
VALIDATION REPORT

**M/s Raj Infrastructure Development
(India) Pvt Limited**

**2.5 MW Bundled Wind Power
Project in Maharashtra (India)**

SGS Climate Change Programme

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Date of Issue:		Project Number:	
02/06/2009		CDM.VAL1976	
Project Title:			
2.5 MW Bundled Wind Power Project in Maharashtra (India)			
Organisation:		Client:	
SGS United Kingdom Limited		Raj Infrastructure Development (India) Pvt. Ltd.	
Publication of PDD for Stakeholders Consultation			
Commenting Period:		14/06/2008 to 13/07/2008	
First PDD Version and Date:		Version 01 dated 18/02/2008	
Final PDD Version and Date:		Version 03 dated 20/10/2008	
Summary:			
Raj Infrastructure Development (India) Pvt. Ltd. has commissioned SGS to perform the validation of the project: 2.5 MW Bundled Wind Power Project in Maharashtra (India) Methodology used: AMS I D Version and Date: Version 13, valid from 14th December 2007 The scope of the validation is defined as an independent and objective review of the project design document, the project's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules and associated interpretations. SGS has employed a risk-based approach in the validation, focusing on the identification of significant risks for project implementation and the generation of CERs. The report is based on the findings of document reviews, the stakeholder consultation process and responses from the project participants to the findings raised in this report. The report and the annexed validation describes a total of Five (5) findings which include: • Three (3) Corrective Action Requests; • Two (2) Clarification Requests; and All findings have been closed out satisfactorily and the project will be recommended to the CDM Executive Board with a request for registration.			
Subject:			
CDM Validation			
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Abbreviations

CAR	Corrective Action Request
CDM	Clean Development Mechanism
CEA	Central Electricity Authority
CER	Certified Emission Reductions
CO ₂	Carbon Dioxide
COP/MOP	Conference of Parties serving as the Meeting of Parties to Kyoto Protocol
DNA	Designated National Authority
DOE	Designated Operational Entity
DR	Document Review
EIA	Environment Impact Assessment
GHG	Greenhouse Gas(es)
I	Interview
kWh	Kilo Watt hour
MEDA	Maharashtra Energy Development Agency
MNES	Ministry of Non Conventional Energy Sources
MoEF	Ministry of Environment and Forest
MoV	Means of Verification
MSEDCL	Maharashtra State Electricity Distribution Company Limited
MP	Monitoring Plan
MW	Mega Watt
CL	Clarification Request
NGO	Non Government Organization
NOC	No Objection Certificate
PDD	Project Design Document
PLF	Plant Load Factor
PP	Project Proponent
PPA	Power Purchase Agreement
UNFCCC	United Nations Framework Convention for Climate Change
WTG	Wind Turbine Generators

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1. Validation Opinion

SGS United Kingdom Ltd has been contracted by Raj Infrastructure Development (India) Pvt. Ltd. to perform a validation of the project: 2.5 MW Bundled Wind Power Project in Maharashtra (India) in India.

The Validation was performed in accordance with the UNFCCC criteria for the Clean Development Mechanism (CDM) and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

SGS reviewed of the project design documentation, using a risk based approach and conducted follow-up interviews.

By installing wind electricity generators and supplying the electricity produced to Western Grid, the project activity will result in reductions of greenhouse gas emissions that are real, measurable and give long-term benefits to the mitigation of climate change.

In our opinion, the project meets all relevant UNFCCC requirements for the CDM and all relevant host country criteria. The project correctly applies methodology AMS I.D. version 13. It is demonstrated that the project is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity.

The total emission reductions from the project are estimated to be 39,460 tCO₂e over a ten year crediting period, averaging **3,946 tCO₂e** annually. The emission reduction forecast has been checked and it is deemed likely that the stated amount is achieved given the underlying assumptions do not change.

The project will hence be recommended by SGS for registration with the UNFCCC.

Signed on Behalf of the Validation Body by Authorized Signatory



Signature:

Name: Siddharth Yadav

Date: 12th June 2009

2. Introduction

2.1 Objective

Raj Infrastructure Development (India) Pvt. Ltd. has commissioned SGS to perform the validation of the project: 2.5 MW Bundled Wind Power Project in Maharashtra (India) with regard to the relevant requirements for CDM project activities. The purpose of a validation is to have an independent third party assess the project design. In particular, the project's baseline, the monitoring plan (MP) and the project's compliance with relevant UNFCCC and host country criteria are validated in order to confirm that the project design as documented is sound and reasonable and meets the stated requirements and identified criteria. Validation is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of Certified Emission Reduction (CER). UNFCCC criteria refer to the Kyoto Protocol criteria and the CDM rules and modalities and related decisions by the COP/MOP and the CDM Executive Board.

2.2 Scope

The scope of the validation is defined as an independent and objective review of the project design document, the project's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules and associated interpretations. SGS has employed a risk-based approach in the validation, focusing on the identification of significant risks for project implementation and the generation of CERs.

The validation is not meant to provide any consulting towards the Client. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the project design.

2.3 GHG Project Description

The proposed CDM project activity is an electricity generation project through Wind Electricity Generators (WTGs) and supplying the same to the Western Grid. The project will result in replacing the same amount of electricity from same grid which is dominated by fossil fuel based power plants. The project activity is located at Dhule district of Maharashtra state in India. The project activity was already commissioned and working in satisfactory condition. The proposed CDM project activity is bundled project activity. The project activity involves installation of one Wind Electricity Generator of 1.25 MW capacity in Isharde village, Dhule district by Raj Promotors & Civil Engineers Pvt. Ltd., which was commissioned on 30th September 2006, and one Wind Electricity Generator of 1.25 MW in Chhadvel village, Dhule District by Raj Infrastructure Development (India) Pvt Ltd, which was commissioned on 13th August 2006. This was checked during the site visit and cross-checked from commissioning letter and found acceptable.

2.4 The Names and Roles of the Validation Team Members

Name	Role	Affiliate
Mr. Vikrant Badve	Lead Assessor	SGS India
Mr. Ramkrishna Patil	Assessor	SGS India
Mr. Ravi Kant Soni	Local Assessor (Trainee)	SGS India

3. Methodology

3.1 Review of CDM-PDD and Additional Documentation

The validation is performed primarily as a document review of the publicly available project documents. The assessment is performed by trained assessors using a validation protocol.

A site visit is usually required to verify assumptions in the baseline.

A site visit was performed on 18th July 2008 by the Assessor and Local assessor and the results are summarized in the Local Assessment Checklist attached as Annex 1.

3.2 Use of the Validation Protocol

The validation protocol used for the assessment is partly based on the templates of the IETA / World Bank Validation and Verification Manual and partly on the experience of SGS with the validation of CDM projects. It serves the following purposes:

- it organises, details and clarifies the requirements the project is expected to meet; and
- it documents both how a particular requirement has been validated and the result of the validation.

The validation protocol consists of several tables. The different columns in these tables are described below.

Checklist Question	Ref ID	Means of verification (MoV)	Comment	Draft and/or Final Conclusion
The various requirements are linked to checklist questions the project should meet.	Lists any references and sources used in the validation process. Full details are provided in the table at the bottom of the checklist.	Explains how conformance with the checklist question is investigated. Examples of means of verification are document review (DR) or interview (I). N/A means not applicable.	The section is used to elaborate and discuss the checklist question and/or the conformance to the question. It is further used to explain the conclusions reached.	This is either acceptable based on evidence provided (Y), or a Corrective Action Request (CAR) due to non-compliance with the checklist question (See below). Clarification Requests (CLs) is used when the validation team has identified a need for further clarification.

The completed validation protocol for this project is attached as Annex 1 to this report

3.3 Findings

As an outcome of the validation process, the team can raise different types of findings

In general, where insufficient or inaccurate information is available and clarification or new information is required the Assessor shall raise a **Clarification Requests (CLs)** specifying what additional information is required.

Where a non-conformance arises the Assessor shall raise a **Corrective Action Request (CAR)**. A CAR is issued, where:

- mistakes have been made with a direct influence on project results;
- validation protocol requirements have not been met; or
- there is a risk that the project would not be accepted as a CDM project or that emission reductions will not be verified.

The validation process may be halted until this information has been made available to the assessors' satisfaction. Failure to address a CL may result in a CAR. Information or clarifications provided as a result of a CL may also lead to a CAR.

FARs may be raised which are for the benefit of future projects and future verification or validation actors. These have no impact upon the completion of the validation or verification activity.

Corrective Action Requests and Clarifications are raised in the draft validation protocol and detailed in a separate form (Annex 2). In this form, the Project Developer is given the opportunity to "close" outstanding CARs and respond to CLs and FARs.

3.4 Internal Quality Control

Following the completion of the assessment process and a recommendation by the Assessment team, all documentation will be forwarded to a Technical Reviewer. The task of the Technical Reviewer is to check that all procedures have been followed and all conclusions are justified. The Technical Reviewer will either accept or reject the recommendation made by the assessment team.

