

**STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION**

In the Matter of:)	Docket No. 04-IEP-01E and F
The Preparation of the 2005 Integrated)	2005 Energy Report:
Energy Policy Report (Energy Report))	Comments on Strategic Value
)	Analysis for Integrating
)	Renewables

**COMMENTS OF THE
CALIFORNIA WIND ENERGY ASSOCIATION
ON
“STRATEGIC VALUE ANALYSIS FOR INTEGRATING
RENEWABLE TECHNOLOGIES IN MEETING
TARGET RENEWABLE PENETRATION”
AND SUPPORTING DOCUMENTS**

Pursuant to the June 15, 2005, Notice of Committee Workshop and the statement of Commissioner Geesman at the workshop regarding the filing date for these comments,¹ the California Wind Energy Association (“CalWEA”) submits comments on the Strategic Value Analysis for Integrating Renewable Technologies in Meeting Target Renewable Penetration (“SVA Report”) (CEC-500-2005-106) and supporting documents. CalWEA represents over 20 members of the wind energy industry, including turbine manufacturers, component suppliers, consultants, project developers, and project owners representing over 200 megawatts of capacity operating in all four of California’s major wind resource areas.

According to the SVA Report (at p. 1), the SVA analysis is intended to be “a method for evaluating the economic feasibility of using in-state renewable resources to meet California’s Renewable Portfolio Standard (RPS) targets” and for assessing the impacts of deploying those resources on the state’s electricity system. According to the workshop notice, the SVA method additionally “may be useful to electric utilities and renewable project developers involved in procuring renewable resources under the ‘least-cost, best-fit’ requirements of the RPS bid procurement process.” Our comments are concerned primarily with how the SVA Report might inappropriately affect procurement and transmission decisions being made at the CPUC. Due to the resource constraints we face in the midst of multiple ongoing proceedings both at this commission and at the CPUC, we are not able to comment on other aspects of the SVA Report at this time.

¹ See the transcript for the July 1 workshop at p. 11 line 14 (written comments on the workshop subjects are due on July 22).

Summary of Comments

To summarize our comments, we are concerned that the SVA Report leaves the false impression that the state's RPS goals largely can be met without substantial investments in the state's transmission infrastructure. This impression could potentially undermine the determination that needs to be made by the CPUC to authorize construction of the Tehachapi transmission upgrades – a determination that requires a finding that the Tehachapi wind resources are needed to meet the state's RPS goals.

In addition, the report's analysis of transmission benefits related to renewable resources located in certain areas where transmission upgrades would not be needed could be used in the least-cost/best-fit ("LCBF") bid evaluation process to benefit those resources with no comparable assessment available for the renewable resources that do require transmission upgrades or that could use available transmission with some level of curtailment. In other words, the report does not analyze all potential renewable resources (or even evaluate all prime resource areas) on a consistent basis. Rather, it analyzes only a select subset of renewable resources whose "developability" is not assured for a variety of reasons.

We request, therefore, that the SVA Report be modified to eliminate the potential that its findings may be misinterpreted. If the 2010 scenarios for meeting the RPS goals are not eliminated entirely, they should contain a prominent disclaimer that they are based on an analysis of only a subset of theoretical resources. Likewise, any statements in the 2005 IEPR that draw upon this report should be carefully crafted to avoid any unintended inferences.

Discussion

The SVA Report may be useful for developers interested in knowing where they may inject power into the grid without triggering the need for upgrades, both because they will not have to pay for any upgrades as part of their interconnection agreements and because their bid should be evaluated accordingly. The Report is potentially very counter productive, however, when it suggests that the resources it identifies are capable of satisfying the RPS goals. This suggestion is false for at least three interrelated reasons:

- the report is not based on a LCBF analysis of renewable resources, as required by the RPS statute;
- the report has not analyzed all resources, including those that require transmission upgrades, and
- rather than focusing on projects that are in some stage of development (as did, for example, the Commission's 2003 Renewable Resource Development Report), the report takes *theoretical* projects and *locates them* in a fashion that minimizes the potential for transmission overloads.

A discussion of these points follows.

Although the report states (at p. 1) that it has evaluated the economic feasibility of using in-state resources to meet RPS targets, it has not actually done so because it has evaluated only a subset of resources and it did not conduct a LCBF analysis -- i.e., an analysis that includes actual bid prices, integration costs, and transmission costs and benefits. For example, it did not evaluate the full Tehachapi wind resource, including a potential transmission interconnection system that would create a loop around Path 26, increasing the state's north-south transfer capability. Likewise, no consideration appears to have been given to projects that may be able to utilize available transmission with some level of curtailment.

