

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to
Continue Implementation and
Administration of California
Renewables Portfolio Standard
Program.

Rulemaking 11-05-05
(Filed May 5, 2011)

CLEAN COALITION COMMENTS ON PROJECT VIABILITY CALCULATOR

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CLEAN COALITION COMMENTS ON REVISIONS TO THE PROJECT VIABILITY CALCULATOR

Pursuant to the May 13, 2011, *Request for Comments* in Proceeding R-11-05-005, the Clean Coalition respectfully submits these comments in response to the Energy Division's request for comments on the Project Viability Calculator (PVC) for use in the Renewables Portfolio Standard (RPS) Solicitations.

The Clean Coalition is a California-based advocacy group, part of Natural Capitalism Solutions, which is based in Colorado. The Clean Coalition advocates primarily for vigorous feed-in tariffs and "wholesale distributed generation," which is generation that connects to distribution lines close to demand centers. Clean Coalition staff are active in proceedings at the Commission, Air Resources Board, Energy Commission, the California Legislature, Congress, the Federal Energy Regulatory Commission, and in various local governments around California.

I. INTRODUCTION

The Clean Coalition commends the Commission for developing a tool in the PVC which "uses standardized categories and criteria to quantify a project's strengths and weaknesses in key areas of renewable project development." There are clearly many projects being considered in RPS solicitations and it is in the interest of all parties to have a standardized tool for assessment of these projects. We also see room for improvement and believe that the Commission's proposal to change specific criteria and adjust the Category weighting represents an important step in the right direction. However, we believe that the proposed PVC remains problematic and that further improvements should be pursued. Specifically, we recommend the following:

- Further clarify that the PVC is a tool for assessing relative project viability and is not meant to be a perfect predictive tool for project success;

- Modify the PVC to adjust scoring for projects that are very strong in some categories and very weak in others, a combination which can currently result in a project with a high PVC score but a low actual probability of completion;
- Modify the PVC to adjust scoring for projects that are expected to be completed in more than 24 months and may be based on “low ball” pricing because they are scheduled for completion relatively far off in the future;
- Integrate a risk weighting into the PVC to reflect historical project failure rates;
- Back-test PVC scores to determine how they compare to historical project success or failure; and
- Modify PVC outputs to reduce market confusion about the qualitative difference between a PVC score and a percent likelihood of project completion;
- Update PVC scores on a quarterly basis to reflect changes in each project, including failure to meet expected hurdles and timelines

We encourage the Commission to consider all these changes in order to make the PVC a more powerful tool and to ensure that the use of the PVC in public discussions of the RPS occurs in a manner that is accurate, meaningful and educational to the public and to policymakers.

Our point that the PVC needs to be “accurate, meaningful and educational” is particularly important, as PVC scores appear to be increasingly accepted as proof that California is well-positioned to meet its RPS goals. While this may be the case (and we hope that it is), we are concerned that much of this confidence may be based on an apparent belief by observers, market participants and elected officials that a PVC score represents the projected likelihood of project completion. And while the Commission clearly states that the PVC “is used as a screening tool, not to determine the exact merit of a particular project or contract”, this point is easily misunderstood and this is not how PVC scores are generally being discussed in the marketplace or by policymakers. In fact, even the Commission at times uses the PVC in a manner that implies a percent

likelihood of project completion. In the Commission's February 1, 2011 Senate Oversight Hearing presentation, the slide on page 8 (titled "Generation under negotiation could meet 33% goal") shows columns labeled "Online or Viability > 90%", clearly implying that a PVC score above 90% is effectively as good as a project that is actually online. The same chart also shows massive amounts of GWh associated with PVC scores of 50-80%, which, as we demonstrate below, is a score that could easily be achieved by a very problematic project that is unlikely to ever come to fruition. In addition, the PVC fails to reflect the high project failure rates that have occurred to date in California.

