

**Proposal for the Identification and Designation of Renewable Energy Zones
and Associated Transmission in the WECC
Draft – October 26, 2007**

Overview: This paper briefly outlines a proposal for creation of a western regional initiative to identify and designate Renewable Energy Zones (REZ) in the Western Interconnection based on commercial potential and cost of development. The initiative would then seek to develop transmission plans of service to priority REZs to facilitate development of the most cost-effective renewable resources located in the Western Interconnection.

1. Why do we need a Western REZ Initiative?

A number of western states, including Arizona, California, Colorado, Nevada, and New Mexico are working to identify their location-constrained renewable resources and to determine transmission needed to move generation to load centers. These state-by-state assessments provide valuable information on how to economically develop renewable resources within particular states for that state's own use, and in a few cases for use in adjoining states. However, restricting renewable procurement and transmission development to in-state and adjoining state resources can lead to higher costs to consumers and less efficient use of resources available across the Western Interconnection.

A regional renewables market providing multi-state access to the most economic renewable resources across the Western Interconnection provides opportunities for economies of scale, pairing resources on a single transmission system to achieve optimal capacity factors, more liquid markets, a more robust regional transmission system, potentially lower costs than state-by-state markets, and attention to environmental siting considerations at relevant regional scale.

By identifying developable renewable resources in zones throughout the Western Interconnection, load-serving entities, transmission providers, renewable energy developers, and state regulators will be able to make more informed decisions about:

- Costs of renewable power;
- Optimum transmission needed to move renewable power to consumers;
- Potential partners in developing transmission to access renewable areas; and
- Where renewable energy developers should site their facilities to ensure access to the transmission system and minimize environmental impacts..

2. What are other benefits of a Western REZ initiative?

Ideally, the Western REZ (WREZ) initiative would engage stakeholders throughout Western Interconnection in commercial assessment of renewable resource potential and transmission development, thereby laying a foundation for interstate collaboration in the approval and construction of interstate transmission facilities. As it evolves, the WREZ process would seek to build multi-state public and private sector cooperation on policy issues related to renewable development and permitting of related transmission facilities, addressing cost allocation, siting considerations, and need assessment issues, among others. The goal of the

initiative would be to continue the work of the WGA CDEAC process, reducing both perceived and real risks, and creating broad support and specific conditions that favor transmission investments.

3. How would the WREZ initiative work?

The WREZ initiative would be implemented in phases:

Phase 1: Identify all commercial renewable resource potential in the Western Interconnection, aggregate the best potential into REZs, and identify key assumptions and methods in order to determine bus bar generation and related transmission costs to deliver resources from each REZ to specified load centers. This initial REZ analysis would be performed by a consultant who would start with existing studies, then take engineering and environmental concerns into account to screen out undevelopable land in each REZ in order to arrive at estimations of commercial potential. A REZ designation would accommodate all technologies possible within a REZ, and would include a supply curve to indicate REZ potential at various cost levels.

Phase I would also include establishing a collaborative public process to engage regional stakeholders, including, without limitation, public service commissions and other relevant state agencies, load-serving entities (LSE), transmission owners, renewable developers, environmental concerns, tribal concerns, federal land use agencies and others. Stakeholders would inform the consultant's REZ analysis by establishing criteria to designate and evaluate REZs for development. Stakeholders would work by consensus to validate, and correct (where necessary) analytical work being performed. The final report would be a product of the stakeholder process.

Phase 2: Through existing Western Electricity Coordinating Council and sub-regional transmission planning groups, develop conceptual transmission plans to deliver energy from the highest ranking REZs to identified load centers. WGA would encourage these planning groups to ensure that their stakeholder processes are especially open and transparent when addressing REZ-related projects.

Phase 3: Report to WGA on remaining commercial obstacles. If the first two phases identify interstate procurement options that may be commercially viable, yet no LSE has taken steps to procure such resources, the Steering Committee (described below) would engage senior management of LSEs to investigate and report on the reasons why.

Phase 4: Identify preferred institutional options for interstate cooperation to facilitate transmission permitting approvals, allocate costs and ensure cost recovery of transmission investments.

4. How can the federal government support transmission to REZs?

The Western Area Power Administration (Western) can play a major role in the construction of transmission to REZs. Congress should grant Western significant new funding and authority to ensure transmission expansion to REZs as provided below:

- Expand Western’s core function and charter mandate to require building and operating transmission to renewable energy resources.
- Establish and fund a Renewable Energy Fund to finance new transmission to REZs. This would be done in coordination with western states.
- Authorize Western to borrow funds to develop transmission for renewable resources to be paid back over 50 years.

5. How will the WREZ initiative be structured and governed?

The WREZ initiative would be overseen by a Steering Committee made up of Western Governors, state PSC Commissioners, and senior management of representative LSEs and transmission owners. WGA/WIEB would provide project management support. The WREZ initiative would operate as a collaborative, with transparent planning assumptions and shared data. Steering Committee and stakeholder meetings would be open to the public. Broad-based stakeholder support for REZ designations and planning, design, and construction of associated transmission is an essential outcome.

6. What are we asking from EERE to support the WREZ initiative?

We request that EERE provide the following support for the WREZ initiative:

Provide funding for technical support of the WREZ initiative by NREL. In the interim, NREL is working with the California PUC to ensure that analytical methodologies being developed by California and NREL are compatible;

Find that it is appropriate for the Western Governors’ Association/Western Interstate Energy Board to manage the WREZ initiative, including facilitating the stakeholder process, and financially support this management role;

Act as the focal point for coordination with other DOE divisions, such as the Office of Electricity and the Western Area Power Administration, and other federal agencies, and participate as a stakeholder;

Assist in identifying stakeholders, including renewable technology representatives, who should participate in the WREZ initiative.