It is this type of analysis that the CPUC is seeking as it considers whether to grant Southern California Edison's CPCN applications for the three segments of Phase 1 of the Tehachapi upgrades. As stated in the CPUC's Scoping Memo for Segment 1 (Antelope-Pardee):

[T]he scope of this proceeding includes whether the proposed Antelope-Pardee Transmission project is "necessary" to facilitate achievement of RPS goals ...²

[A]dditional testimony is necessary in order to determine whether the Antelope-Pardee Transmission Line is a reasonable investment for California's, and SCE's ratepayers. Although the CEC [Renewable Resources Development Report] indicates that Kern County (Tehachapi) wind may alone satisfy much, if not all, of RPS demand, the study did not address the operational cost of integrating Tehachapi wind resources into the system, the cost-effectiveness of wind resources compared to other renewable resources, or the likelihood of wind projects succeeding in the utilities' RPS solicitations.³

Whether wind projects succeed in the utilities' RPS solicitations will depend in significant part on the cost estimates associated with the necessary transmission infrastructure related to those bids, as well as the benefits of that infrastructure. We are concerned that, were the judge in this proceeding (and the proceeding for Segments 2 and 3, which will follow close on its heels) to read the SVA Report, she might well conclude that Tehachapi wind is not "necessary" to facilitate achievement of RPS goals, or even that it is cost-effective compared to other renewable resources. She might draw this conclusion from statements in the SVA Report such as (at p. 1):

[The SVA methodology] was used to evaluate the economic feasibility of using in-state renewable resources to meet California's Renewable Portfolio Standard (RPS) targets ...

And, at p. 2:

² Application 04-12-007, "Scoping Memo and Ruling of Assigned Commissioner," June 7, 2005 (at p. 5).

³ *Id.* (at p. 7).

The results in this report indicate that in-state renewable resources that require little increase in new transmission lines [i.e., including only 900 MW from the Tehachapi resource] ... can provide approximately eighty-five (85) percent ... of the electricity needs required by the RPS target, based on the SVA approach. The remaining fifteen (15) percent of the required electricity can be developed from out-of-state resources and/or from in-state renewable resource that will need new transmission capacity.

Similarly, were the SVA Report to be used by the utilities in assigning transmission benefits to bidders proposing to locate projects at points identified in the Report while ignoring the transmission benefits associated with bids in locations not evaluated in the report (an outcome that would be allowed under current CPUC policy), the bid evaluation would be skewed to the detriment of the projects not considered in the SVA Report, such as projects located in Tehachapi.

In addition, the SVA Report takes *theoretical* projects and *locates them* in a fashion that minimizes the potential transmission overloads. The Report thereby elevates projects that may have *no realistic chance of development* while ignoring resource areas where the potential for development is great. For example, the Report's scenario for meeting 2010 RPS goals:

- is inconsistent with actual RPS bidding results to date. Whereas the SVA scenario assumes that geothermal resources will comprise 20 percent of capacity and wind resources will comprise 51 percent of capacity, in actual RPS bidding results to date wind accounts for 73 percent of all new projects and geothermal accounts for just 13 percent of all new projects. Likewise, biogas accounts for 7% of the capacity in the SVA scenario, but under 1% of new capacity in RPS bidding results. Finally, concentrating solar power (CSP) facilities account for 10% of capacity in the SVA scenario, but 0 percent of RPS bidding results.⁴
- appears to be based on an analysis which is inconsistent with the LCBF bid evaluation methodology. That methodology is unlikely, for example, to support the development of over 1,000 MW of CSP facilities whose costs are unlikely to be lower than the combined cost of wind energy and capacity from other sources (e.g., a combustion turbine), which together can provide energy and capacity at a significantly lower cost than CSP. In other words, the LCBF methodology should result in meeting the RPS *energy* goals at least cost.
- includes development in highly controversial areas, such as 132 MW of wind resource development at the Altamont Pass (despite a development moratorium that is in effect there due to avian mortality concerns, and despite lawsuits that threaten to shut *existing* projects down) and 175 MW of geothermal capacity at Medicine Lake (a site with significant environmental and cultural sensitivities).

⁴ These figures are based on CalWEA's tally of RPS bidding results to date, including the pre-RPS interim solicitations. Approximately 900 MW of new capacity has been contracted for, in addition to contracts for existing geothermal, biomass and hydro resources and wind repowers.

- excludes development in the Tehachapi area where the land has already been permitted for wind development, has been cleared of air space conflicts with the military through an adopted ordinance, and is free of significant avian mortality issues. In contrast, some 1,600 MW of wind development is assumed in San Bernardino and Riverside counties where permits are not generally in hand and military clearance has not been granted.

Likewise, other resource areas identified as desirable do not appear to have been screened for their ability to be developed in the near-term. Substantial lead time is required to identify and evaluate potential project sites, tie up the land, obtain permits, etc.

In short, the SVA Report's 2010 RPS scenario is based on an analysis of a subset of renewable resources whose "developability" is not assured for a variety of reasons, and which excludes resources whose development is likely (provided transmission access).

Conclusion

The SVA Report may provide value to renewable resource developers and transmission planners. However, it should not be used as the basis of scenarios for meeting RPS goals because it is based on only a partial analysis of available renewable resources, does not use the least-cost/best-fit evaluation methodology, and does not take into account actual bids or bidding results. We request, therefore, that the SVA Report be modified to eliminate the potential for its findings to be misinterpreted. Because the results are not useful for assessing how the state might actually meet its RPS goals, it would be appropriate to eliminate all scenarios for meeting the RPS goals until such time as a more thorough SVA analysis has been conducted. If this step is not taken, the RPS scenarios should contain a prominent disclaimer that they are based on an analysis of only a subset of theoretical resources. Likewise, any statements in the 2005 IEPR that draw upon this report should be carefully crafted to avoid any unintended inferences.

Respectfully submitted,

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