act Of 2009). An REP policy might be seen as a necessary alternative should either cap-and-trade or a national RES prove too politically unpopular. While a national RES is less than ideal because it favors current technologies applied on a larger scale rather than incentivizing more advanced technologies, RES and REP policies are not mutually exclusive (WFC, 2009). In fact, Rep. Jay Inslee's office hopes to propose a revised federal REP bill by mid to late 2009, and there are efforts underway to build support for this legislation on Capitol Hill and across the country (WFC, 2009). If such a bill becomes law, any federal legislation will have to coexist with current and forthcoming state and local REP policies.

Making National, State and Local REP Policies Compatible

Each state represents diverse political interests and equally diverse natural resource endowments. A national policy seeking to stimulate investment in renewable energy production must treat all states fairly regardless of their renewable generation potential by permitting state and local REP policies to function unfettered by federal policy. Two specific policy elements needed to allow state and local REP policies to operate in concert with a national one are:

- An amendment to PURPA allowing states to set rates above federal requirements
- A similar amendment to the Federal Power Act (WFC, 2009)

Suppose the federal enacts a national REP providing for solar projects up to 20MW at a rate of \$0.27/kWh based on a cost of production that assumes certain economies of scale such as buying solar panels in large quantities. But Florida, in this hypothetical example, wishes to promote small-scale, decentralized solar installations that are not as attractive financially under the federal program because smaller-scale projects are more expensive per kWh installed. Florida decides to put a state REP in place for projects up to 1.5MW at a rate of \$.36/kWh. A small project in Florida would then draw incentives from the combination of federal and state programs with \$.27/kWh of the cost shouldered by regional cost sharing and the additional \$.09/kwh cost recovered through in-state cost sharing, meaning from Floridians only.

These proposed amendments do not appear to be politically contentious because they both would return some rate setting authority to states (WFC, 2009). With FERC orchestrating the logistics of program administration, transmission, and rate setting REP policies would not inherently conflict with one another. On the contrary, states sharing regional costs of renewable electricity generation would want to secure as much of the regional production capacity investment as possible. With this in mind, states would encourage participation in the federal program and undoubtedly design their own programs to further incentivize in-state investment. However, this brings up the issue of renewable energy potential inequality between states. Without additional policy elements, states with abundant renewable energy

endowments will be able to provide lower cost electricity than their neighbors, and thus, come to dominate regionally. Here, the policy design element of “**in-state carve outs**” comes into play.

Decentralization, Diversification, and Self-Sufficiency

In contrast with state-based cost sharing, the regional cost sharing proposed in the federal REP bill allows those states that can produce the lowest cost renewable energy an advantage over other states in their region. States with high generation costs might not be able to develop financially viable generation models for renewable energy in their state. Instead, states would feel pressure to buy cheap renewable energy from neighboring states rather than exploit their own, more expensive resources. Comparative advantage forms the basis for interstate trade, but a certain level of self-sufficiency in renewable energy production for each state, for reasons of security, independence and equity, remains a main goal of REP policy. Relying on a few major exporting states encourages the consolidation of electricity generation by area and technology rather than dispersing and diversifying generation of renewable energy. To counteract these forces, states of lesser renewable endowments can be granted “in-state carve outs”.

This mechanism makes the most sense when considering a hypothetical future where the federal government has passed a national RES along with a national REP. The RES would require every state to source a percentage of their electricity, using 25% for this example, from renewables. An “in-state carve out” would further mandate that the targeted state must generate a minimum percentage of that 25% strictly from in-state sources (WFC, 2009). This means that the state given such a carve-out would be required to develop their own in-state research, local generation capacity, and state self-sufficiency. A carve out drives in-state investment in the same manner as a state RPS, but it carries the added benefit of spreading associated costs across the region instead of merely statewide. In this way, potential low-cost, wind energy generators in South Dakota or solar energy generators in New Mexico would benefit from exporting surplus electricity, but they would also have to shoulder some of the costs required to generate more expensive renewable energy elsewhere in their region for the sake of diverse, decentralized generation and state-based self-sufficiency.

Implementing REP policies at the federal level faces several obstacles, notably coal industry opposition and strong resistance from Southeastern states. But this opposition can be overcome with policy designs sensitive to the interests of these key stakeholders that encourage state self-sufficiency and a smooth transition to renewable energy production. With REPs at the national, state and local levels sharing reasonable compatibility, public service organizations such as the Alliance for Renewable Energy can educate Congressional representatives on the merits of a national REP policy in the year(s) ahead.

Works Cited

Rickerson, Wilson, Florian Bennhold, and James Bradbury. "Feed-in Tariffs and Renewable Energy in the USA – a Policy Update." May 2008. Wind-Works. 31 March 2009, [http://www.wind-works.org/FeedLaws/USA/Feed-in Tariffs and Renewable Energy in the USA - a Policy Update.pdf](http://www.wind-works.org/FeedLaws/USA/Feed-in%20Tariffs%20and%20Renewable%20Energy%20in%20the%20USA%20-%20a%20Policy%20Update.pdf)

Roberts, David. "Jay Fever, An interview with Rep. Jay Inslee, clean-energy champion from Washington state." 11 April 2007. www.grist.org. 28 March 2009 <<http://www.grist.org/news/maindish/2007/04/11/inslee/>>

United States. Cong. House. Energy and Commerce Committee & Energy and Environment Subcommittee. American Clean Energy And Security Act Of 2009. 111th Cong., 1st sess. H. (to be determined). Washington: GPO, 2009. <http://energycommerce.house.gov>. 3 April 2009 http://energycommerce.house.gov/Press_111/20090331/acesa_discussiondraft.pdf

World Future Council. "Feed-in Tariff Strategy Meeting, transcript." 13 March 2009. Washington DC.