4. Validation Findings

4.1 Participation Requirements

The host Party for this project is India. India has ratified the Kyoto protocol on 26th August 2002. A Letter of Approval from Indian DNA was submitted by the project proponent (PP). The PP has received the Host country approval letter for the present project activity dated 28th May 2008 issued by the Indian DNA (reference number 4/7/2008-CCC. This letter was checked and the project activity name indicated in the HCA and in section A.1 of the PDD was found same. Thus it is acceptable.

No Annex I Party has been identified in the PDD and therefore no further Letter of Approval was available. It is observed that the CDM EB has agreed that the registration of a CDM project activity can take place without an Annex I Party being involved at the stage of registration although it should be noted that before CER can be transferred to an Annex 1 Party, a Letter of Approval from Annex 1 Party will need to be submitted.

4.2 Project Design

It was found that version 1 of the PDD has followed the guidelines for PDD completion. The PDD of the present project activity has been prepared in accordance with the guidelines for completing CDM-SSC-PDD version 5 and CDM-SSC-PDD template version 3.

Section C.1.1 of version 1 of the PDD indicated the 9th January 2006 as the project activity starting date. The purchase order of wind electricity generator which is earliest action of project activity is considered as project activity starting date. This was accepted as starting date for the project activity.

The PP has not submitted the applicable ownership documents or licenses which allow the implementation of the project activity, thus CL #1 was raised. In response to CL #1 the PP has submitted the land documents, purchase orders, commissioning certificates, Power purchase agreement and approval for the project activity. Thus CL #1 was closed out. Operational lifetime and the technical specifications mentioned for the project activity were cross-checked with the purchase orders dated 09/01/2006. The operation lifetime was accepted as 20 years after reviewing the technical specifications for the project activity. The PP has submitted a letter of undertaking mentioning that the project technology will not be substituted or replaced by more efficient technology during the crediting period.

The operation and maintenance is being carried out by Suzlon and has proper procedures for providing training to its employees. The ISO certificates were checked and are acceptable.

The PP has submitted undertaking which mentions the project cost and financing structure. The letter was checked and the project cost was the same as mentioned in the financial calculations, the letter also mentioned that no ODA was used and the project was financed by debt and promoter's contribution, the same was also discussed with the project proponent.

4.3 Eligibility as a Small Scale Project

The project activity is power generation by using wind energy and supplies the same to the Western Grid and is following AMS I D. The total capacity of the project is 2.5 MW which is less than the 15 MW limit for the small scale project activity. The project is following AMS I D version 13 valid from 14/12/2007. The same was checked with UNFCCC site and found acceptable.

4.4 Baseline Selection and Additionality

The project has applied baseline as mentioned in the small scale methodology AMS I D version 13 valid from 14th December 2007 for "Grid connected Renewable Electricity generation" as per Appendix B of the simplified modalities and procedures for small-scale CDM project activities. The project activity generates electricity from wind mills and supplies the same to the Western Grid and thus replaces fossil fuel and contributes to conservation of fossil fuel, and fall under the category AMS I D of the appendix B.

The project has adopted the Investment barrier to discuss the additionality of the present project activity. The investment barrier calculates equity IRR for the project activity. The PP has also mentioned sensitivity analysis for the project activity considering the net power generation, project cost O&M cost, income from sale of electricity as variable factor. In order to get all the related documents on the basis of which the project was shown additional, CAR #2 was raised.

The investment analysis described under the section B.5 was discussed with the PP. The benchmark for the project activity has been taken as 16.30 % return on equity as per market risk premium method. The assumptions used for the calculation of benchmark are as follows

1. The benchmark selected for the equity IRR applicable for the project activity is derived based on the government bond rates increased by a suitable risk premium. The risk premium has been calculated as 7.82% which is based on the bond yield of 7.32% which is referred from RBI which can be cross-checked at (<http://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/67219.pdf>) and
2. The Dividend yield was taken as 2.17% which is based on Data of CNX index from 1st January 2003 to 30th November 2005 (<http://www.nse-india.com> (Open >Indices/statistics/Divd Yield for CNX 100))
3. The growth rate has been considered as 8.30% referred from Ministry of Finance : Macro economic framework statement for three years (<http://indiabudget.nic.in/ub2004-05/frbm/frbm1.pdf> (pg5 point no. 2, for year 2004-2005), <http://indiabudget.nic.in/es2003-04/chapt2004/chap11.pdf> ,for year 2003-2004) and <http://indiabudget.nic.in/es2002-03/chapt2003/chap11.htm> , for year 2002-2003
4. The inflation is accounted as 4.67% (average of three years) the same referred and cross-checked from RBI Monetary Policy statement (<http://indiabudget.nic.in/es2004-05/chapt2005/chap33.pdf> pg 1 point no. 3.15), <http://indiabudget.nic.in/es2003-04/chapt2004/chap33.pdf> and <http://indiabudget.nic.in/es2002-03/chapt2003/chap33.pdf> for years 2003-2004 and 2002-2003 respectively.

Based on the above data the risk premium has been estimated as 7.82%. The Required rate of return has been estimated as the sum of Bond Yield (7.32 %), risk premium of (7.82 %). Thus the required rate of return comes to be 15.14 %. The project participant has not considered the additional risk premium for Windmill project, thus the calculated value is conservative. The project proponent has mentioned the equity IRR for the project activity without CDM benefits which stands to be 10.37% for Raj infrastructure Development (India) Pvt. Ltd and 9.82% for RAJ Promoters & Civil Engineers Pvt. Ltd. The calculation and assumptions were provided in the excel sheet which were checked and found acceptable.

The appropriateness of the input values for the financial calculation has been checked as follows

1. The PLF value referred as 20% in the electricity generation from the project activity; the same was mentioned under section 2.2.2.B on page 32 of 176 of MERC order dated 24/11/2003 and cross-checked with PPA dated 04/09/2006 for Raj Infrastructure and dated 11/10/2006 for Raj Promoters. Thus PLF of 20% for the project activity was accepted. It has been checked for Maharashtra Energy Development Agency (MEDA) that PLF in Maharashtra for the last five years prior to conceptualization of project activity was 19-20% based on previous years installed capacity, thus the 20% PLF as per MERC order is acceptable.
2. The tariff rate has been taken as INR 3.50 per KWh for wind mills in Maharashtra from the MERC order dated 24/11/2003, and same was cross checked with PPA. The PPA is for first 13 years and tariff after 13th is uncertain, however project has considered as a tariff of INR 3.50 per KWh for remaining life of project activity and this has been checked from MERC order - Case No. 17(3), 3, 4 & 5 of 2002, dated 24/11/2003 & MSEB Policies on Wind Energy: Deviations from the Policies of GOM & Guidelines of MNES and is accepted.
3. The PP has also provided a copy of the purchase order dated 09/01/2006 for the project activity as evidence against the project cost and capacity which was used in financial analysis sheet. Bank charges, interest rate and Debt have been checked with loan sanction letters of Janata Sahakari Bank Ltd for Raj Infrastructure and loan sanction letters of Jalgaon Janata Sahakari Bank Ltd, Janseva Sahakari Bank Ltd, Jankalyan Sahakari Bank Ltd for Raj Promoters. The overheads have been taken as 1.5% and are accepted.

Project financial details were checked during the discussion with project proponent during validation process. The assumptions like PLF, Annual depreciation for the project activity, tariff used for calculating the IRR for the project activity were checked with the respective evidence mentioned in the excel sheet and found acceptable.

The PPA was only for 13 years and after the 13th year tariff rate was uncertain, however the project participant has considered tariff of INR 3.50 per KWh for the remaining life of the project activity. To check this applicability of tariff rate, the following excerpts taken from MERC order - Case No. 17(3), 3, 4 & 5 of 2002 dated 24/11/2003 & MSEB Policies on Wind Energy: Deviations from the Policies of GOM & Guidelines of MNES have been checked for the tariff rate that would be applicable

*“The Commission notes that in Cost Plus Approach, which the Commission has adopted for tariff proposal, rate per unit charged by such projects during initial period of 10 years is bound to be higher as during this period the project has various debt related obligations. However, it is essential that the consumer is able to enjoy the benefit of cheaper power once all debt related obligations are paid off and project has virtually no variable costs.”*¹

*“The rate payable gets reduced after 10 years (i.e. after repayment of loan) so that the net average cost of energy gets reduced.”*²

*“To ensure that developer does not remove the machine after availing higher purchase rate for 10 years, an agreement may be signed allowing MSEB to have second charge for first 10 years (when the lender institution shall have first charge on the machine) and subsequently MSEB shall have first charge for the balance 10 years.”*³

The above extracts indicate that the tariff rate will reduce after 13th year and due to this uncertainty the considered tariff rates are acceptable.

The sensitivity analysis for the project activity has been carried out for the project activity with increase and decrease in plant load factor, project cost and O&M Cost by 5% and 10% to the base value. The generation if calculated for the project life of 20 years constitutes for more than 20% of the Project Cost. OM if calculated for the project life of 20 years is 47% of project cost and exceeds 20% of the project cost. Project cost is 100%. Thus as per guidance 16 of investment analysis for sensitivity parameters, these variables constitute more than 20% of total project cost and has been considered for Sensitivity Analysis. The results of the sensitivity analysis have been tabulated below. The calculations for the same was checked and found to be acceptable.

