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PUBLIC RECORD

Expanding Transmission to Access Renewables May be Key to Reach State Mandates

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ABSTRACT

The RETI 2.0 effort is a statewide initiative sponsored by the California Natural Resources Agency, the California Energy Commission, the California Public Utilities Commission (CPUC), the California Independent System Operator (California ISO) and the U.S. Bureau of Land Management. Transmission development and new renewable energy sources could help the state meet the mandates set by Senate Bill 350, which calls for generating half of California's electricity from renewable sources by 2030, and Senate Bill 32, which requires California to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030, according to the report.

FULL TEXT

By Staff Reports

Meeting California's renewable energy and greenhouse gas emission goals may necessitate the expansion of electricity transmission infrastructure to access new renewable power sources, both within and outside the state, according to a multiagency state report.

The draft Renewable Energy Transmission Initiative (RETI) 2.0 report seeks to identify areas where utility-scale renewable energy can be accessed and where opportunities exist to develop electricity transmission. California is blessed with abundant renewable resources which can be developed at reasonable economic and environmental costs.

"California is leading the world as we work to meet our clean energy goals," said Energy Commission Chair Robert

B. Weisenmiller. "We are pursuing an integrated strategy, and looking ahead at least 15 years to make sure we're doing the right things now to develop the options we'll need then. The RETI 2.0 process is helping the state's energy agencies, utilities, renewable industry, and residents narrow down our focus on where we might need new transmission."

Expanding Transmission to Access Renewables May be Key to Reach State Mandates

The RETI 2.0 effort is a statewide initiative sponsored by the California Natural Resources Agency, the California Energy Commission, the California Public Utilities Commission (CPUC), the California Independent System Operator (California ISO) and the U.S. Bureau of Land Management. Development of the plan involved extensive, public discussions with stakeholders at more than a dozen workshops over a 13-month period.

The report also included the work of three significant foundational reports that offered additional opportunities for public input. One of those reports, the RETI 2.0 Western States Outreach Project Report authored by interests outside the state of California, found that greater cooperation among partners in the Western states would open additional opportunities to increase access to renewable energy.

Transmission development and new renewable energy sources could help the state meet the mandates set by Senate Bill 350, which calls for generating half of California's electricity from renewable sources by 2030, and Senate Bill 32, which requires California to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030, according to the report.

Access to low-cost renewable supplies and renewable markets outside California can add to the diversity of renewable power resources while also opening up markets for excess in-state power generation. This would serve to reduce consumer costs, the report said.

The report found that utility-scale solar photovoltaic is cost competitive across much of California and that while many of the best and most accessible wind resources in the state have been developed, improvements in wind turbine technology could allow more wind resources to become cost-effective. Tapping renewable energy in some of the state's most renewable-rich areas such as the San Joaquin Valley, Imperial Valley, and the desert is feasible due to extensive planning efforts by local officials and stakeholders, but may require new transmission.

The report examined additional potential transmission challenges. One is the potential need for a new transmission line to deliver power from San Bernardino, Riverside, and Imperial counties. Two alternative projects were identified, either of which would face significant permitting challenges and costs of up to \$1 billion.

The report emphasized there is a diversity of strategies available to meet the state's energy goals. Options such as energy efficiency and rooftop solar systems could reduce the demand for large-scale renewable projects, while widespread adoption of electric cars could increase it.

RETI 2.0 is not a regulatory proceeding and the report does not estimate, project or target any additional transmission. Findings from the report will be used to inform future planning and regulatory forums at the Energy Commission, CPUC and the California ISO starting in 2017.