

Department of Energy's Quadrennial Energy Review Hearing on Energy Infrastructure
August 21, 2014
Cheyenne, WY

Rep. Tom Sloan
State of Kansas

On behalf of the Council of State Governments and National Conference of State Legislatures

Thank you for the opportunity to provide comments regarding the establishment of Department priorities, especially in its role as Presidentially designated lead federal agency on streamlining infrastructure siting and decision-making on federal lands. The Council of State Governments (CSG) is the only national organization that includes state executive, legislative, and judicial branch members. One of its primary roles is to develop Interstate Compacts, agreements passed by state legislatures and signed by governors, to facilitate interstate cooperation. There are hundreds of Compacts, some regionally based (e.g., related to the Great Lakes), others nationally (e.g., child support collection and remittance), and a few internationally involving our Canadian neighbors. CSG does not develop the proposed Compacts and submit them to the states for ratification, rather CSG staff convene appropriate stakeholders to draft language which is then vetted through interested parties. The version ultimately submitted to states for consideration is a consensus product whose implementation will benefit the ratifying states' populations.

1. **CSG Interstate High Voltage Electric Transmission Line Siting Compact:** CSG staff convened state legislators, regional transmission organizations' (RTO/ISO) staff, environmental advocates, electric utility transmission operators, state regulatory agencies' representatives, and other key stakeholders over a two-year period. Meetings were held at the Federal Energy Regulatory Commission (FERC) with FERC and DOE staff providing support and information. Draft language was circulated through the network of organizations represented in the drafting process and presented at professional meetings across the country for further comments and suggestions. Presentations also were made to the DOE's Electricity Advisory Committee and to land management policy staff with the Departments of Defense, Interior and Agriculture, as well as to White House staff. All agency representatives expressed interest in the Compact as a means of increasing federal-state coordination on siting infrastructure, but also stated that the DOE is the lead federal agency.

Compact Objectives: The Compact's language is included with this formal filing as are supporting documents. In summary fashion, the Compact provides: a) streamline siting filing,

hearing, public input, and appeals processes for proposed multi-state high voltage electric transmission lines; b) addresses the Energy Policy Act of 2005 language enacted by Congress that provides states may avoid federal backstop siting practices if the states form one or more compacts; c) provides a framework through which regions may address grid reliability, economic development, movement of energy to meet Environmental Protection Agency (EPA) clean air standards; and d) provides a clear mechanism through which federal agencies and Tribal governments can participate as equals with states in evaluating proposed electric transmission routes and in the decision-making processes used to determine whether an application is approved, approved with changes, or rejected for cause.

The Compact provides a firm timeline for hearings in each state before the appropriate officials, public hearings at which citizens may provide information, decision-making, and establishes a common record for administrative and judicial review. The Compact also clearly establishes that decision-makers shall consider regional and national energy needs when evaluating the value of a proposed transmission line (i.e., they shall not solely concern themselves with benefits to the states through which the proposed line will pass).

The Compact encourages applicants to meet with state, federal, and tribal officials and public sector interests (e.g., landowners) prior to filing an application for siting authority. The Compact does not undermine state interests or authority, but facilitates a common application process and procedures with a timeline to streamline the consideration of high voltage transmission projects to meet public policy objectives.

Desired Action: After reviewing the Compact language, it is hoped that the DOE will convene one or more meetings with federal land management agencies, the Compact's drafters, and such other persons as may be deemed appropriate to develop any necessary language or procedural changes. State Legislatures and Legislators have discussed the Compact (e.g., it passed one Chamber of a state legislature before being withdrawn because of the QER process). Western state legislators are particularly interested in the Compact's potential, BUT only if federal land management/owning agencies participate.

The drafters are thus presented with a dilemma: state officials are interested if federal agencies will participate; federal land management agencies are interested if the DOE is supportive; the drafters are willing to consider revisions necessary to secure federal and state participation. DOE endorsement and active support, the DOE's Electricity Advisory Committee recognized this Compact as a way to streamline transmission siting decisions while protecting public interests, is necessary to bring the appropriate level federal decision-makers to a table with the Compact drafters to formally approve a partnership document and process.

If the DOE wishes to pursue this proposal, please contact Crady deGolian (cdegolain@csg.org) or Rep. Tom Sloan (tom.sloan@house.ks.gov).

2. Other Infrastructure Opportunities: Integrated Wind-Solar-Storage Generation RFP

Whether one believes climate change is a result of natural cycles or significantly enhanced by mankind's activities, the Environmental Protection Agency and the general public believe that the appropriate course of action is to increase the generation of electricity using renewable resources. A major problem with such generation units is the variability of production, often simplified by saying it is less dispatchable. The DOE has funded some research and pilot/ARRA electricity/energy projects, but has not truly been on the "cutting edge" of identifying ways to make intermittent renewable generation more reliable.

The DOE should issue a request for proposals (RFPs) for an integrated renewable generation system that involves multiple generation types with storage to act as both a "smoothing" mechanism and a "shoulder" between generators (e.g., wind and solar). At a minimum, a federally supported wind-solar-storage integrated generation project would establish the viability of renewable energy serving as a more baseload unit. Biodigesters using animal or other wastes, algae, landfill gas, or other forms of renewable energy generation could also be incorporated into the project.

Desired Action: The DOE has supported solar programs with direct funds and the nuclear industry with loan guarantees. Establishing the viability of renewable energy generation and storage as baseload equivalencies to fossil fuel, hydro, and nuclear generation would be a worthy and significant role for the Department. The DOE could issue RFPs for utility-size integrated generation plants and micro-grid projects to establish the viability for meeting sustained electric needs by consumers and demonstrating to regulators that such projects are feasible and cost-effective long-term. While funds must be available to support the selected projects, what is more important is the need for vision and innovative thinking.