	Variation in PLF				
Equity IRR	+10%	+5%	0%	-5%	-10%
PLF	22%	21%	20%	19%	18%
Raj Promoters	13.48%	11.66%	9.82%	7.95%	6.04%
Raj Infrastructure	14.27%	12.33%	10.37%	8.40%	6.40%
	Variation in Project Cost				
Equity IRR	+10%	+5%	0%	-5%	-10%
Raj Promoters	7.63%	8.63%	9.82%	11.26%	13.11%
Raj Infrastructure	8.00%	9.07%	10.37%	11.99%	14.12%
	Variation in O & M Expenses				
Equity IRR	+10%	+5%	0%	-5%	-10%
Raj Promoters	9.31%	9.56%	9.82%	10.07%	10.32%
Raj Infrastructure	9.84%	10.11%	10.37%	10.64%	10.90%

¹ http://mercindia.org.in/pdf/Detail_Wind_Energy_Order.pdf – Refer Page No. 14, Paragraph 2 of the document.

² <http://mercindia.org.in/pdf/Annexures.pdf> – Refer Page No. 135, Paragraph 2 of the document.

³ MSEB <http://mercindia.org.in/pdf/Annexures.pdf> – Refer Page No. 141, Point No. 15 of the document.

Based on the above discussion it can be concluded that the project activity without CDM funds is not a financially viable alternative as the financial returns from the project are less than the referred benchmark for the investment without CDM funds. Thus the project can be termed as additional due to investment barrier and hence CAR #2 was closed out.

The project participant has mentioned the regulatory and other barriers to the project activity; however these barriers are not project specific and are not acceptable.

The project activity start date is 09/01/2006 which is the date mentioned on the purchase order for the project activity. The project participant had a prior knowledge of CDM, and this was checked through the meeting with Suzlon and project participant dated 11/11/2005 and Loan application with the bank dated 10/12/2005. The project proponent provided extract of the Board meeting dated 15/12/2005 for Raj Promoters and 26/05/2006 for Raj Infrastructure as an evidence for CDM consideration; the extract mentions that the board has considered investing in wind project revenue from sale of carbon credit when decided to go ahead with the investment in wind mills. The same has been checked with the bank application dated 10/12/2005. The PP has mentioned the detailed chronology of events for the real action taken to secure CDM activity in parallel with its implementation.

Sl. No.	Action/ Events	Date	Reference/ Comment
1.	Meeting between Suzlon and PP	11/11/2005	Information regarding CDM from Suzlon to project participant
2.	Loan Application for installation of WTG and Feasibility report submitted to bank	10/12/2005	Information to the bank installation of WTG and submission of feasibility report of IRR calculation to bank with CDM revenue consideration.
3.	Board Resolution	15/12/2005 & 26/12/2005	Board of both companies of Raj group adopted the resolution related to Wind Power Projects in consideration of CDM benefits.
4.	Letter from Financing bank.	22/12/2005	Janata Sahakari Bank Ltd Pune has asked clarification for the consideration of CDM revenue for the feasibility report submitted on 10/12/2005
5.	Raj Group Reply	27/12/2005	PP informed the bank about the CDM project cycle and revenue expected from the same.
6.	Purchase Order to WTG supplier	09/01/2006	Both companies issued Purchase order to WTG supplier.
7.	Application for Infrastructure clearance by Raj Promoter & Civil Engineers Pvt. Ltd to MEDA	10/01/2006	Raj Promoter & Civil Engineers Pvt. Ltd. applied for infrastructure clearance from MEDA for its 1.25 MW wind power project.
8.	Undertakings for procurement of land by WTG supplier	From February to April 2006	Constant communication was made by WTG supplier in connection to land procurement with Forest Department & vice versa, since the land is a forest land. There was delay to get the land for project activity. The delay leads to further delay in meeting with CDM consultant.
9.	Letter from Suzlon to Raj Group	22/02/2006	Suzlon confirmed the presence for meeting scheduled on 10/03/2006 at Raj Group office.
10.	Suzlon – Raj Group Meeting	10/03/2006	Minutes of meeting where PP want assistance from Suzlon to arrange for a meeting between Senergy Global Pvt. Ltd & Raj Group for CDM project activity.
11.	Letter from Suzlon to Raj Group	20/03/2006	Letter of Suzlon to project participant stating that they have informed to CDM consultant

			about the meeting and consultant would send details of their services.
12.	Diversion of 212.52 hectare of forest land for construction of 225 MW wind power project in favour of WTG supplier in project site (Dhule District)	22/04/2006	The WTG supplier obtained land from Forest department for setting up of 225 MW wind power project in Dhule District.
13.	E-mail from Senergy Global Pvt. Ltd. (CDM consultant) to Raj Group	20/05/2006	Mail of CDM consultant, Senergy Global Pvt. Ltd. to Raj Group to discuss about CDM consultancy service during 2 nd or 3 rd week of August, 2006.
14.	Transfer of lease 37.45 hectare of forest land out of 212.52 ha allotted to WTG supplier by MoEF.	11/06/2006	The WTG supplier can approach MEDA for the transfer of infrastructure clearance (already obtained on 04/01/2006) from WTG supplier to its clients including Raj Group.
15.	Transfer of capacity from WTG supplier to Raj Infrastructure (I) Pvt. Ltd. issued by MEDA	29/07/2006	The infrastructure clearance for setting up of 10 MW wind power project was already given to WTG supplier, dated 04/01/2006. From 10 MW wind power project, 1.25 MW wind power project was allocated to Raj infrastructure (I) Pvt. Ltd. after getting forest department clearance, dated 22/04/2006.
16.	Raj Group – Senergy Meeting	26/08/2006	Raj group requested Senergy Global Pvt. Ltd. to send Draft CDM contract.
17.	E-mail from Senergy Global Pvt. Ltd. to Raj Group	28/08/2006	Senergy Global Pvt. Ltd. had sent Minutes of the Meeting that took place on 26 th August, 2006 at RAJ Group Office.
18.	Infrastructure clearance for Raj Promoter & Civil Engineers Pvt. Ltd. issued by MEDA	28/09/2006	Raj Promoter & Civil Engineers Pvt. Ltd. obtained Infrastructure clearance from MEDA which was applied for the same, dated 10/01/2006.
19.	Commissioning of the WTGs	13/08/2006 & 30/09/2006	Both machines were commissioned.
20.	Success fee agreement from Senergy Global Pvt. Ltd	28/09/2006	The draft success fee agreement was sent by consultant through mail dated 28/09/2006 for providing services for CDM.
21.	Success fee agreement Execution	10/10/2006	The agreement was signed by Raj Group.
22.	Draft of CDM agreement with few amendments.	28/11/2006	Revised success fee agreement with few amendments made by consultant Senergy Global Pvt. Ltd was sent to PP through mail dated 28/11/2006.
23.	Requisites of list of documents	28/02/2007	Requisites of list of documents sent by previous consultant to develop the CDM project of PP.
24.	Intimation of Agreement Cancellation	12/03/2007	Raj Group informed previous consultant about cancellation of the agreement, since a considerable time was lapsed to exercise that had considerable financial implications.
25.	Agreement Cancellation	26/03/2007	Original Agreement received back without execution from Senergy Global Pvt. Ltd.
26.	Board Resolution	09/04/2007, 12/04/2007	The PP decided to invite quotes from other CDM Consultant.
27.	Proposal from new consultant	18/05/2007	Proposal received from CDM Consultant with FIXED FEE + SUCCESS FEE

28.	Board Resolution	06/06/2007, 11/06/2007	Board decided to postpone the decision of appointment of CDM Consultant in view of future projects and high fixed fee.
29.	Work order to consultant	15/11/2007	Work order released to CDM Consultant.
30.	Submission of Project Information Note (PIN)	05/12/2007	The project consultant submitted PIN to the Project Promoter.
31	Document Collection / Checking by Project consultant & Submission of Project Design Document (PDD)	22/02/2008	The project consultant submitted PDD to the Project Promoter after receiving necessary documents from the PP.
32	Application to MoEF for DNA Meeting	03/03/2008	Raj Group applied for DNA Meeting to MoEF.
33	Application for Host Country Approval made to MoEF during the DNA Meeting.	25/04/2008	The Project Proponent applied for Host Country Approval to MoEF during the DNA Meeting & submitted relevant documents required by the MoEF.
34	Appointment of Validator	14/05/2008	The agreement with the validator has been checked
35	Host Country Approval	28/05/2008	Received Host Country Approval from MoEF.
36	The international stakeholder web-hosting	14/06/2008	PDD is web hosted on the UNFCCC website for international stakeholder commenting period.