While page 7 of the CPUC presentation just cited acknowledges a 12% failure rate, the investor owned utilities (IOUs) cited failure rates of 30-50% in the public discussions held by Commissioner Florio on March 25, 2011 on the need for an RPS Request for Offers (RFO) this year. This level of project failure is in line with numbers reported by NREL in its Renewable Energy Finance Tracking Initiative,¹ in which 30% of planned PV projects greater than 1MW across the US are abandoned and an additional 20% are delayed more than one year. Not all of the NREL reported projects had secured PPA contracts, but these results reinforce our concerns. The Energy Commission found also that 20-30% of RPS projects will likely fail, and this margin of failure should be accounted for, in its 2006 report on "contract failure."² We believe that more analysis needs to be done by the Commission on failure rates and that this analysis should be ultimately integrated into the PVC, creating a more accurate, "risk-weighted" PVC.

Along these lines, we would particularly encourage the Commission to back-test PVC scores to determine how they relate to historical project results. Each time a project

¹ <http://financere.nrel.gov/finance/REFTI>

² "Building a 'Margin of Safety' Into Renewable Energy Procurements: A Review of Experience with Contract Failure," CEC-300-2006-004, 2006. <http://www.energy.ca.gov/2006publications/CEC-300-2006-004/CEC-300-2006-004.PDF>.

comes on line or fails, it should be a relatively easy task to examine the original PVC scores and determine whether or not they correlated accurately with the outcomes. Not only will this analysis undoubtedly provide more data for the further fine-tuning of the PVC as a measure of relative project viability as intended, but it will also allow the Commission to begin to predict actual failure rates by project types as discussed above.

We make these points not to criticize the Commission, but rather to highlight the importance of the PVC, its role in the public discussion of the RPS and the opportunity for improvement. We feel that the Commission recognizes many of these issues and applaud its efforts to improve the PVC. Our more specific recommendations follow.

II. Analysis of the Proposed PVC

The PVC has the potential to be valuable both in initial project selection and in ongoing project and procurement portfolio evaluation. As mentioned above, we support the Commission's efforts to improve the PVC and believe that the proposed re-weighting, and particularly the increase in weighting for "Development Milestones", is a step in the right direction. However, since the PVC does not fully reflect "deal breaker" type issues in its calculation of the overall score, there are some potential gaps in the model. Consider the example of a theoretical large solar thermal farm to be built far from load (i.e. will need substantial new transmission) by experienced developers with strong balance sheets. This project could conceivably score a 10 on each of Project Development Experience, Ownership/O&M Experience, Technical Feasibility, Resource Quality, Manufacturing Supply Chain, Site Control and Project Financing Status. It could get another 7 points on Interconnection Process for being in the Serial Study Group and having initiated a facilities study. Even if the project received a 0 in Permitting Status, 0 in Transmission Requirements AND 0 in Reasonableness of COD, this project would score a very respectable 72 from the current PVC. We find it problematic that a project with no permit, a best case transmission access time period of

5 years and no IOU confidence in the COD can score so high and, as we have seen, be presented to the public in a manner that implies a relatively high level of confidence in its ultimate completion.

Unfortunately, this is an issue that cannot be addressed by weighting alone. Even if Development Milestones are weighted 75%, the hypothetical project still scores a 62. In order to make the make the PVC a more valuable tool, we propose that the Commission consider the following proposals:

- Within the Development Milestones category, create a trigger if two or more of the categories have a score of less than four. If the trigger is tripped, the overall category score is reduced by a defined percentage. This methodology better reflects the presence of “deal breaker” type situations in a project as described above in our theoretical example.
- Alternatively, the Commission could analyze project failure and/or cancellation rates and use this data to assess projects accordingly. A PVC that calculates risk-weighted scores would be a far superior analysis and actually could be used fruitfully to discuss progress towards RPS targets. (This concept may be more of a long-term goal, but merits further discussion.)

