California Energy Commission

RENEWABLE ENERGY TRANSMISSION INITIATIVE

The California Energy Commission (CEC), in collaboration with the California Public Utilities Commission (CPUC), California Independent System Operator (CAISO), Northern California Power Agency, Southern California Public Power Authority, and the Sacramento Municipal Utility District, formed the Renewable Energy Transmission Initiative (RETI) as an informal stakeholder collaborative to develop a conceptual statewide transmission plan that minimizes environmental impacts and economic costs and supports California’s 33 percent Renewables Portfolio Standard goals. Though RETI does not have administrative or legal standing, its value lies in its ability to influence formal processes and procedures related to renewable energy infrastructure planning and permitting. The 30-member stakeholder collaborative includes state, federal, and local agencies; investor and publicly owned electric utilities; environmental organizations; renewable generation developers; ratepayer advocates; Native American tribal representatives; and others.

The Need for a Collaborative Planning Process

A new, collaborative approach to renewable energy planning and permitting in California was essential to address problems associated with the transmission planning process and with permitting renewable-related infrastructure. For example, transmission planning in California has historically lacked a statewide approach; and stakeholder participation in transmission planning has not been adequately emphasized, with the result that transmission plans have lacked broad support, contributing to permitting issues and failures. Transmission planning must also now incorporate renewables, increasing the complexity of the planning and permitting processes, because most renewable energy sites are remotely located and therefore require lengthy transmission lines to interconnect to the transmission grid.

This chart shows revised CREZ assessments in terms of relative economic cost and environmental concerns per unit energy produced. CREZ to the left in this chart are expected to have fewer environmental concerns per unit energy production, and CREZ toward the bottom are expected to have lower cost/higher economic value per unit energy.
RETIs ability to improve California’s transmission planning process is due in part to the fact that the majority of the RETI members are either responsible for, or parties to, formal transmission and renewable generation planning and permitting. Every major stakeholder group with an interest in renewable energy development in California is represented in the collaborative. Without new and upgraded transmission infrastructure, central station renewable generation could be stranded, market support would dry up, and advancement of clean technologies would be hampered.

The RETI stakeholder collaborative benefits the public as it encourages support for renewable technologies and seeks to improve public perceptions of renewable infrastructure needs.

Implementing RETI
The CEC first implemented a strategy to address the lack of broad stakeholder support for transmission plans by funding the Imperial Valley and Tehachapi Implementation Groups contract in 2005. The contract, for two specific renewable areas of California, marked the first use of a stakeholder collaborative to conduct transmission planning, and it was essentially the precursor to RETI, which launched in July 2007. The CEC has spent $1.3 million in RETI facilitation and technical support, while the CPUC has contributed another $1.1 million; other members have donated their staff resources in active participation in the collaborative.

Preliminary Results
While it is difficult to quantify results, billions of dollars are necessary to transform California’s electric system from fossil fuels to renewables. Broad stakeholder and public support—which RETI is seeking to improve—is essential and this approach has the potential to reduce costly litigation and delays during the permitting process. RETI has been instrumental in fostering consolidated electric utility transmission planning that will directly feed into the CAISO transmission planning process. In addition, RETI has shaped the CPUC’s long-term generation procurement process for renewable energy.

Judges’ Comments
RETI is a great conceptual model that can link together multiple states and stakeholders—which would be a big step forward in transmission planning. The Initiative exhibits leadership and innovation and is a commendable activity that ought to be emulated by almost every state, at least internally, to deal head-on with one of the major issues our nation is facing.