The evidence for all events has been checked and found to be acceptable. The project participant was aware about the CDM project activity and the consideration of CDM revenue in the feasibility report was the decisive factor for the project activity. The loan application for installation of WTG and Feasibility report submitted to the Janata Sahakari Bank Ltd has been considered CDM revenue. The bank correspondence with the project participant dated 22/12/2005 has been checked along with the feasibility report. The project participant has taken real action to secure CDM status for the project in parallel with implementation. This is in line with "Guidance on the demonstration and assessment of prior consideration of the CDM". The main delay is due to negotiation with consultant. The same has been checked and found to be appropriate.

The PDD version 1 mentioned the project boundary, the project boundary is described as regional grid along with the details for metering points, and the same was checked and discussed during the site visit found acceptable.

4.5 Application of Baseline Methodology and Calculation of Emission Factors

The present project activity was generating wind power and supplying it to Western Grid. The project has applied baseline methodology as mentioned in the small scale methodology AMS I-D version 13 dated valid from 14th December 2007 for "Grid connected Renewable electricity generation" as per Appendix B of the simplified modalities and procedures for small-scale CDM project activities. The project is of 2.5 MW capacity and supplies electricity generated to the Western Grid, thus satisfying the condition for the baseline methodology.

The combined margin (CM) emission factor (EF) for the Western grid has been considered for emission reduction calculation. The data for the same is provided by the CEA which can be referred at the link (<http://www.cea.nic.in/planning/c%20and%20e/Government%20of%20India%20website.htm>). The PP has provided an excel spreadsheet for the calculation of emission reduction for the project activity. In the first version of PDD and spread sheet, the Operating Margin (OM) and Build Margin (BM) values (expressed in tCO₂/MWh) have been used for two decimal points while calculating emission factor using CEA baseline database. Following this approach, the combined margin emission factor comes out as 897.5 tCO₂/GWh (or 0.8975 tCO₂/MWh) and this figure was expressed by four decimal places in terms of MWh. The validation team found that, whilst reviewing the calculation, that rounding off the OM and BM values at the initial step of the calculation doesn't reflect correctly in the final actual values. Therefore, CL #3 was raised and the PP was asked to use the same OM and BM values, as appeared in the CEA baseline database version 03. In response to CL #3 the PP has considered the correct values for OM and BM values expressed in tCO₂/MWh

up to three decimal points. The correct data from the latest version of CEA, available at the time the PDD was made public for stakeholders' consultation, was used. It was found that when the Combined Margin (CM) EF was calculated in the right way it comes out as 901.0 tCO₂/GWh. In summary, the incorrect use of decimal points led to a wrong figure (0.8975 tCO₂/MWh) in version 01 of PDD and was later corrected as 0.901 tCO₂/MWh (final version of PDD). The correct emission factor figure is converted from tCO₂/MWh to tCO₂/GWh for calculation purposes. The revised PDD has mentioned the combined margin grid emission factor as 901.0 tCO₂/GWh for Western grid and is kept fixed for the entire crediting period. The emission reduction figures would further be checked during verification. As per methodology AMS I-D version 13 dated valid from 14th December 2007; leakage due to the project activity will be considered only when there is an equipment transfer from one place to another but this is not the case with the present project activity, hence no leakage is considered.

4.6 Application of Monitoring Methodology and Monitoring Plan

The present CDM project activity uses monitoring methodology AMS I-D version 13 valid from 14th December 2007 for "Grid connected Renewable Electricity generation".

The QA/QC procedure for the project activity has not described and the proportioning procedure for the calculation of net electricity export to the grid and all required parameters in monitoring section B.7.1 has not found in PDD, thus CAR #5 was raised. In response to CAR #5 the project proponent clarified that the operation and maintenance is being carried out by Suzlon and the same is ISO certified and has proper procedures for providing training to its employees. The QA/QC procedure has mentioned in PDD. The ISO certificates for ISO 9001:2000 dated 18th December 2006 and valid till 17th September 2009 and ISO 14001:2004 dated 25th April 2006 valid till 13th April 2009 were checked and are acceptable. The PP has mentioned the proportioning procedure for the calculation of net electricity export to grid and included all required parameters in section B.7.1 of revised PDD.

CAR #5 was closed out.

4.7 Choice of the Crediting Period

It was not clear about the evidence of start date of project activity and start date of crediting period, thus CAR #4 was raised. In response to CAR #4 the PP has mentioned the first purchase order as a start date of the project activity and is accepted. The present project activity has chosen ten years fixed crediting period. The start date of crediting period is appropriate at present and acceptable.

CAR #4 was closed out.

4.8 Environmental Impacts

The project proponent has mentioned in the PDD that the present project activity does not require EIA to be carried out. The same was checked with the EIA notification which mentions the project requiring EIA, and according to the notification wind projects do not require EIA to be carried out. The web-link for the notification is <http://envfor.nic.in/legis/eia/so1533.pdf>. The PP has submitted the necessary consents and approvals for the project activity. Project proponent submitted infrastructure clearances from MEDA dated 28/09/2006. The commissioning certificate for the project activity was checked and the same was acceptable.

4.9 Local Stakeholder Comments

The project activity involves setting up of 2.5 MW wind power project for electricity generation, which is being fed to the Western Grid of India. The project proponent identified local villagers, and the government institutions as local stakeholders for the project activity. The PDD has mentioned that local stakeholder consultation was carried out and the evidences for media of invitation, Minutes of meeting, attendance sheet has submitted. The meeting was carried out on 05/12/2007. There was no negative comment for the project activity. A copy of was provided by the project proponent which was cross-checked with the original during the discussion at the time of site visit and found acceptable.

5. Comments by Parties, Stakeholders and NGOs

In accordance with sub-paragraphs 40 (b) and (c) of the CDM modalities and procedures, the project design document of a proposed CDM project activity shall be made publicly available and the DOE shall invite comments on the validation requirements from Parties, stakeholders and UNFCCC accredited non-governmental organizations and make them publicly available. This chapter describes this process for this project.

5.1 Description of How and When the PDD was Made Publicly Available

The Project Design Document for this project was made available on the UNFCCC website <http://cdm.unfccc.int/Projects/Validation/DB/C2QR7R7JT8OQRKGVD3E5Y9MODNM3RG/view.html> and was open for comments from 14/06/2008 until 13/07/2008. Comments were invited through the UNFCCC CDM homepage

5.2 Compilation of all Comments Received

No comments were received

5.3 Explanation of How Comments Have Been Taken into Account

No comments were received

6. List of Persons Interviewed

Date	Name	Position	Short Description of Subject Discussed
18/07/2008	Mr. Suresh	Project Consultant	Baseline and Monitoring procedure and additionality
18/07/2008	Mr. Karekar	Financial Expert	Financial calculations

7. Document References

Category 1 Documents (documents provided by the Client that relate directly to the GHG components of the project, (i.e. the CDM Project Design Document, confirmation by the host Party on contribution to sustainable development and written approval of voluntary participation from the designated national authority):

- /1/ PDD version 1 dated 18/02/2008 (submitted for international stakeholder's comments)
- /2/ AMS I D version 13
- /3/ UNFCCC website (<http://cdm.unfccc.int/index.html>)
- /4/ PDD version 2
- /5/ PDD version 3 dated 20/10/2008 along with Bundle form version 3 dated 20/10/2008 (submitted with request for registration)
- /6/ Host Country Approval, reference number 4/7/2008-CCC dated 28/05/2008
- /7/ IRR calculation sheet for the project
- /8/ Board note dated 15/12/2006 and 26/12/2006 for Raj group as CDM consideration proof
- /9/ Modalities of communication
- /10/ Emission reduction calculation sheet

Category 2 Documents (background documents used to check project assumptions and confirm the validity of information given in the Category 1 documents and in validation interviews):

- /11/ Certificate for no use of ODA for project activity by project participant
- /12/ MoM for stakeholder consultation process carried on 05/12/2007 in Maharashtra,
- /13/ Letter of undertaking for no change in technology
- /14/ Purchase orders of WTG of 2 nos. of 1.25 MW in Maharashtra dated 09/01/2006
- /15/ ISO 9001:2000 valid till 17th September 2009 and ISO 14001:2004 valid till 13/04/2009
- /16/ PPA for WTG of 1.25 MW by Raj Infrastructure Development dated 04/09/2006 and WTG of 1.25 MW by Raj Promoters dated 11/10/2006
- /17/ Commissioning certificates for WTG of 2 no. of 1.25 MW in Maharashtra commissioned on 13/08/2006 and 30/09/2006 by Raj Infrastructure and Raj Promoters respectively
- /18/ MEDA clearance for commissioning of 1.25 MW WTG of Raj Promoters dated 29/09/2006 and of 1.25 MW WTG of Raj infrastructure dated 05/08/2006,
- /19/ MERC Order dated 24/11/2003
- /20/ Evidences for the chronology of events

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A.1 Annex 1: Local Assessment

This checklist is designed to provide confirmation of in-country data and information provided in the Project Design Document for “**2.5 MW Bundled Wind Power Project in Maharashtra (India)**”.

It serves as a “**reality check**” on the project that is completed by a local assessor from SGS India.