We also believe the Commission should consider modifying the “Project Financing Status” category in order to address the longer timeline projects that may not be economic or are unlikely to achieve financing. For example, it is our belief that many bids have been submitted with the intent of delaying completion for several years in hopes that project costs (e.g. panel prices, in the case of solar PV) will decline further in the future, thereby making the bid economically feasible where it may not be if it was completed sooner. While these speculative bids are not worthless since project cost declines probably will continue in the future, there should be some recognition that these bids are less likely to come to fruition and are therefore less valuable than bids that are ready and able to come online today. We encourage the Commission to

address this issue in the PVC by creating a trigger in the “Project Financing Status” category if delivery is scheduled to occur longer than 24 months from contract completion. If this trigger is tripped, the bidder would be required to provide overall project cost assumptions (such as panel prices) and cost of capital assumptions. If these assumptions are deemed to be materially different from current market conditions, the Project Financing Status score should be deemed lower.

We support a balanced procurement portfolio that allows a diversity of projects, including promising and potentially innovative but unproven cost-effective sources. Uncertainty of such supplies should, however, be balanced with attention to projects with near-term deployment capability (less than two years) to ensure that interim RPS trajectories and targets are achieved, such as Wholesale Distributed Generation projects (20 MW and smaller projects connected to the existing distribution grid).

III. Additional Areas for Improvement

As we mention above, the PVC scores are already, arguably inappropriately, in the public domain as an indication of the likelihood of utilities achieving their 2020 RPS mandates. In light of how easy it is to conflate a PVC score with a percentage probability of meeting planned COD, we encourage the Commission to consider a methodology for presenting the score that is less easily misconstrued as a predictive evaluation of on-time delivery. For example, projects that score between 90-100 points could be rated an A, 80-90 rated a B, etc. The actual scores could still be used for IOU ranking, but the reporting could be modified to use this letter score system. While this may sound like a simple cosmetic change, we believe it would help reduce the confusion that surrounds the use of PVC scores in the marketplace. In addition, using the project failure data described above, we strongly encourage results to be always presented with a “disclaimer” with regard to PVC scores. For example, continuing with the letter categories recommended above, project failure data could be used to provide

language such as: "Note: Over the past 6 years, projects rated "A" by the PVC have shown a 12% likelihood of cancelation and a 30% likelihood of delay in generation availability exceeding one year."

We also encourage the Commission to consider:

- Adopting additional interval-based intermediate milestones to identify delayed or failing projects earlier in the procurement planning calendar
- Updating PVC scores on a quarterly basis in order to reflect changes in the project, including failure to meet expected hurdles and timelines.

Based on comments made by the IOUs in the March 25, 2011, RPS RFO discussion, it appears that the IOUs already have an internal system for assessing ongoing project viability on a monthly basis. We strongly encourage the Commission to learn more about the IOU's internal risk assessment methodologies and to use this knowledge to update the Commission's own PVC scores on a quarterly basis.

IV. Conclusion

It is in the best interest of all parties that the PVC provides a meaningful and accurate tool for the assessment of RPS projects. The Clean Coalition is enthusiastic about the Commission's desire to improve the PVC and we hope that our comments have added some useful material to this discussion. We believe there is much room for improvement and encourage the Commission to hold a stakeholder meeting to further address these issues.

Respectfully submitted on May 20, 2011

A handwritten signature in black ink, consisting of stylized, cursive letters that appear to read 'TH' followed by a long, sweeping horizontal stroke.

Tamlyn Hunt

CERTIFICATE OF SERVICE

I hereby certify that I have served by electronic service a copy of the foregoing CLEAN COALITION COMMENTS ON CHANGE TO PROJECT VIABILITY CALCULATOR on all known interested parties of record in R.11-05-005 included on the service list appended to the original document filed with this Commission. Service by first class U.S. mail has also been provided to those who have not provided an email address.

Dated at Santa Barbara, California, this 20th day of March, 2011.



Tamlyn Hunt

VERIFICATION

I am an attorney for the Clean Coalition and am authorized to make this verification on its behalf. I am informed and believe that the matters stated in the foregoing pleading are true.

I declare under penalty of perjury that the foregoing is true and correct.

Executed this 20th day of May, 2011, at Santa Barbara, California.

Tam Hunt

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