



RESPONSE TO REQUESTS FOR REVIEW

Bureau Veritas Certification had performed the validation of the CDM project activity "Modification and retrofitting of the existing 34 MW hydropower plant at Bhandardara -2 (project activity) in Maharashtra state in India by Dodson – Lindblom Hydro Power Private Limited (DLHPPL)" located at Bhandardara, Akola Taluk, Ahmednagar district Maharashtra state, India.

The request for registration was made in August 2008 (Reference number: 2173). Subsequently, there have been 3 (three) requests for review, which were received on 05/01/2008. Since all the requests are identical, we are providing common responses to the issue that have been raised.

Our response to the review request have referred to various annexes that are attached by Project Participant along-with their response. These are not separately attached with our response again We thank the CDM Executive Board and the Secretariat for giving us the opportunity to clarify about our considerations in validating the said project.

Question 1

The DOE is requested to further clarify how it has validated the calculation of benchmark, in particular the use of 25.91% as market risk premium.

DOE Response

While reviewing the calculation of the benchmark, the validation team noted an error that has crept in the values of indices taken for CAGR calculation and in calculation of post tax cost of debt (cell E10 of WACC sheet attached with the response by the project participant).

The project participant has now corrected the error by reworking the CAGR. The corrected CAGR is now 33.64% and thus the corrected market risk premium is $[(R_m - R_f) = 33.64 - 7.34] = 26.3\%$. The corrected data shows that the SENSEX yields the most conservative estimate. Further from the revised working of WACC validation team notes that the weighted average cost of capital [i.e the benchmark] for the project activity has reduced to 14.63%. The post tax project IRR in the base case and with 10% increase in generation are only 11.78% and 14.45% respectively, which are within the revised and corrected benchmark of 14.63% also.

The validation of the calculation of the benchmark is further explained below:

The project participant has preferred the benchmark analysis for demonstration of additionality and the weighted average cost of capital (WACC) of the project activity (ie., 16%) is considered by the project participant for the benchmark analysis.

The validation team has validated the benchmark calculation with the help of the financial expert with due consideration of:



1. Tool for demonstration and assessment of additionality, version 04 [Additionality Tool] and
2. Guidance on assessment of investment analysis, Annexure 45 of EB 41

The validation was done in the following manner:

- Assessment whether the benchmark is derived as per Option III of Sub-step 2b of the additionality tool:

Project participant has derived the benchmark according to clause 4b [PDD incorrectly states clause 6b] viz. 'Estimates of cost of financing and required rate of return'.

- Assessment whether the cost of financing is calculated in line with the additionality tool [e.g. commercial lending rates and guarantees required for the country and the type of project activity concerned]:

The cost of financing is calculated as weighted average of cost of equity and cost of debt for the project. Cost of equity is calculated using Capital Asset Pricing Model [CAPM] using the publicly available data of private equity investors as explained below. Thus it follows the requirement of:

- use of publicly available data as per clause 12 of the investment analysis guidance; and
- not [being] linked to subjective profitability expectations or risk profile of a particular of the particular project developer.

Cost of debt is calculated using interest rate charged by financial institutions. Thus it follows the requirement of use of banker's views. The validation team ascertained the cost of debt by verifying the interest rate charged by the Financial Institutions viz., State Bank of India (SBI), International Finance Corporation (IFC) and DEG-DEUTSCE Investitions (DEG), who have term loan exposure in the present project activity. The scanned copies of relevant pages of loan documents attached herewith (Annexure A to E).

In the context of this project activity YTM (Yield to Maturity) at primary issues over a period of 10 years has been considered to represent the rate of risk free investment (R_f). The project participant has taken this value (of $R_f = 7.34$) from the annual report of the Reserve Bank of India (Annexure F). The validation team accepted this value as it is taken directly from the RBI report, which is authentic and reliable.

The project participant took the geometric mean of the opening index as per SENSEX taken from BSE website for the most conservative CAGR of 33.64%, compared to BSE 100, BSE 200 and BSE 500. Being conservative, the validation team accepted the same. Thus the expected market rate of return R_m being 33.64%, the market risk premium works out to 26.3% ie., $[(R_m - R_f) = 33.64 - 7.34]$.



- Assessment whether the benchmark represents the standard returns in the market considering the specific risk of project type:

Since the project activity is a hydropower project, it is necessary that the derived benchmark relates to the hydropower project.

The project participant considered the power companies - Jaiprakash Hydro Power Ltd (JHPL), GVK Power & Infrastructure Ltd (GPIL) and Tata Power Company Limited (TPCL), which are listed in the Bombay stock exchange, (BSE). The beta values of these power companies as considered by the project participant and taken from the weblink: http://cdm.unfccc.int/Projects/DB/RWTUV1190101228.6/ReviewInitialComments/6USZ3WQZ5259KXK_F5CYLILNL8YA8GL which is cross-referenced to Bloomberg data. This shows beta values of 1.078 for JHPL, 1.101 for GPIL and 0.964 for TPCL. The validation team also verified the adjusted beta values of TPCL from Bloomberg for a two-year period prior to decision making date. Validation team noted that considering SENSEX as relative index the adjusted beta value is 1.138 and considering BSE 100 index it is 1.102 (Annexures - G & H). However the project participant has taken a value of 0.6 as the beta value, which is conservative.

Validation team agrees with this selection for the following reasons:

- There is no other private investor in hydropower whose rate of return could be derived based on publicly available information.
- At the point of decision-making, of the companies said above, only TPCL was listed, but TPCL is only partially into hydropower generation.
- JHPL was not listed at the time of decision for the project implementation,
- The value of 0.6 taken by the project participant is conservative.

The validation team hereby confirms that the corrected calculation of the benchmark is correct and in line with the requirements stated above. The validation team also confirms that the project IRR [11.78% with base PLF] and 14.45% with sensitivity is below the corrected benchmark [14.63%] and hence the project activity is considered to be additional.

We hope that the explanation provided above is satisfactory and request you to kindly register the project.

Thanking you,

On behalf of Bureau Veritas Certification Holding SAS

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