Mr. Hans Jurgen Stehr
Chair, CDM Executive Board
UNFCCC Secretariat
CDMinfo@unfccc.int

October 10th 2007

Re: Request for review of the request for registration for the CDM project activity "Bundled wind energy projects (2003 policy) in Rajasthan" (UNFCCC No. 1167)

Dear Mr. Stehr

SGS has been informed that the request for registration for the CDM project activity "Bundled wind energy projects (2003 policy) in Rajasthan" (UN1167) is under consideration for review because three requests for review have been received from members of the Board.

The requests for review are based on the same reason outlined below. SGS would like to provide an initial response to the issues raised by the request for review:

Request 1, 2 and 3:

1. *The additionality of the project should be demonstrated by using version 3 of the additionality tool.*

SGS Response

DoE would like to through light on the chronology of the Project activities CDM cycle.

Sr. No.	Date	Description
1	21st Nov. 2006	PDD for the project activity was made public on UNFCCC website. PDD uses most recent version of methodology ACM0002 version 6 with the applicable tool for the demonstration and assessment of additionality version 2
2	15th Dec. 2006	EB 28 (para 20) decided to consider the revised tool for the demonstration and assessment of additionality in the next meeting.
3	20th Dec. 2006	Period for submission of Public comments was over.
4	16th Feb. 2007	EB 29 (para 35) agreed to the revision of the tool for the demonstration and assessment of additionality.
5	13th June 2007	Project activity was submitted for Request for Registration (RfR) to UNFCCC.
6	31st July 2007	Project activity was published on UNFCCC website under RfR
7	17th Sept. 2007	CDM-EB informed DoE that project activity was requested for review.

As per Annex 2 to the EB30 report: "*The revision of an approved methodology or tool referred to in a methodology shall not affect (i) registered CDM project activities during their crediting period; and (ii) project*

activities that have been published for public comments for validation using the previously approved methodology or tool, so long as the project activity is submitted for registration within 8 months of the date when the revision became effective."

Version 3.0 of the additionality tool was made public on 16th February 2007 and the Project Activity was published for public comments for validation prior to the Version 3.0 of the additionality tool and submitted for RfR before end of the grace period of eight months as mentioned above.

In light of the above, we understand that additionality tool version 2.0 is applicable to the Project Activity and hence Project activity with version 2 of the additionality tool was submitted for RfR. However project proponent has revised the PDD using version 3.0 of the additionality tool. The revised PDD was attached as Annex 1 herewith. The same was validated and found acceptable. Revised Validation report which mentions use of additionality tool version 3.0 is attached as Annex 2 herewith.

2. *Further validation of the appropriateness of the benchmark used is required.*

The relevant benchmark (post tax equity returns) has been derived from the benchmark that has been long used in the power generation sector, first set by Government of India policy notification (1991) and later, by the Central Electricity Regulatory Commission ("CERC") and State Electricity Regulatory Commissions (and in some instances, the state government policy notification) took over the role of tariff setting mandated by, first the Electricity Regulatory Commission Act in 1998 and later on through the Indian Electricity Act since 2003. Post tax equity return has long been an established benchmark in the Indian power sector (electricity generation), whether it is for conventional fossil fuel fired power generation, hydro power generation or non-conventional/renewable power generation. We provide below an overview of the regulatory regime that govern the tariff determination for electricity sector investments in India.

The regulatory reforms for Electricity sector in India first started in 1991 and later made headways when the Electricity Regulatory Commission Act was enacted in 1998 that lead to creation of central and state electricity regulatory commissions. In 2003, the Electricity Regulatory Commission Act was replaced by the Indian Electricity Act, a comprehensive regulation that covered all activities in electricity sector such as generation, distribution, transmission and trading of power.

Since the advent of the Electricity Regulatory Commission Act 1998, and subsequently with Electricity Act 2003, the power to determine the tariff relating to generation, transmission and distribution of electricity is vested with the Central and State Electricity Regulatory Commissions. The State Electricity Regulatory Commissions (SERCs) are guided by the Central Regulatory Commission (CERC) on various issues, including tariff determination. The principles of "cost plus" tariff setting was first discussed by CERC in 1999 through its consultation paper dated 15 September 1999[1]; which is attached as Annex 3 herewith and enforced through its ruling on tariff regulations, issued on 26th March 2001[2]. The principles allow full cost recovery plus the required return on equity for the power generators. Both the CERC documents consider a cost plus 16% post tax equity return as appropriate for determining the generation tariff.

