

Statement of Dr. Peter Fox-Penner
Principal and Chairman Emeritus, *The Brattle Group*
before the
Natural Resources Committee
National Governors Association

Biloxi, MS
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Mr. Chairman and members of the Committee:

It is an honor to appear before you and share my thoughts on electric transmission policy. As all of us know, we are living through the greatest era of change in our energy system since the industrial revolution. To meet the challenge of global climate change, improve our energy security, and transform our system into a “Smart Grid,” we must build a clean energy infrastructure capable of providing millions of good new jobs.

A larger, well-planned transmission grid is an essential part of the New Energy Economy. I agree with the committee that a major barrier to energy security and independence is our inability to plan and build needed transmission lines quickly enough.

Before I talk about solutions, however, I want to reframe the problem a little more carefully. As I do this, I note that my comments are directed at the large-scale, high-voltage grid, not the local distribution wires, where the primary issues are state-jurisdictional.

The United States is fortunate to have one of the most advanced power grids in the world. The problem is *not* that we aren’t building any transmission – we’ve built about 1,000 miles a year since 2005 and current plans show about 2,700 miles a year through 2012. There are at least a dozen proposed multi-billion-dollar projects around the country, most primarily for renewable power.

The problem we confront is twofold. First, we are not planning our grid to meet our policy objectives. The planning process we use does not produce lowest-cost electric service and does not make the best use of renewable resources. This is not to cast any blame – these processes were designed for another era in which transmission planning had no mandate other than to preserve reliability.

My second point is that the current inadequate process fails because it does not integrate planning with binding cost allocation and siting *on a regional basis*.¹ The Committee asked me to speak to the ability to finance new transmission lines. I can assure you that financing a new line is 100% related to whether that line comes has planning approvals, its cost allocated, and siting OKs. With those three items in place I have never seen a line fail to get financing on reasonable terms.

As a result of these problems, we are building transmission in this country but we are not building it in the best places and we are not building it fast enough. As a very rough guess, we need 20,000-30,000 miles of new lines by 2030 to meet RPS and climate goals. This amount of new transmission is economically and technically achievable. We simply need a faster process, with a higher batting average for getting projects done.

There has been a lot of concern expressed recently about a so-called nationwide transmission superhighway that will transport renewable energy far and wide across the land. To many states at the receiving end, this concept is viewed as displacing local renewable development. Moreover, this idea has become associated with legislation that would give the Federal government much more authority over grid planning and siting.

One of the most important things I want to impress on you today is that the need for transmission policy reform is not synonymous with a giant national grid and the loss of in-region development.

¹ In transmission discussions the term *regional* has been used to describe many different areas. I use the term to describe transmission planning/cost allocation/siting areas that are roughly the size of about five small states or one to three large states. Note that these are smaller than several current RTOs and reliability organizations, so each RTO contains several “regions,” which they usually label “subregions.” For example, the Midwest ISO has three planning “subregions.” As I explain, the larger regional areas (such as the WECC) and the FERC must play a role integrating plans and allocating costs that span several subregions or regions.

Nor must we give short shrift to energy efficiency and distributed generation – in a good resource planning process, these come first.

The critical need in planning and siting reform has always been regional, not at the “interconnection-wide” or national level. The regional level is the economically and technically correct way to plan a transmission system that provides lowest-cost power to your citizens. If you want to keep rates low, your utilities should plan and site lines and generators with a regional perspective and within a regional process.

As all of you know, there are several pending Senate proposals to change transmission policy and a House-passed bill. Although these bills represent a lot of excellent work, and are rather close to a good solution, I am not sure whether any have quite found the sweet spot between federal, regional, and state interests. However, I do want to say clearly that these proposals can easily be made workable, and that there is an important federal role here. Let me say as clearly as possible what I think that role is and what it isn't.

First, the federal government should set the national policy objectives and the process standards that every region should meet. Every region must do their part, and every process should be done using the right economic and technical planning methods.

Second, the FERC should continue to have the final authority to allocate transmission costs, including broadly across a subregion or region when necessary.

Finally, the FERC – perhaps aided by larger organizations – should integrate and resolve disputes between regional plans.

What the federal government need not do is top-down transmission planning. It needs to make the regions do it right, not do it from above. It also need not force interconnection-wide plans or cost allocation.

If you cannot support any one of the current proposed bills, then I hope you will work with

Congress to modify them to create a better nationwide process of more rapid and binding regional compromise. There are many different ways to structure the decision-making in the process, including regional regulatory bodies or compacts, joint federal-state boards, or organizations of state regulators such as NECPUC or the Organization of MISO States.

But **most importantly**, please recognize this: The states must be not just one of the change agents, but rather the **leading** change agent, in reforming grid policies. Without your leadership it just won't happen, and we will miss our renewable energy and climate goals or make them much more expensive to achieve.

I acknowledge that there are encouraging signs of progress in many of your regions. Many are considering ambitious plans and working together better than ever before. However, no region has an integrated process yet and there is much work to do.

It would be an irony worthy of Shakespeare if, in haste to foster local renewable development, states inadvertently stunted the growth the industry and raised their own power rates by blocking any action whatsoever on policy reform – the lifeline renewable energy needs to thrive. From the forging of the constitution itself, every act of American progress has been an act of balancing state, regional, and federal interests. On this grand historic scale, regionalizing transmission governance effectively will bring far more gain than pain to your economy and your citizens.

With your permission, I would like to close with a similar but broader point emerging from my forthcoming book, *Smart Power* (Island Press, 2010). My study of the industry has convinced me that the single most important actors shaping the new energy economy are the state public service commissioners you appoint and guide. These public servants face the job of regulating an industry that is going through gigantic changes and facing unparalleled risk. Your commissions are going to need the very best and brightest talent anywhere and more resources. I hope you will bear this in mind as we work together to build the much-needed New Energy Economy.

Thank you very much for your kind attention.