Issue	Findings	Source/Mean of Verification	Further Action / Clarification / Information Required?
1. Host Country Approval letter	The HCA for the project activity has been submitted having reference no is 4/7/2008-CCC dated 28/05/2008	Document Review /6/	Appropriate and accepted
2. Purchase orders for the project activity.	The purchase orders of WTG of 2 nos. of 1.25 MW in Maharashtra dated 09/01/2006,	Document Review /14/	Appropriate and accepted
3. Financial calculation sheets and evidence against the data and assumptions used.	The same is submitted and is acceptable.	Excel spreadsheet /7/	Appropriate and accepted
4. Evidence is required regarding serious CDM Consideration for the project activity.	The board note dated 15/12/2005 and 26/12/2005 has been submitted by project participant.	Document Review /8/	Appropriate and accepted
5. Evidence for no use of ODA	The same is submitted by project participant	Document Review /11/	Appropriate and accepted
6. Evidence is required to be submitted that the technology used would not be changed during the crediting period.	The same undertaking has been submitted	Document Review /13/	Appropriate and accepted
7. The media used to invite the local stakeholders	The invitation letter has submitted and found to be acceptable.	Document Review /12/	Appropriate and accepted
8. MoM of local stakeholder consultation is required. Discussion with the local stakeholders is	The MoM for stakeholder's consultation has been submitted; the same was checked and cross-checked during the site visit and is acceptable.	Document Review /12/	Appropriate and accepted

Issue	Findings	Source/Mean of Verification	Further Action / Clarification / Information Required?
required during the site visit	There was no negative comment from local stakeholders.		
9. Evidence for start date of the project activity.	The purchase orders of WTG of 2 nos. of 1.25 MW in Maharashtra dated 09/01/2006 has been submitted and acceptable.	Document Review /14/	Appropriate and accepted
10. It is required to be checked whether the project activity is a de-bundled components of not.	Checked during site visit and found that the project is not de-bundled component of large scale project activity.	Discussion with project participant (Site visit)	Appropriate and accepted
11. PPA for the project activity.	PPA for WTG of 1.25 MW by Raj Infrastructure Development dated 04/09/2006 and WTG of 1.25 MW by Raj Promoters dated 11/10/2006 has submitted; the same was checked and is acceptable.	Document Review /16/	Appropriate and accepted
12. Delay to approach CDM funds needs to be discussed.	Chronology of events has been mentioned in PDD and all evidences are submitted and are acceptable.	Document Review, Discussion with project participant /20/	Appropriate and accepted
13. QA/QC procedures for data monitoring or ISO certificates for the EPC contractor.	ISO certificates for Suzlon have been submitted and are acceptable.	Document Review, site visit /15/	Appropriate and accepted
14. Consents and approval for the project activity.	MEDA clearance for commissioning of 1.25 MW WTG of Raj Promoters dated 29/09/2006 and of 1.25 MW WTG of Raj infrastructure dated 05/08/2006,	Document Review /18/	Appropriate and accepted
15. Modalities of Communication for the project activity.	The same is submitted.	Document Review /9/	Appropriate and accepted

A.2 Annex 2: Validation Protocol

Table 1 Participation Requirements for Clean Development Mechanism (CDM) Project Activities (Ref PDD, Letters of Approval and UNFCCC website)

Requirement	Reference	Comments	Conclusion
1. All Parties (listed in Section A3 of the PDD) have ratified the Kyoto protocol and are allowed to participate in CDM projects	Marrakech Accords, CDM Modalities §30	India has ratified the protocol on 26 th August 2002 and is allowed to participate. (http://unfccc.int/parties_and_observers/parties/items/2109.php)	Y
2. The project shall assist Parties included in Annex I in achieving compliance with part of their emission reduction commitment under Art. 3 and be entered into voluntarily.	Marrakech Accords, CDM Modalities §29 and §30	Project will reduce GHG emissions; however no Annex-1 Party is identified by the project proponent so far. This is a unilateral project.	Y
3. The project shall assist non-Annex I Parties in achieving sustainable development and shall have obtained confirmation by the host country thereof, and be entered into voluntarily	Marrakech Accords, CDM Modalities §29 and §30 Kyoto Protocol Art. 12.2, Marrakech Accords, CDM Modalities §40a	The project activity will contribute to sustainable development. Host Country Approval from Designated National Authority is provided by the project proponent.	Y

Requirement	Reference	Comments	Conclusion
4. Parties, stakeholders and UNFCCC accredited NGOs shall have been invited to comment on the validation requirements for minimum 30 days, and the project design document and comments have been made publicly available	Marrakech Accords, CDM Modalities, §40	Yes, the project was listed on UNFCCC website from 14 th June 2008 to 13 th July 2008 which was linked to the SGS website http://cdm.unfccc.int/Projects/Validation/DB/C2QR7R7JT8OQRKGVD3E5Y9MODNM3RG/view.html The project is also listed on SGS climate change website from 14 th June 2008 to 13 th July 2008 http://www.sgsqualitynetwork.com/tradeassurance/ccp/projects/project.php?id=533 Number of comments received during web-hosting period - 0	Y
5. The project design document shall be in conformance with the UNFCCC CDM-PDD format	Marrakech Accords, CDM Modalities, Appendix B, EB Decisions	The PDD is as per the CDM-SSC-PDD version 3 format.	Y
6. The project participants shall submit a letter on the modalities of communication (MoC) before submitting a request for registration	EB-09 F_CDM_REG form	The same needs to be submitted by Project proponent.	Site visit The same is submitted.
7. For AR projects, the host country shall have issued a communication providing a single definition of minimum tree cover, minimum land area value and minimum tree height. Has such a letter been issued and are the definitions consistently applied throughout the PDD?	-	Not applicable	Not applicable

Table 2 PDD

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
A. General Description of Project Activity					
A.1. Project Title					
A.1.1. Does the used project title clearly enable to identify the unique CDM activity?	01,06	DR	The title of the project activity mentioned is “2.5 MW Bundled Wind Power Project in Maharashtra (India)”. This is unique. The title of project activity has checked with the LoA from Host country.	Y	Y
A.1.2. Are there an indication of a revision number and the date of the revision?	01	DR	Yes; The PDD which was webhosted for International stakeholder consultation mentions version 01, dated 10/06/2008.	Y	Y
A.1.3. Is this in consistency with the time line of the project’s history?	01,14	DR	The start date of the project activity is 09/01/2006. The date of PDD is 18/02/2008. This is in line with projects history. This will be further checked during the site visit.	Site visit	Y PO is provided
A.2. Description of the Project Activity					
A.2.1 Is the description delivering a transparent overview of the project activities?	01,14	DR	Information regarding the purpose of the project activity, type of technology used and contribution to sustainable development has been described. The same would be cross-checked during the site visit.	Site visit	Y PO is provided
A.2.2 Is all information provided in compliance with actual situation or planning?	01	DR	The project activity entails installation of Wind Mills for power generation and supplying the same to the western regional grid of India, the same would be checked during the site visit.	Site visit.	Y

* MoV = Means of Verification, DR= Document Review, I= Interview

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
A.2.3. Is all information provided consistent with details provided in further chapters of the PDD?	01	DR	The project activity details as mentioned in the PDD are consistent the same would be cross-checked during the site visit.	Site visit.	Y
A.3. Project Participants					
A.3.1 Is the table required for the indication of project participants correctly applied?	01,06	DR	The table in section A.3 of PDD version 01 has mentioned Raj Infrastructure Development (India) Pvt Ltd as a project participant. The same will be checked during site visit	Site Visit	Y Checked with HCA
A.3.2. Is all information provided in consistency with details provided by further chapters of the PDD (in particular annex 1)?	01	DR	The information of project participant is consistent in PDD	Y	Y
A.4. Technical Description of the Project Activity					
A.4.1. Does the information provided on the location of the project activity allow for a clear identification of the site(s)?	01	DR	The project is located at Dhule district in Maharashtra. The exact location along with latitude and longitude is mentioned in PDD. The same will be checked during site visit	Site Visit	Y
A.4.2. Do the project participants possess ownership or licenses which will allow the implementation of the project at that site / those sites?	01,14	DR	Applicable ownership documents or licenses which allow the implementation of the project activity at the project site need to be submitted by Project Participant.	CL #1	Y Approvals, POs are submitted. CL #1 closed
A.4.3. Is the category(ies) of the project activity correctly identified?	01,14	DR	The PDD mentions that the project activity involves electricity generation by Wind mills and supplying the same to the western regional grid, the same would be cross-checked during the site visit.	Site visit	Y PO is provided

