



## RESPONSE TO REQUESTS FOR REVIEW

Bureau Veritas Certification had performed the validation of the CDM Project “2.76 MW Grid Connected Renewable Energy Project in Rajasthan by Kalani Industries” by M/s. Kalani Industries Limited. The request for registration was made in July 2007 and was under review from 03/08/07 to 07/09/07. Subsequently, there have been 3 (Three) requests for review, which were received on 05/09/2007. All the three requests are found to be identical and therefore we are providing our responses in common to all these.

We thank the CDM executive board and the secretariat for giving us the opportunity to clarify about our considerations in validating the said project.

The project participants have provided to us their response. We observe that this response and the information therein are in line with the discussions we had with the project participants during the course of the validation. We therefore endorse the response given by the participants

Our response to the review points have referred to various annexes which are attached by Project Participant along-with their response. These are not separately attached with our response again.

<b>Reasons and background for Request for Review</b>	<b>Bureau Veritas Certification response</b>
<p>1. As the barriers listed in the PDD relate to the economic feasibility of the project activity, it should be demonstrated that the project activity was not financially attractive given the financial assumptions made at the time of the decision to proceed with the project activity, given the fact that all the turbines of the project were already commissioned by the end of May 2001 and in business operation until now without stopping for over 6 years, the PP did not provide credible evidence to show the project is taking risk at stopping business operation without support from CDM</p>	<p>Since the proposed project activity is a small-scale project (2.76 MWh), as per the modalities and procedures of small-scale projects, any one barrier to prove the additionality was sufficient. The project proponent opted to prove additionality through prevailing practice barriers, regulatory barriers and low PLF.</p> <p>The project proponent has done a financial analysis and submitted it to the validators, who have gone through the analysis. The equity IRR without CDM benefit is 12.80% and with CDM it is 13.85%. This equity IRR is less than the benchmark return on equity of 16% without CDM credits. The same has been now included in Section B.5 of PDD (pages 17 – 19).</p> <p>The financial analysis is attached as Annex-II.</p> <p>Subsequently, all the 12 turbines got commissioned in 2001. The generation guarantee given by the EPC contractor for each WEG in the project was 5.6 Lakhs kWh/annum. The actual average annual generation from the total project (12 WEG's) has been approximately 50.8 Lakhs kWh as against the expected 67.2 Lakhs kWh given from the generation guarantee. The reduced generation obtained over the years has had a significant impact on the income stream of the project and CDM revenue may help to offset</p>

<p>2. Further evidence is required regarding the difficulty in obtaining finance; in particular it should be validated that the loan could not be obtained without the CDM.</p> <p>3. While utilizing investment barrier to demonstrate additionality, the PDD did not provide financial investment analysis, showing to which extent the financial performance indicator, such as IRR, etc. is lower than the required benchmark value. And also the PP did not show how the additional cash flows from sale of CERs could make the project commercially viable and then feasible.</p> <p>4. As version 10 of the methodology AMS-I.D is used, corrections in the PDD, section B.6.1 Explanation of methodological choices should be made. Further, the DOE should confirm that version 10 of the methodology AMS-I.D has been correctly applied and validated.</p>	<p>these losses to a considerable extent.</p> <p>The PDD does not mention about difficulty in obtaining finance, especially loans for the project activity without CDM. Please refer section A.4.4 of the PDD, it has been mentioned that the installations are financed through mix of loans and in-house equity. The validators have gone through the details of the investment. The total cost of the project is Rs. 160.2 millions. Out of this the Loan amount is around Rs. 101.55 millions. The loan for the project activity was obtained irrespective of the CDM benefits.</p> <p>As mentioned in point # 1, the project proponent opted to prove additionality through prevailing practices, regulatory barriers and low PLF. The financial analysis is done and the details of financial analysis are now furnished.</p> <p>The applicable methodology for the project activity is AMS I.D. – Grid connected renewable electricity generation, Version 10, Scope 1, dated 23<sup>rd</sup> December 2006. The baseline is the kWh produced by the renewable generating unit multiplied by an emission coefficient (measured in kg CO<sub>2</sub>e/kWh) calculated in a transparent and conservative manner as:</p> <p>(a) A combined margin (CM), consisting of the combination of operating margin (OM) and build margin (BM) according to the procedures prescribed in the approved methodology ACM0002. Any of the four procedures to calculate the operating margin can be chosen, but the restrictions to use the Simple OM and the Average OM calculations must be considered.</p> <p style="text-align: center;">OR</p> <p>(b) The weighted average emissions (in kg CO<sub>2</sub>e/kWh) of the current generation mix. The data of the year in which project generation occurs must be used.</p>
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<p>5. The PDD indicates electricity generation of 6,000 MWh/annum, however the emission reduction calculations are based on 5,476 MWh/annum. This should be clarified.</p>	<p>As the methodology AMS I.D permits to use any one of the above approaches, the project proponent, has considered Combined Margin emission factor, for determining the emission reductions. The baseline emission factor has been considered from the “<b>CO<sub>2</sub> Baseline Database</b>”, Version 1.1, dated 21<sup>st</sup> December 2006 published by Central Electricity Authority (CEA), Govt. of India<sup>1</sup>.</p> <p>In the earlier version of PDD, these were mentioned wrongly. The explanation of methodological choices has been corrected in the Section B.6.1 of PDD (page 19). The validators confirm that the applicable methodology is AMS I.D (Version 10; dated 23<sup>rd</sup> December 2006)</p> <p>The revised PDD Version 4, dated: 14.09.2007, is attached as Annex-I</p> <p>The total capacity of the project is 2.76 MW. The electricity generation of 6,000 MWh /annum was estimated by considering 25% PLF which was the maximum in the region of Jaisalmer, Rajasthan. The same is mentioned in section B.6.2, B.6.3 and B.7 of the PDD. The CER’s were calculated based on the actual data of the previous years i.e. from 2001 to 2006. However there are some errors in calculating the Net Generation of previous years. The CER’s have been recalculated have been updated in the PDD (Page 24, section B.6.4). The CERs after recalculation are 5868 per year.</p> <p>The CER calculations are attached as Annex-III.</p>
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<sup>1</sup> CO<sub>2</sub> Baseline Database, <http://www.cea.nic.in/planning/c%20and%20e/Government%20of%20India%20website.htm>