The DOE's Electricity Advisory Committee (EAC) has prepared a number of papers on the value of energy storage and potential roles for the Department in helping utilities and regulators model the value and benefits of energy storage. Three former EAC members recently had a paper published by IEEE on rate-making principles and problems for energy storage that may be of interest to Department personnel. EAC members are currently working on one or more advisory papers to further encourage the DOE's engaging with the Federal Energy Regulatory Commission (FERC), National Association of Regulatory Utility Commissions (NARUC), Council of State Governments (CSG), National Conference of State Legislatures (NCSL), the Edison Electric Institute (EEI), and other relevant stakeholders. Such actions as may be recommended by the EAC are supportive of the above recommendation regarding the Department issuing and supporting RFPs for integrated renewable generation with storage.

If the DOE wishes to pursue this proposal, please contact Rep. Tom Sloan
(tom.sloan@house.ks.gov)

- 3. Structure Designs and Rights-of-Way:** For many citizens and federal land management agencies one of the objections to permitting high voltage transmission lines, even those delivering renewable energy, is that the towers are unsightly. The wireless telecommunications industry has done a good job of developing ways to “mask” some of their towers. Clearly transmission line towers are more numerous and larger than communications towers, but the principle is the same – how to make transmission towers less obtrusive within viewsheds.

The transmission tower industry can build anything, the limit again is our imagination (within reasonable cost constraints). Just as a transmission tower near Disney World is shaped like Mickey Mouse’s head, other tower shapes can be designed to provide reliable service, while being more esthetically pleasing. Iceland conducted a competition a few years ago to identify such tower designs.

Desired Action: The DOE should initiate a competition for new high voltage transmission structures in conjunction with the Forest Service, Department of Defense, Bureau of Land Management, Parks Service, and FERC. Simultaneously, studies should be commissioned to determine how wide rights-of-way should be if transmission tower heights are reduced to minimize viewshed disturbances. Collaboration among the federal agencies, combined with innovative tower designs and rights-of-way, would be a low-cost, productive means of increasing the ability of infrastructure to be sited on federal lands.

If the DOE wishes to pursue this proposal, please contact Glen Andersen (glen.andersen@ncsl.org), Crady deGolian (cdegolian@csg.org), or Rep. Tom Sloan (tom.sloan@house.ks.gov).

- 4.** The DOE’s Electricity Advisory Committee’s Subcommittee on Energy Storage and the full EAC recommended the Department explore with the private sector financial community ways to “insure” new technologies performance. As the EAC members emphasized, state public utilities commissions are generally reluctant to approve new technologies (e.g., energy storage, composite transmission lines) or new applications of existing technologies because of the perceived risk that consumers will pay twice – once for the new technology and a second time to replace it when/if it fails.

The EAC reported that while the DOE has funded pilot and demonstration projects, too often public utility commissions are either ignorant of the performance of such projects or suspect that their performance will not be repeated in another state (e.g., the performance in Georgia may not be repeated in Minnesota because of temperature differences). The EAC recommended more communication with utilities and commissions detailing the performance of new technologies AND that the DOE engage private sector financial sector community members in developing insurance, surety, assurance, and/or loan guarantee instruments to minimize risk to consumers of new technologies failing to provide the performance anticipated.

As the DOE has provided loans (e.g., to solar companies), loan guarantees (e.g., to the nuclear industry/utilities), and grants (e.g., for storage pilot projects), it is reasonable to expect the Department to investigate additional financial instruments to promote innovation and deployment.

This is important because state public utility commissions are more likely to permit utilities to be “early or first adapters” of new technologies if the perceived risk to consumers is minimal. Just as the U.S. Department of Agriculture and the private sector provide crop insurance to farmers, so too should the DOE and the private sector develop financial instruments to protect electric customers, while encouraging innovation that results in more secure grid operations, while protecting affordability.

If the DOE wishes to pursue this proposal, please contact Ralph Masiello (ralph.masiello@dnhkema.com) or Rep. Tom Sloan (tom.sloan@house.ks.gov).

- 5. DOE and States:** State regulators, and the legislators and governors who develop the rules governing utility regulation, are both very reluctant to take risks with ratepayer money and are potential innovators IF provided information about managing risks associated with “new” technologies and alternative rate-making options. The DOE should not determine “best practices” or recommend specific policies, but can assist in developing models associated with, for example, recognizing and recovering the value of energy storage in its multiple roles. The Electricity Advisory Committee has made this recommendation and state officials through surveys conducted by the Energy Storage Association confirm their interest in receiving such information.

Desired Action: The Department can organize and host meetings with state policy-makers and regulators, RTOs/ISOs, and utilities to collaboratively explore grid security/reliability, micro-grid, storage, and other technologies’ impacts for rate-making purposes. Such meetings can be conducted with the assistance of/in conjunction with meetings of the Council of State Governments, NARUC, and the National Conference of State Legislatures. CSG has regional meetings and all three have national meetings that are held around the country.

The DOE has the authority and moral responsibility to assist state regulators and policy-makers in educating consumers as to the value of electricity and the benefits of maintaining a grid structure that provides reliable, responsible, affordable energy through investment in technologies and resiliency.

If the DOE wishes to pursue this proposal, please contact Glen Andersen at the National Conference of State Legislatures (glen.andersen@ncsl.org), Crady deGolian at the Council of State Legislatures (cdegolian@csg.org), or Rep. Tom Sloan (tom.sloan@house.ks.gov).

Conclusion: Thank you again for considering our thoughts about how the DOE can more effectively work with other federal land management agencies and state governments to promote responsible energy and infrastructure development.