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
A.4.4. Does the project design engineering reflect current good practices?	01,14	DR	The project activity involves electricity generation through wind mills. The technical specifications and Purchase orders for all wind mills involved in the project activity are submitted by the project proponent.	Y	Y
A.4.5. Is all information provided in compliance with actual situation or planning as available by the project participants?	01	DR	To be checked during the site visit.	Site visit	Y Checked
A.4.6. Does the project use state of the art technology or would the technology result in a significantly better performance than any commonly used technologies in the host country?	01	DR	The project activity uses technology that is common practice in India. The same will be checked during site visit.	Site visit	Y
A.4.7. Is the project technology likely to be substituted by other or more efficient technologies within the project period?	01,13	DR	The lifetime of the project activity as mentioned in the PDD is 20 years. The same needs to be cross-checked with the technical specifications. Evidence is required that the project technology would not be substituted during the crediting period.	Site Visit	Y Undertaking is submitted.
A.4.8. Does the project require extensive initial training and maintenance efforts in order to work as presumed during the project period?	01	DR	The project does not require extensive initial training and maintenance efforts. The same needs to be discussed during the site visit.	Site visit	Y
A.4.9. Does the project make provisions for meeting training and maintenance needs?	01	DR	The same needs to be checked during the site visit.	Site visit	Y O & M agreement is provided

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
A.4.10. Is a schedule available on the implementation of the project and are there any risks for delays?	01	DR	The project has already been implemented.	Y	Y
A.4.11. Is the table required for the indication of projected emission reductions correctly applied?	01	DR	The table has been applied correctly.	Y	Y
A.5. Public Funding					
A.5.1. Does the information on public funding provided conform with the actual situation or planning as presented by the project participants?	01,11	DR	The PDD mentions that no ODA was used for the project activity. The loan documents are required to be submitted for the project activity. Also evidence is required that No ODA was used in the project activity. The same will be checked during site visit.	Site Visit	Y Undertaking and Loan documents are submitted
A.5.2. Is all information provided consist with details provided by further chapters of the PDD (in particular annex 2)?	01	DR	The same will be checked during site visit.	Site Visit	Y
A.5.3. In case of public funding from Annex I Parties is it confirmed that such funding does not result in a diversion of official development assistance	01	DR	The same will be checked during site visit.	Site Visit	Y
A.6. Debundling					
A.6.1 Is the small-scale project activity a debundled component of a large scale project activity	01	DR	The PDD mentions that the project activity is not a de-bundled component; the same will be checked during the site visit.	Site visit	Y The same is checked
A.6.2 If the project is a debundled component of a larger project, does the larger project fall within the limits for small-scale CDM project activities	01	DR	The project activity is not a de-bundled project activity as mentioned in the PDD. The same needs to be checked during the site visit.	Site visit	Y The same is checked

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
B. Baseline and Monitoring Methodology					
B.1. Choice and Applicability					
B.1.1. Is the project using an approved simplified methodology?	01, 02, 03	DR	The methodology used is AMS I D version 13; the same is an approved methodology and is valid.	Y	Y
B.1.2. Does the project activity qualify as small scale project?	01, 02	DR	The project uses AMS I D; the total capacity of the project is 2.5 MW which is less than the specified limit of 15 MW, the same needs to be cross-checked during the site visit.	Site visit.	Y The same is checked
B.1.3. Is the category(ies) of the project activity correctly identified in accordance with Appendix B to the simplified modalities and procedures for small-scale CDM project activities?	01, 02 & 03	DR	The project activity electricity generation by Wind mills and supplying the same to western regional grid.. The methodology selected is AMS I D and the same is applicable.	Y	Y
B.1.4. Is the project activity a bundle of several small scale activities and if so does it contain any sub-bundles	01, 03	DR	The project activity is not a bundle project activity as mentioned in the PDD, the same needs to be checked during site visit.	Site visit	Y The same is checked
B.1.5. If the project activity is a bundle of several small scale activities, does the sum of the total bundle (including any subbundles) fall within the limits for small scale projects	01, 03	DR	The project activity is not a bundle project activity as mentioned in the PDD, the same needs to be checked during site visit.	Site visit	Y The same is checked
B.1.6. If the project activity is a bundle of several small scale activities, has the form with information related to the bundle been submitted and is it correctly used	01, 03	DR	The project activity is not a bundle project activity as mentioned in the PDD, the same needs to be checked during site visit.	Site visit	Y The same is checked

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
B.2. Project Boundary					
B.2.1. Has the project boundary of the project activity been based on the guidance of the applicable project category?	01, 02	DR	The project boundary is described as regional grid. The same needs to be checked during the site visit and discussion with the project proponent.	Site visit	Y The same is checked
B.2.2. In case of grid connected electricity projects: Is the relevant grid correctly identified in accordance with EB guidance and the underlying methodology?	01	DR	The project activity generates electricity and supplies the same to the western regional grid of India. The grid selected is as per the CEA.	Y	Y
B.2.3. Are the project's spatial boundaries (geographical) and the project's system boundaries (components and facilities used to mitigate GHGs) clearly defined?	01	DR	The project boundary has been described clearly.	Y	Y
B.3. Identification of the Baseline Scenario					
B.3.1. Does the PDD discuss the identification of the most likely baseline?	01, 02	DR	The baseline scenario is continuation of generation in the western regional grid as per the current emission levels, the same needs to be discussed during the site visit.	Site visit	Y The same is checked
B.3.2. Is the discussion and determination of the chosen baseline transparent and supported by the available data?	01, 02	DR	The baseline scenario is continuation of generation in the western regional grid of India as per the current emission levels, the same needs to be discussed during the site visit.	Site visit	Y The same is checked
B.3.3. Is conservativeness addressed in the way of identifying the baseline?	01, 02	DR	The baseline scenario is continuation of generation in the western regional grid of India, the same needs to be discussed during the site visit.	Site visit	Y The same is checked

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
B.4. Additionality					
B.4.1. Is the discussion on additionality and the evidence provided consistent with the starting date of the project	01,14	DR	The start date for the project activity is 09/01/2006. The discussions are in line with the start date. To be discussed during the site visit.	Site visit	Y The same is checked
B.4.2. Is the discussion on additionality based on a comparison with realistic and credible alternatives?	01,07	DR	Supporting as mentioned in the PDD is required to be submitted. Justification for the selected benchmark in light with para 40 of general guidance of EB 40 meeting report. It is not clear which benchmark is exactly applied Evidence for the each value used in financial calculation and basis for calculation. The regulatory and other barrier seems to be generic in nature. Please clarify how these barriers are project specific which prevent the implementation of project activity prior to start of project activity. Please clarify how the operational barriers are specific to project activity. Evidence for CDM consideration and justification for time gap between start of project activity and validation is needed.	CAR #2	Y CAR #2 closed. Financial barrier is acceptable.

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
B.4.3. Does the discussion on additionality take into account relevant national and/or sectoral policies, macro-economic trends and political aspirations??	01,07	DR	Pending CAR #2	Pending CAR #2	Y CAR #2 closed. Financial barrier is acceptable.
B.4.4. Has it been shown that the proposed project activity faces barriers that prevent the implementation of this type of proposed project activity but would not have prevented the implementation of at least one of the alternatives?	01,07	DR	The PDD identifies the barriers as Barrier due to investment which is as per the attachment A to Appendix B. Evidence is required to be provided to support the same. Pending CAR #2	Pending CAR #2	Y CAR #2 closed. Financial barrier is acceptable.
B.4.5. Is it demonstrated/justified that the project activity itself is not a likely baseline scenario	01, 02	DR	Pending CAR #2	Pending CAR #2	Y CAR #2 closed. Financial barrier is acceptable.
B.5. Application of the Baseline Methodology					
B.5.1. Has the simplified methodology been applied correctly for determining baseline emissions ?	01, 02,07	DR	There is inconsistency in KWh generation and grid emission coefficients between excel sheet and PDD Version 01, Please clarify the same. Project participant need to check values for the simple OM for the recent 3 years and for BM of recent year with latest available data at the time of PDD submission for validation.	CL #3	Y CL #3 closed. Revised Excel is submitted.

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
B.5.2. Has the simplified methodology been applied correctly for determining project emissions ?	01, 02, 07	DR	The Excel spreadsheet of the calculation of emission reductions need to be provided by the project proponent.	Pending CL #3	Y CL #3 closed.
B.5.3. Has the simplified methodology been applied correctly for determining leakage ?	01, 02, 07	DR	The Excel spreadsheet of the calculation of emission reductions need to be provided by the project proponent.	Pending CL #3	Y CL #3 closed.
B.5.4. Have all the methodological choices been explained, have they been properly justified and are they correct	01, 02, 07	DR	Pending closure of CARs/CLs.	Pending CARs/CLs	Y CL #3 closed.
B.5.5. Are uncertainties in the GHG emissions estimates properly addressed in the documentation?	01, 02	DR	Pending closure of CARs/CLs.	Pending CARs/CLs	Y CL #3 closed.
B.6. Ex-ante Data and Parameters Used					
B.6.1. Are the data provided in compliance with the simplified methodology?	01, 02, 07	DR	The excel sheet for calculation of emission reductions is required to be submitted along with evidences for the assumptions used. The same would be checked during the site visit.	Pending	Y CL #3 closed.
B.6.2. Is all the data derived from official data sources or replicable records and have these been correctly quoted?	01, 02 & 03	DR	Evidences for calculation of baseline emissions is required to be submitted, Pending CL #3	Pending CL #3	Y CL #3 closed.
B.6.3. Is the vintage of the baseline data correct?	01	DR	Pending closure of CARs/CLs.	Pending CARs/CLs	Y CL #3 closed.

