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Att: CDM Executive Board

Your ref.:
CDM Ref 1549

Our ref.:
MLEH/KCHA

Date:
30 May 2007

Response to request for review 9 MW Neria Hydroelectric Project, Karnataka, India (1549)

Dear Members of the CDM Executive Board,

We refer to the requests for review by three Board members concerning DNV's request for registration of project activity 1549 "9 MW Neria Hydroelectric Project, Karnataka, India" and would like to provide the following initial response to the issues raised by the requests for review.

Comment 1: The DOE should confirm how it has validated that the 5% variation in the values of the parameters for the sensitivity analysis and the 16% return on equity for the equity component of the WACC are considered appropriate.

DNV Response:

As stated in our validation report, the IRR analysis for the project activity was carried out based on the tariff structure and the capital investment terms of the lending institutions. The IRR for the project was estimated to be 11.71% without CDM revenue which is below the post tax benchmark (weighted average cost of capital) of 14.75%. DNV was able to confirm that the all documents pertaining to the presented analysis have been verified, such as the

- Project costs
- Energy purchase agreements
- Tariff as per PPA

The sensitivity analysis for the IRR analysis was carried out by a 5% variation in the parameters of electricity generation, tariff, and operation and maintenance costs. DNV has considered the +_5% variations for the sensitivity analysis as reasonable and appropriate due to the following reasons.

The O&M cost considered in the IRR analysis is 2.5% of the total project cost and is on the lower side as per the industry practices, which normally consider 5-10% for O&M costs in estimations. It is thus not considered likely that O&M costs in actual operation are lower than -5%. Increases in the O&M will only lead to a decrease in the IRR.

The tariff of the project activity used in the IRR analysis is as per the power purchase agreement (PPA) signed between the project proponent and Karnataka Power Transmission Company Limited (KPTCL) on 4 November 2004. As per the PPA the base tariff is INR 2.9/KWh with a yearly escalation of 2%. Even though the tariff is to be governed by the PPA, the tariff is changed at the instance of KPTCL. The tariff has seen a reduction to 2.8% without any escalation. Hence, it is in our opinion a 5% increase in the tariff for sensitivity analysis is reasonable. The Project IRR will reach the benchmark only if the tariff increases by 20% and in DNVs opinion this is not a realistic scenario.

The generation from the project activity has been fixed at 31% considering a dependability of 90% and this information has been sourced from the detailed project report (DPR). The plant load factor itself has been arrived at based on past hydrological data and is dependable. It has been evidenced that the project IRR will reach the benchmark if the generation increases by 18.5%. However, a look at the actual generation at the project activity for the one years operating history indicate that actual generation is 19.6 GWh compared to 22.7 GWh anticipated in the DPR, which is a decrease of 13.6% from the anticipated generation. As the generation is entirely dependent on the monsoons, DNV is of the opinion that a 5% positive variation is reasonable.

The required rate of return of 16% considered by the PP as the return on the equity component of WACC is found to be appropriate as the same has been recommended by the Central Electricity Regulatory Commission (CERC) and subsequently Karnataka Electricity Regulatory Commission (KERC). It is observed that during tariff negotiation Karnataka Renewable Energy Development Limited (KREDL), the nodal agency for promotion of renewable energy projects in the State of Karnataka, has pleaded for a return of 18%, whereas the REDAK (Renewable Energy Developers Association of Karnataka) have requested for a return of 20% on equity to cover the systematic risk to mini hydro power projects. While the commission acknowledged the systematic risks associated with mini hydro projects, however it restricted the return to 16% on equity which is lower than what is sought by KREDL and REDAK.

Hence it is DNVs opinion that the return of 16% applied for return of equity component of weighted average cost of capital equity is suitable and appropriate.

Comment 2: The DOE should confirm that the expected additional income from the CDM was essential for the decision to go ahead with the implementation of the project activity given that it was submitted for validation two years after the start date of the construction.

DNV Response:

As stated in our validation report, DNV was also able to verify that the project proponents seriously considered the benefits of CDM for the proposed project. The following chronology of events clearly highlights the delays and the reasons also.

- a) The board of directors of M/s BPCL passed the resolution considering CDM revenue on 15 September 2003
- b) Letter of appointment of the CDM consultant in December 2003.
- c) Agreement with the equipment supplier and the construction and civil works in September 2004.
- d) Termination of the contract with the consultant due to non-performance on 14 July 2004.
- e) Appointment of new consultant in 2 December 2005.
- f) Project put up for validation in 15 July 2006.

DNV had also verified that the project proponent had another CDM activity (24 MW Chayadevi project registered on 30 March 2007) under implementation at the same time and due to the delays by the first consultant in the preparation of the documents, priority was accorded to the Chayadevi project due to its higher generating potential. While it is evident that CDM was considered for the project activity prior to the start of the project activity (construction start of 6 September 2004), it was also verified during validation that the parameters of generation (anticipated), tariff, and the interest on the term loan (that are critical in the financial analysis of the project) have not changed since the start date and the date of validation.

Comment 3: The evidence of prior consideration of the CDM in the decision to proceed with the project activity should be described under the section B.5 of the PDD.

DNV Response:

We acknowledge that this information should have been incorporated in the PDD.

We sincerely hope that the Board accepts our aforementioned explanations.

Yours faithfully
for DET NORSKE VERITAS CERTIFICATION AS



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