In 2003, the Government of Rajasthan introduced its policy for development of wind power projects in the state which determined, *inter alia*, the tariff applicable for wind power projects in Rajasthan[3] attached as Annex 4 with the response. The proposed CDM project activity was set up in 2003. This policy followed the tariff principles set by the CERC tariff regulations 2001 and considered cost plus post tax equity return of 16% while determining the tariff for wind power projects.

[1] http://cercind.gov.in/consultation%20paper-

[2] http://cercind.gov.in/Tariiff/tariff_notification.htm

[3] http://www.rajenergy.com/wind_pol.pdf

The reason for setting out this elaborate discussion is to look at the level of post tax equity return that has been considered by various policies and regulations available at the time of investment in the project. As can be seen all prevailing policies and regulations, at the time the project was conceived, considered post tax equity return of 16% as appropriate.

The Option III - Benchmark analysis tool allows for equity returns as the appropriate benchmark; which fits in well with the choice of equity rate of return that was chosen for this project, based on the various policy notifications and electricity regulatory commissions' orders. We believe that since the regulatory commission/government notifications provide a very sound, rigorous and transparent basis for the benchmark returns and this has been in use in India for a very long time, this may be accepted as the appropriate benchmark for the project activity.

3. *Justification and validation of the PLF is required in the context of this specific project activity.*

The project activity involves generation and sale of the electricity to the state utility, therefore in accordance with the Electricity Act, the tariff for the project is determined by the Rajasthan Electricity Regulatory Commission (RERC). RERC Order for determination of tariff from wind generation sources has been based on extensive consultation, obtaining information from various stakeholders (including wind farm developers, government agencies, utilities and other stakeholders). The RERC considered the PLF for the projects to be set up based on the data made available from various sources, which was elaborately discussed during the public hearing process conducted by RERC. RERC in its Order noted that the maximum PLF achieved in Rajasthan was 23.97% and that a 22% PLF for Jaisalmer, Jodhpur and Barmer districts should be considered as reasonable, based on data available with RERC[4]. The RERC order is attached as Annex 5 herewith.

The Government of Rajasthan ("GoR") had come out of policies in 2003, 2004 and 2006 for promotion of non conventional energy sources (including wind energy) in the state. The Rajasthan Renewable Energy Corporation (RREC, a state government agency) while prescribing the tariff for NES power plants in GoR policy of April 2003, October 2004 and February 2006 considered that a PLF of 22.37% would be appropriate for wind projects in Rajasthan, based on the data available with RREC. We enclose an undertaking from RREC, which certifies that the PLF considered for the purpose of tariff evaluation for the wind energy projects in 2003 policy was 22.4%. The undertaking is enclosed as an Annex 6 herewith. The same evidence can be confirmed from RERC's latest tariff order dated 15th March 2007 (paragraph 13 to 22 on page 8 to 10) attached as Annex 7 with the response.

The project activity is spread across Asloi, Korwa, Sodabandhan, Temadrai Ph-1, 2 and 3 Villages in Jaisalmer district of Rajasthan. It is important to note that for the extended period from 2003 up to 2006, the state government and the regulatory commission used the PLF of 22.4% and 22% respectively for arriving at the per unit cost of generation. For carrying out the investment analysis, the PLF has been considered as 22% which is same as the PLF considered by the regulatory commission and marginally lower than the PLF considered by RREC in the 2003 policy. However, a sensitivity analysis of the project's IRR is also provided in the PDD considering a PLF of 23.97%, which is the highest PLF observed in Rajasthan. A sensitivity analysis of the project's IRR is also provided in the PDD considering a PLF of 23.97%, which is mentioned by RERC in their order attached as Annex 5. Even at this PLF, the post-tax equity return is below the benchmark considered for the project activity.