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
B.7. Calculation of Emissions Reductions					
B.7.1. Has the approved methodology been applied correctly for determining emission reductions ?	01, 02	DR	Pending CL #3	Pending CL #3	Y CL #3 closed.
B.7.2. Are the emission reduction calculations documented in a complete and transparent manner?	01, 02, 07	DR	The emission reductions calculation has been described in the PDD, Pending closures of CARs/CLs	Pending closure of CARs/CLs	Y CL #3 closed.
B.7.3. Have conservative assumptions been used to calculate emission reductions?	01, 02	DR	The same needs to be checked with the plant data during the site visit.	Site visit	Y Checked
B.7.4. Is the projection based on provable input parameter?	01, 02	DR	To be checked during site visit.	Site visit	Y Checked
B.7.5. Is the projection based on same procedures as used for later monitoring or acceptable alternative models?	01, 02	DR	To be checked during the site visit.	Site visit	Y Checked
B.7.6. Is the calculation of the emission reduction correct?	01, 02	DR	Pending closures of CARs/CLs	Pending closure of CARs/CLs	Y Checked
B.8. Emission Reductions					
B.8.1. Will the project result in fewer GHG emissions than the baseline scenario?	01, 02, 07	DR	The PDD mentions the emission reduction of 3877 tCO ₂ e per annum, pending closure of CARs and CLs.	Pending	Y Closed
B.8.2. Is the form/table required for the indication of projected emission reductions correctly applied?	01, 02	DR	The table has been applied correctly.	Y	Y

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
B.8.3. Is the projection in line with the envisioned time schedule for the project's implementation and the indicated crediting period?	01	DR	The start date of the crediting period as mentioned in the PDD is 01/09/2008. The start date of crediting period assumed is not realistic, kindly clarify. The same would to be discussed during the site visit.	CAR #4	Y CAR #4 is closed. Date is appropriate.
B.9. Monitoring Methodology					
B.9.1. Does the monitoring methodology provide a consistent approach in the context of all parameter to be monitored and further information provided by the PDD?	01, 02	DR	The same needs to be checked during the site visit.	Site visit	Y The same is checked.
B.9.2. Does the monitoring methodology consistently apply the choice of the option selected for monitoring both of project and baseline emissions?	01, 02	DR	The same needs to be checked during the site visit.	Site visit	Y The same is checked.
B.10. Data and Parameters Monitored					
B.10.1. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for estimation or measuring the emission reductions within the project boundary during the crediting period?	01,15	DR	The data archiving system has been discussed for the parameters to be monitored in the PDD. The same would be cross-checked during the site visit.	CAR #5	Y The same is mentioned. CAR #5 was closed
B.10.2. Are the choices of project GHG indicators reasonable and in conformance with the requirements set by the simplified methodology applied?	01	DR	Not applicable	NA	NA

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
B.10.3. Will it be possible to determine the specified project GHG indicators?	01	DR	The net electricity supplied and the amount imported from the grid can be measured accurately. The emission reduction directly depends on the same.	Y	Y
B.10.4. Will the indicators enable comparison of project data and performance over time?	01	DR	The net energy supplied from the project activity and electricity imported from grid would be monitored thus can be compared in the later years.	Y	Y
B.10.5. Is the information given for each monitoring variable by the presented table sufficient to ensure the verification of a proper implementation of the monitoring plan?	01	DR	The same needs to be checked during the site visit	Site visit	Y The same is checked.
B.10.6. Is the information given for each monitoring variable by the presented table sufficient to ensure the delivery of high quality data free of potential for biases or intended or unintended changes in data records?	01	DR	To be checked during the site visit	Site visit	Y The same is checked.
B.10.7. Is the monitoring approach in line with current good practice, i.e. will it deliver data in a reliable and reasonably acceptable accuracy?	01	DR	Pending closure of CARs/CLs	Pending	Y The same is checked.
B.10.8. Are all formulae used to determine project emission clearly indicated and in compliance with the monitoring methodology.	01, 02	DR	Pending closure of CARs/CLs	Pending	Y The same is checked.

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
B.11. Quality Control (QC) and Quality Assurance (QA) Procedures					
B.11.1. Is the selection of data undergoing quality control and quality assurance procedures complete?	01,15	DR	The Quality control and Assurance procedures are required to be checked during the site visit. The ISO certificates of the EPC contractor are required to be submitted.	Pending CAR #5	Y CAR #5 closed. Certificates are submitted.
B.11.2. Is the belonging determination of uncertainty levels done correctly for each ID in a correct and reliable manner?	01	DR	To be checked during the site visit	Site visit	Y The same is checked.
B.11.3. Are quality control procedures and quality assurance procedures sufficiently described to ensure the delivery of high quality data?	01,15	DR	QA/QC procedures need to be described for all the parameters in the PDD. The same needs to cross-checked during the site visit.	Pending CAR #5	Y The same is checked. CAR #5 was closed
B.11.4. Is it ensured that data will be bound to national or internal reference standards?	01	DR	The same needs to be checked during the site visit.	Site visit	Y The same is checked.
B.11.5. Is it ensured that data provisions will be free of potential conflicts of interests resulting in a tendency of overestimating emission reductions?	01	DR	The same needs to be checked during the site visit. The calibration frequency of the meters has been mentioned as periodic, the same would be checked during the site visit.	Site visit	Y The same is checked.

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
B.12. Operational and Management Structure					
B.12.1. Is the authority and responsibility of project management clearly described?	01	DR	Management structure for the project activity has been described in the PDD. The same needs to be checked during the site visit.	Site visit	Y The same is checked.
B.12.2. Is the authority and responsibility for registration, monitoring, measurement and reporting clearly described?	01	DR	The same has been described under the section B.7.2 of the PDD; the same would be cross-checked during the site visit.	Site visit	Y The same is checked.
B.12.3. Are procedures identified for training of monitoring personnel?	01	DR	Training requirements have not been discussed in the PDD,	Y	Y
B.13. Monitoring Plan (Annex 4)					
B.13.1. Is the monitoring plan developed in a project specific manner clearly addressing the unique features of the CDM activity?	01	DR	Pending closure of CARs/CLs	Pending CARs/CLs	Y
B.13.2. Does the monitoring plan completely describes all measures to be implemented for monitoring all parameter required, including measures to be implemented for ensuring data quality?	01	DR	Pending closure of CARs/CLs	Pending CARs/CLs	Y
B.13.3. Does the monitoring plan provide information on monitoring equipment and respective positioning in order to safeguard a proper installation?	01	DR	The same needs to be checked during the site visit.	Site visit	Y The same is checked.
B.13.4. Are procedures identified for calibration of monitoring equipment?	01	DR	The PDD describe the procedures as once in a year for calibration of monitoring equipment the needs to be cross-checked during the site visit.	Site visit	Y The same is checked.

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
B.13.5. Are procedures identified for maintenance of monitoring equipment and installations?	01	DR	The same needs to be checked during the site visit.	Site visit	Y The same is checked.
B.13.6. Are procedures identified for day-to-day records handling (including what records to keep, storage area of records and how to process performance documentation)	01	DR	The operational and Management Structure has been provided, the same would be cross-checked during the site visit.	Site visit	Y The same is checked.
B.13.7. Are procedures identified for dealing with possible monitoring data adjustments and missing data allowing redundant reconstruction of data in case of monitoring problems??	01	DR	The same has not been described in the PDD. To be checked during the site visit.	Site visit	Y The same is checked.
B.13.8. Are procedures identified for internal audits of GHG project compliance with operational requirements where applicable?	01	DR	The operational and Management Structure has been provided, the same also mentions about periodic checking by the Management. The same would be cross-checked during the site visit.	Site visit	Y The same is checked.
B.13.9. Are procedures identified for project performance reviews before data is submitted for verification, internally or externally?	01	DR	The operational and Management Structure has been provided, the same would be cross-checked during the site visit.	Site visit	Y The same is checked.
B.14. Baseline Details					
B.14.1. Is there any indication of a date when determine the baseline?	01	DR	The baseline has been determined on 10/06/2008, as mentioned in the PDD.	Y	Y
B.14.2. Is this in consistency with the time line of the PDD history?	01,14	DR	The start date of the project activity is 09/01/2006 this is in time line with the project activity. The baseline has been determined on 18/02/2008 which is before PDD publication	Y	Y

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
B.14.3. Is all data required provided in a complete manner by annex 3 of the PDD?	01	DR	Pending Closure of CARs/CLs	Pending closure of CARs/CLs	Y
C. Duration of the Project / Crediting Period					
C.1.1. Are the project's starting date and operational lifetime clearly defined and reasonable?	01,14	DR	The start date of the project activity is 09/01/2006 and the operation lifetime is 20 years as described in the PDD. Evidence is required for the start date of the project activity. The initial purchase order needs to be submitted. Project participant need to mention appropriate date for start of crediting period.	Pending CAR #4	Y Evidence submitted CAR #4 closed
C.1.2. Is the assumed crediting time clearly defined and reasonable (renewable crediting period of max 7 years with potential for 2 renewals or fixed crediting period of max. 10 years)?	01	DR	The crediting period chosen is fixed crediting period.	Y	Y
C.1.3. Does the project's operational lifetime exceed the crediting period	01	DR	The operational lifetime of the project activity exceeds the crediting period.	Y	Y
D. Environmental Impacts					
D.1.1. Does the project comply with environmental legislation in the host country?	01,17,18	DR	The necessary clearances required for proposed project activity (like NOC, Electrical inspectorate certificate if applicable), analysis of environmental impact need to submit by project proponent. The same needs to be checked during the site visit.	Site Visit	Y Approvals are submitted.

