

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Investigation on the Commission's own Motion to actively promote the development of transmission infrastructure to provide access to renewable energy resources for California

Investigation 08-03-010 (Filed March 13, 2008)

Order Instituting Rulemaking on the Commission's own Motion to actively promote the development of transmission infrastructure to provide access to renewable energy resources for California.

Rulemaking 08-03-009 (Filed March 13, 2008)

CLEAN COALITION OPENING COMMENTS ON PROPOSED DECISION
IMPLEMENTING ASSEMBLY BILL 1954

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The Clean Coalition respectfully submits these opening comments on the Commission's Proposed Decision (PD) implementing Assembly Bill 1954.

The Clean Coalition is a California-based advocacy group, part of Natural Capitalism Solutions, a non-profit entity based in Colorado. The Clean Coalition advocates primarily for policies and programs that enable the "wholesale distributed generation" market segment, which is generation that connects to the distribution grid for local use. The Clean Coalition is active in proceedings in many regulatory venues, including the Commission, Air Resources Board, and the Energy Commission in California; the Federal Energy Regulatory Commission; and in other state and local jurisdictions across the country.

Our main points are as follows:

- The Clean Coalition supports the Proposed Decision with one exception.
- We propose that transmission investment studies be rate-based only when there is a reasonable likelihood that the proposed transmission line to be studied will be cost-effective relative to the alternatives.
- We support adoption of a modified approach to the relative cost test for rate-basing the cost of new transmission studies proposed by DRA, in place of the PD's third option for approval.
- We instead propose a reasonableness test based on the available results of the existing RETI analysis and any subsequent updates.

Comments

Background

The Clean Coalition is an advocate of Wholesale Distributed Generation (WDG), which we define as renewable energy projects interconnecting to the distribution grid close to load centers. We do not in principle oppose transmission-interconnected projects, but we do encourage policies that allow fair comparisons of these different market segments. See Figure 1 illustration for our estimate of actual ratepayer cost for various market segments when distance to load and transmission dependence is considered.

Existing utility procurement practices that focus almost entirely on the purchase price of renewable energy projects (c/kWh) have the unfortunate effect of masking the actual ratepayer cost of delivering that energy from remote locations. This is the case because the transmission system costs required to send power from remote locations to load is rate-based and not generally considered in procurement decisions. This process drives large-scale renewable energy developers to seek the lowest cost locations for generation (lowest cost of land and highest wind or solar resource), thus creating an artificial demand for transmission from remote areas. **Pursuing such major ratepayer investments without consideration of the availability of less costly and timely alternatives would be bad policy and not in keeping with the law**

Figure 1. Clean Coalition estimate of ratepayer costs of solar energy in various market segments.

	Distribution Grid					T-Grid
PV Project size and type	100kW roof	500kW roof	1 MW roof	1 MW ground	5 MW ground	50 MW ground
Required PPA Rate	15¢	14¢	13¢	12¢	11¢	10¢
T&D costs	0¢	0-1¢	1¢	1¢	1-2¢	2-4¢
Ratepayer cost per kWh	15¢	14-15¢	14¢	13¢	12-13¢	12-14¢

The Proposed Decision notes that the purpose of Assembly Bill 1954 amended Section 399.2.5 is to provide “backstop” cost recovery mechanisms and increase certainty to allow “utilities to proceed with the development of transmission facilities that are necessary to help attain RPS goals and that otherwise might be too risky due to the inherent uncertainty of renewable resource development.” (PD at 2). The Clean Coalition wishes to bring to the Commission’s attention that such risks associated with renewable resource development are, by contrast, largely avoided through distribution-connected generation that serves local load; such projects require no new transmission facilities, do not require long lead times, and make use of incremental upgrades to existing systems that need not be performed until the generation is under construction and assured of production. These factors greatly reduce the large long-term investment commitments and risk associated with new transmission facilities.

Standards

The Commission concluded in the Proposed Decision that the applicable standard for cost recovery for studies is not whether construction of proposed transmission facility will be approved, but whether the utility has a reasonable expectation that the facility will be necessary to facilitate the achievement of RPS goals (PD at 9). This means not merely that it can help to achieve RPS goals, but that it is **needed** in order to facilitate achievement of RPS goals – i.e. the goals may not be achieved absent study of projects such as the one in question, as part of an aggregate of studies. As such, both the relative value of a proposal and the total capacity of all projects being studied should be considered. For example, if the identified need is for 8 GW of additional capacity, there is no legitimate basis for ratepayers to support studies grossly in excess of this capacity.

The Proposed Decision proposes three criteria under which a study may qualify for reimbursement if it meets any of the three. The Clean Coalition agrees with the first two options (a & b) as these rely upon well-founded planning processes, but we do not support the third (c):

Evidence the facility would be a new 200 kilovolt or larger transmission facility, whether network or generation intertie, designed to serve multiple RPS-eligible

generators. Evidence would be at least two generator interconnection agreements either executed or tendered by the transmission owner to developers of RPS-eligible technology that identify a need for the transmission project.