[4] Refer: Para 67, page 20 and 21 of RERC Wind Order

4. *Clarification of the capacity, cost per MW, total cost and crediting period assumptions for the investment analysis (Sub-step 2c) is required.*

Project involves 30 wind energy converters (WECs) of Enercon make 800 kW E-48, 6 WECs of Enercon make 600 kW E-40 and 13 WECs of Enercon make 230 kW E-30, thus the total capacity of the project activity is 30.59 MW. We regret that there was a typographical mistake in the PDD submitted for RfR which shows 24 MW (instead of 30.59 MW). The financial model which has been uploaded along with the validation report contains the correct calculations in relation to 30.59 MW bundle. The assumptions and all the analysis and results remain the same. Project Cost per MW (of Rs. 48.4 million) was calculated by summation of the project cost and dividing by the capacity and therefore, it remains the same in both the cases. The total project cost is linked to the project cost per MW multiplied by the capacity and total sources of finances (including the equity and debt component) have been linked to the total project cost. These figures would change but this does not impact the results. Annex 1 contains the revised PDD which mentions 30.59 MW as the total capacity of the project activity. The capacity of the project activity was checked during the validation site visit.

5. *Enercon initiative in 2000, CERUPT participation and Enercon activities with customers mentioned as evidence of CDM consideration has not been validated. The proof of CDM consideration as required by the guidelines for completing section B.5 of the PDD should be validated.*

The project proponent has submitted a JIQ newsletter (April 2003 issue) attached as Annex 8 herewith; which confirms project proponent's (Enercon India Ltd.) participation in first CERUPT tender. Due to various reasons, agreement could not be reached and a letter confirming withdrawal of CERUPT offer was sent by Senter Internationaal on 31st March 2004. The letter from Senter was attached as Annex 9 with the response. This confirms the project proponent's claim of consideration of benefits from carbon trading prior to start of the project activity. After rejection of the CERUPT tender project proponent has signed a MoU with Japan Carbon Finance Ltd. (JCF) on 1st July 2005; attached as Annex 10 with the response. Project proponent has submitted loan documents for Enercon Wind farm (Rajasthan) project and letter of intent with its other customers as evidence against the CDM consideration. The same was validated during the validation site visit and found acceptable. This is attached as Annex 11 herewith.

6. *Only one parameter, net electricity supplied to the grid, is considered for monitoring. In the description of measurement methods it is said that two main meters will be used for the measurement of net electricity: import and export. However two parameters should be listed in B.7.1-"Data and Parameters Monitored" and the third should be the calculated net electricity to ensure that these figures will be submitted for assessment in case if there is a need to cross-check the data should there be a problem with invoices.*

We regret the confusion created due to the explanation given in the PDD submitted for RfR, this is a typing error. There is one main meter and one back up meter (mistakenly written as "main meters" in the PDD). Both meters are two way export-import meters that measure export as well as import of electricity and also display net electricity exported to the grid by the project activity. Energy metering for the project is carried out in accordance with the provisions of the Power Purchase Agreement (PPA) entered into with the electricity distribution utility which conforms to the metering code prescribed by the Rajasthan Electricity Regulatory Commission. Accordingly project proponent has considered the net electricity exported to the grid as the sole monitoring parameter for the project activity. This was checked during the site visit conducted during validation phase. Subsequently the PDD has been revised and attached herewith as Annex 1.

Therefore, we feel that the clarification sought by board members has been taken into account. We do however apologize if this was not sufficiently clear from the earlier validation report.

Vikrant Badve (+91 9967005290) will be the contact person for the review process and is available to address questions from the Board during the consideration of the review in case the Executive Board wishes.

Yours sincerely

Sanjeev Kumar
Lead Auditor
Sanjeev.kumar@sgs.com
T: +91 124 23 99990 - 98
M: +91 98717 94628

Irma Lubrecht
Technical Reviewer
Irma.lubrecht@sgs.com
T: +31 181 693287
M: +31 651851777

Annex 1: PDD version 4 dated 5th Oct.2007
Annex 2: Validation Report
Annex 3: CERC consultation Paper in 1999
Annex 4: 2003 Tariff policy for wind projects
Annex 5: RERC order
Annex 6: RERC Undertaking for PLF
Annex 7: RERC's latest tariff order on 15th March 2007
Annex 8: JIQ Newsletter
Annex 9: Letter from Senter Internationaal
Annex 10: A copy of MoU between Enercon and JCF
Annex 11 (a): Loan documents
Annex 11 (b): Specimen copy of Letter of Intent (LoI)