

EXPERTS AGREE: A REGIONAL ENERGY MARKET IS THE MOST EFFICIENT, EFFECTIVE WAY TO MEET GROWING DEMAND FOR RELIABLE, AFFORDABLE AND SUSTAINABLE ENERGY

"A primary, and perhaps only, means to overcome the inherent institutional friction and align divergent stakeholder perspectives is to leverage the common goals of reliability and economic efficiency. ... benefits are substantial and inaction is not an option. Financial and safety risks related to outages, inefficiency costs to consumers, and an inability to optimally integrate clean energy resources and achieve the associated environmental benefits will be an inevitable result of the legacy system in the West unless there are both institutional and physical changes made."

The Hewlett Foundation

"Grid Integration in the West: Bulk Electric System Reliability, Clean Energy Integration, and Economic Efficiency"

"... regional electric grids can help states comply with the new EPA limits. All regional grid operators are capable of not only integrating high levels of renewable energy today, but also confirming wind and solar will reduce their grid's reliance on existing fossil fuel power plants. ... And combining renewable energy development with electricity supply management on a regional basis would present even greater possibilities for reducing emissions from existing power plants."

Union of Concerned Scientists

"Renewable Energy on Regional Power Grids Can Help States Meet Federal Carbon Standards"

"Many undeveloped landscapes with high renewable resource potential also have high conservation value, creating the potential for conflict between renewable energy development and conservation goals. ... At very high [renewable energy] penetration that is limited to in-state development, cost effectiveness decreases substantially under the highest level of environmental constraint due to the over-reliance on solar technologies. This additional cost is removed once the in-state constraint is lifted. Minimizing both negative conservation impacts and electricity costs at very high RE penetration will require California to utilize a combination of in-state and out-of-state RE resources, since it is possible to achieve 50% renewable energy generation by 2030 in the WECC-wide scenario under the most stringent set of environmental constraints while incurring only a 2% cost premium."

The Nature Conservancy (TNC) "Integrating Land Conservation and Renewable Energy Goals in California: A Study of Costs and Impacts Using the Optimal Renewable Energy Build-Out (ORB) Model"

"Wyoming wind when combined with California's own renewables provides a better electrical product than California's indigenous renewables alone can provide. Eliminating existing barriers to regional sharing of renewable assets and eventually moving toward a regional and interconnect wide solutions will allow for the best use of our variable renewable resources as they begin to produce large fractions of our electrical energy supply."

"Wind Diversity Enhancement of Wyoming/California Wind Energy Projects: Phase 2" Prepared by: Jonathan Naughton for the Wyoming Infrastructure Authority

"In 2030, regional trading was mostly renewable, rather than carbon-intensive fossil energy. Annual import quantity was roughly half of today..."

California 2030: The Low Carbon Grid Modeling performed by the National Renewable Energy Laboratory (NREL). Additional analysis will be contributed by GE Energy Consulting and JBS Energy, Inc.