This third option would allow rate-basing study costs for very high-risk transmission proposals lacking any association with planning processes, and evidenced by uncommitted interconnection agreements requiring no commitment to build the generation or any demonstrated market or ability to sell power from the proposed generation. We propose an alternative for this third option. We propose modification of DRA's relative cost criterion with the adoption of the RETI net cost analysis as a basis. **Specifically, we propose that the Commission not provide backstop study cost reimbursement for projects whose net cost is expected to exceed that required to meet 200% of the RPS net short as identified in RETI 2010 and subsequent updates.**

DRA proposes that the cost of the proposed new transmission line be compared to the alternative cost of RPS compliance under the scenario where the line is not constructed, a standard that was adopted in D.07-03-012. The Clean Coalition agrees with the Proposed Decision that a less restrictive standard is required for study of a proposed transmission project than for actual construction of the transmission line. However, we believe DRA's reasoning also has merit and we recommend a modification of DRA's suggested approach.

There are objective criteria available for evaluating reasonable expectations with respect to the need for proposed transmission lines. If less costly alternatives are available to meet or facilitate the achievement of RPS goals, then a reasonable expectation of need has not been demonstrated. The mere request for interconnection (tendering or acceptance of an Interconnection Agreement (IA)) is **not** a sufficient basis, in our view, to conclude that the proposed transmission line has a reasonable likelihood of being necessary to facilitate achievement the RPS. CAISO has received interconnection requests for 60,000 MW of new additional capacity, more than the highest peak load ever recorded on its system. This is 600% of the transmission-dependent capacity anticipated to be required to meet the RPS, demonstrating that a large majority of these facilities will not in fact be needed. Investing in transmission studies for new lines grossly in excess of expected RPS requirements does not conform to the statute or prior Decisions.

As shown in the 2010 RETI report the net cost of transmission can vary dramatically, and there is no basis for pursuing projects when there is no likelihood of demand, even if there is interest among developers for building these projects. The Clean Coalition supports providing transmission development cost rankings to prospective generators, at low cost, to assist in site selection; however, with no cost limitations on individual studies that will be rate-based, the standard for selection of studies to perform must include reasonable criteria to protect against unnecessary studies.

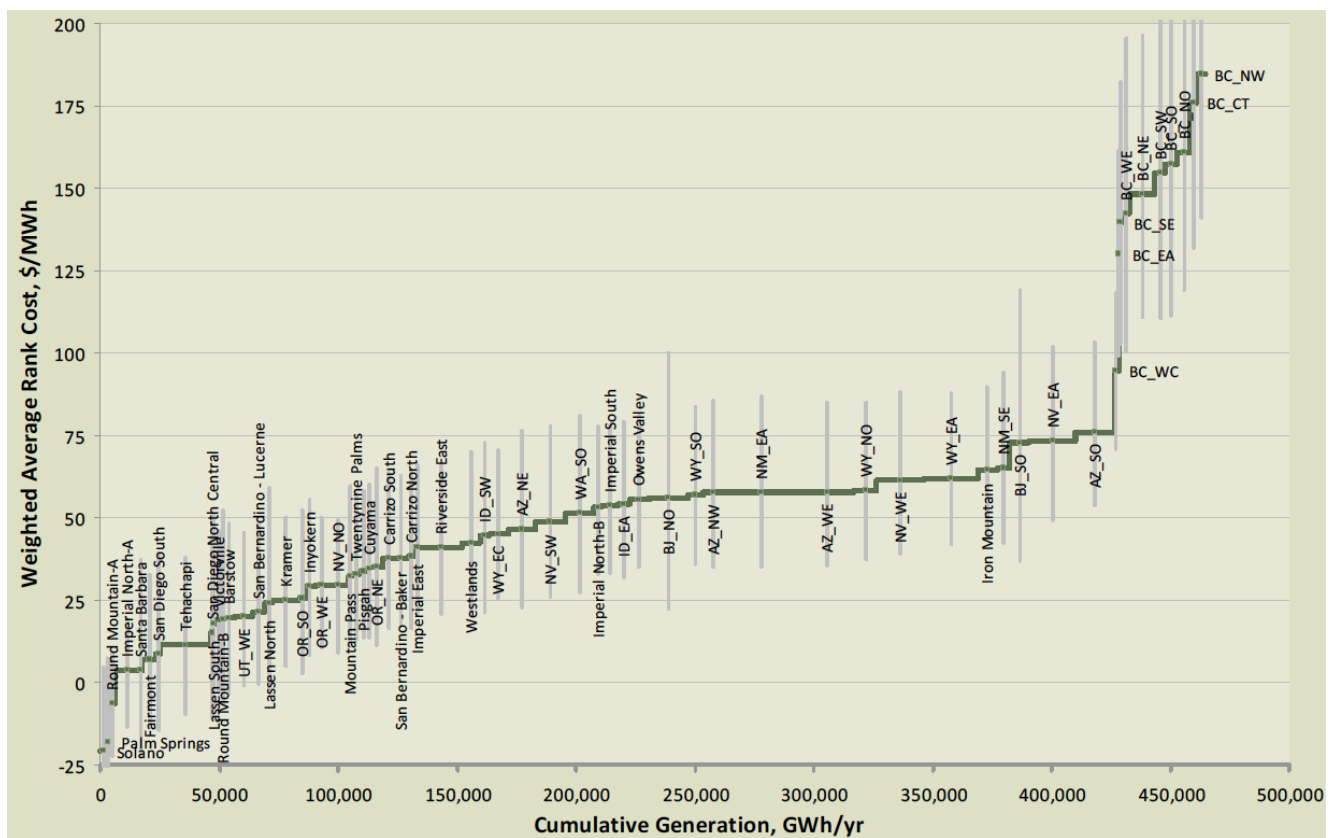
On this basis, the Clean Coalition recommends a bright line criterion for rate-basing qualification: Where neither the CAISO or RETI CREZ planning support the proposed transmission **the cost must not unreasonably exceed the list of RETI-ranked projects sufficient to fulfill the RPS net short**. This test therefore only applies to projects not otherwise already qualified for rate recovery.

With a net short by 2020 of roughly 50,000 GWh/yr, RETI has identified CREZ (Competitive Renewable Energy Zone) projects with a capacity nearly ten times that required. RETI also evaluated the relative cost per MWh of delivered energy among CREZ transmission projects, finding that the less cost-effective projects were also ten times the cost of the most expensive required to fulfill the RPS. While all of these projects would facilitate meeting RPS goals, only 10% would be necessary to do so even if no other resources were considered. In actuality, wholesale distributed generation (WDG) is expected to contribute significantly, greatly reducing the need for even this 10% of RETI-identified transmission.

A supply curve represents the quantity of a product that is available at a particular price. The supply curve (Figure 2) was constructed by plotting the amount of generation or capacity added by each resource against its corresponding levelized cost. For RETI, the incremental generation from each CREZ is plotted against its rank cost in ascending order. Figure 2 depicts the supply curve for all California CREZs and out-of-state resource areas using the weighted average rank costs. The potential generation (GWh/yr) is on the x-axis and rank cost (\$/MWh) is shown on the y-axis. To develop this curve, the CREZ rank costs were sorted from lowest to highest and plotted versus cumulative generation to develop one curve for comparing all the CREZs.

Since the need for new transmission to facilitate fulfillment of RPS standards is dramatically lower than the number of proposed transmission projects, the Commission must consider not whether a project is merely able to facilitate fulfillment of RPS standards, but **must adopt the higher standard of whether it is reasonably considered necessary to do so**. Projects that are clearly not cost-competitive relative to available alternatives do not meet this criterion. As such, there is no reason for ratepayers to absorb costs associated with the study of projects of this type that are never going to be built.

Figure 2. RETI supply curve for CREZ resources (source: RETI Phase 2B report, p. 7-5).



Since environmental impacts of transmission and generation site selection are also significant factors, it would be inappropriate to assume that only the lowest cost systems are likely to be developed, and allowance should be made for the viability of projects above the cost of the capacity necessary to fulfill the RPS. RETI recommends allowing for a 100% excess capacity, equal to 100,000 GWh/yr. The Clean Coalition supports this

recommendation, but notes that since distributed generation has a much lower environmental impact than central station renewables and is cost-competitive with transmission-dependent solar generation in the RETI analysis, WDG may be expected to fulfill a significant portion of the RPS net short. Our best estimate is 30% or more.

With more complete consideration of WDG, 100,000 GWh/yr of transmission-dependent renewable energy will actually represent 200% of the generation needed to meet the 2020 RPS. Adopting a project cost limit sufficient to support a 200% excess capacity surely provides a reasonable standard for determining whether a project is necessary to facilitate fulfillment of the RPS. The Clean Coalition recommends adoption of this standard as a specific basis by which the DRA's proposed economic test may be applied for projects that do not meet either of the first two criteria from the Proposed Decision's checklist:

A determination by an RTO or CAISO that the transmission project in question is reasonably likely to support the state's RPS goals, pursuant to a transmission planning process that is fully compliant with FERC Order 890. For CAISO, evidence would include Category 1 or 2 approval in CAISO's Transmission Planning Process; OR

Evidence that the proposed facility runs through one or more RETI-identified CREZs, or a Renewable Energy Study Area identified by the Desert Renewable Energy Conservation Plan, or has one terminus in such a preferred area. Evidence would include maps of the proposed transmission project and the most recent relevant information from RETI or the Desert Renewable Energy Conservation Plan, including the generation potential and economic and environmental information for the relevant area.

And in place of the third alternative criterion:

Evidence the facility would be a new 200 kilovolt or larger transmission facility, whether network or generation intertie, designed to serve multiple RPS-eligible generators. Evidence would be at least two generator interconnection agreements either executed or tendered by the transmission owner to developers of RPS-eligible technology that identify a need for the transmission project.

DRA proposes language modification to specify that the cost of the line be compared to the alternative cost of RPS compliance under the scenario where the line is not constructed. Our suggested modification is as described above.

I. Conclusion

The Clean Coalition supports the Proposed Decision with the one exception described above.

Respectfully submitted,

-/S/-

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