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
D.1.2. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, is an EIA approved?	01	DR	Environmental Impact Assessment is not required as mentioned in the PDD, the same needs to be checked during the site visit. Evidence for the same is required.	Site Visit	Y The same is checked.
E. Stakeholder Comments					
E.1.1. Have relevant stakeholders been consulted?	01	DR, I	The PDD mentions the stakeholders as the local communities, farmers and villagers the same would be checked during the site visit. The PDD mentions that stakeholder consultation was carried out; the same needs to be cross-checked during the site visit.	Site visit	Y The same is checked.
E.1.2. Have appropriate media been used to invite comments by local stakeholders?	01,12	DR, I	The Media used to communicate the stakeholders has been in form of letters as described in the PDD. The same would be cross-checked during the site visit. Copy of the letters is submitted.	Site visit	Y The same is checked.
E.1.3. If a stakeholder consultation process is required by regulations/laws in the host country, has the stakeholder consultation process been carried out in accordance with such regulations/laws?	01,12	DR, I	Stakeholder consultation is not required by host country regulation; however the project proponent has carried the same as a part of CDM requirements. The same would be checked during the site visit. MoM for the stakeholder consultation carried out is submitted.	Site visit	Y The same is checked.
E.1.4. Is the undertaken stakeholder process described in a complete and transparent manner?	01,12	DR	MoM of the stakeholder consultation process is submitted.	Site visit	Y The same is checked.

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
E.1.5. Is a summary of the stakeholder comments received provided?	01,12	DR	The same is provided and would further be checked during the site visit.	Site visit	Y The same is checked.
E.1.6. Has due account been taken of any stakeholder comments received?	01,12	DR	The same is provided and would further be checked during the site visit.	Site visit	Y The same is checked.

References

Reference ID	Title / Description	Comments
/1/	PDD, Version 1 dated 18/02/2008	Table 2 section A, B, C, D and E
/2/	AMS I D version 13	Table 2 section B
/3/	UNFCCC website (http://cdm.unfccc.int/index.html)	Table 1, Table section B
/4/	PDD version 2	Checked for findings responses
/5/	PDD version 3 dated 20/10/2008 (submitted with request for registration)	Checked for findings and CDM guideline
/6/	Host Country Approval, reference number 4/7/2008-CCC dated 28/05/2008	Checked for project title and project participant
/7/	IRR calculation sheet for the project	Checked for financial calculation
/8/	Board note dated 15/12/2006 and 26/12/2006 for Raj group as CDM consideration proof	Checked for CDM consideration
/9/	Modalities of communication	Checked for contact information
/10/	Emission reduction calculation sheet	Checked for emission reductions
/11/	Certificate for no use of ODA for project activity by project participant	Checked for ODA involvement
/12/	MoM for stakeholder consultation process carried on 05/12/2007 in Maharashtra and invitation letter	Checked for mode of invitation and MoM for comments
/13/	Letter of undertaking for no change in technology	Checked for not to change in technology during crediting period
/14/	Purchase orders of WTG of 2 nos. of 1.25 MW in Maharashtra dated 09/01/2006	Checked for earliest real action i.e start date and technical specifications of project activity.
/15/	ISO 9001:2000 valid till 17 th September 2009 and ISO 14001:2004 valid till 13/04/2009	Checked for QA/QC procedure
/16/	PPA for WTG of 1.25 MW by Raj Infrastructure Development dated 04/09/2006 and WTG of 1.25 MW by Raj Promoters dated 11/10/2006	Checked for tariff rate and terms and condition for power sale
/17/	Commissioning certificates for WTG of 2 no. of 1.25 MW in Maharashtra commissioned on 13/08/2006 and 30/09/2006 by Raj Infrastructure and	Checked for project schedule

Reference ID	Title / Description	Comments
	Raj Promoters	
/18/	MEDA clearance for commissioning of 1.25 MW WTG of Raj Promoters dated 29/09/2006 and of 1.25 MW WTG of Raj infrastructure dated 05/08/2006,	Checked for approvals and clearances of project activity
/19/	MERC Order dated 24/11/2003	Checked for tariff rate and internal losses
/20/	Evidences for the chronology of events	Checked for delay of project activity to submit for validation.

A.3 Annex 3: Overview of Findings

Findings Overview

Findings from validation of “**2.5 MW Bundled Wind Power Project in Maharashtra (India)**”

Each Table below represents a finding from the validation assessment. The findings are numbered consecutively, approximately in the order that they have been identified and irrespective of the nature of the findings, for eg.: CAR #1, CAR #2, CL #3, FAR #4 etc.

Description of Table:

Type	Findings are either Corrective Action Requests (CARs), Clarification Requests (CLs), and Forward Action Request (FARs). A corrective action request (CAR) is raised if one of the following occurs: I. The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions; II. The CDM requirements have not been met; III. There is a risk that emission reductions cannot be monitored or calculated. A clarification request (CL) is raised if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met A forward action request (FAR) is raised during validation to highlight issues related to project implementation that require review during the first verification of the project activity. FARs shall not relate to the CDM requirements for registration.
Lead Assessor	Details the content of the finding
Comments	
Ref	Refers to the item number in the Validation Protocol
Response	Please insert response to finding, starting with the date of entry.

Please Note: This is an open list and more findings may be added as validation progresses.

Responses to each Finding and relevant associated documentation should be recorded in this form by the Client and send back to the Lead Assessor in one submission to SGS (exception of finding linked to Letter of Approval, which can be submitted separately).

SGS reserves the right to review the associated fees and timeline if:

- more than one response submission is received from the Client
- a finding (CL/CAR), raised by the Lead Assessor prior to Technical Review stage, is not closed within 30 days of notification to the Client by SGS.

Rows for comments and further response will be appended to the table until the Findings has been addressed to the satisfaction of the Lead Assessor.

Findings Overview Summary

	CARs	CLs	FARs
Total Number raised	3	2	-

Date:	13/08/2008	Raised by:	Vikrant Badve / Ramkrishna Patil		
Type:	CL	Number:	1	Reference:	A.4.2
Lead Assessor Comment:					
Applicable ownership documents or licenses which allow the implementation of the project activity at the project site need to be submitted by Project Participant. The land documents and loan documents needs to be submitted.					
Project Participant Response:				Date: 25/08/2008	
The infrastructure clearance document can serve the purpose of ownership proof regarding the implementation of the project activity at the project site, as the clearance has been given to project participant (PP) by MEDA which is nodal agency for providing such clearances. List of documents were submitted during the site visit. The land documents were already submitted during the site visit dated 16/07/2008. The original scanned loan and land documents have been submitted to DOE.					
Documentation Provided by Project Participant:					
Land document of diversion of forest land for construction of wind power project from Government of India, Ministry of Environment and Forests (MoEF), Letter no. F.No 8-92/2005/FC dated 22/04/2006. Loan sanction letter to Raj Promotors & Civil Engineers Pvt Ltd from Janaseva Sahakari Bank Ltd, Pune , dated 24/11/2006 Loan sanction letter to Raj Infrastructure Development India Pvt Ltd from Janata Sahakari Bank Ltd, Pune , dated 15/05/2006					
Information Verified by Lead Assessor:					
Land document of diversion of forest land for construction of wind power project from Government of India, Ministry of Environment and Forests has been checked. The area of transfer leased land, location of wind mill is checked Loan sanctioning of wind mills for the ownership proof is checked					
Reasoning for not Acceptance or Acceptance and Close Out:				Date: 30/08/2008	
All applicable ownership documents or licenses which allow the implementation of the project activity at the project site are submitted by Project Participant. The land documents for the transfer of forest land for construction of wind power project for the project participant is checked and loan sanction letter for each wind mill owner is checked and found to acceptable. Thus CL #1 was closed out.					
Acceptance and Close out by Lead Assessor:				Date: 30/08/2008	

Date:	13/08/2008		Raised by:	Vikrant Badve / Ramkrishna Patil	
Type:	CAR	Number:	2	Reference:	B.4.1
Lead Assessor Comment:					
Project proponent need to submit additionality arguments with appropriate evidences in reference of starting date of the project activity.					
Justification for the selected benchmark in light with para 40 of general guidance of EB 40 meeting report.					
It is not clear which benchmark is exactly applied					
Evidence for the each value used in financial calculation need to be submitted and calculation should be separate for each wind mill owner.					
The regulatory and other barrier seems to be generic in nature. Please clarify how these barriers are project specific which prevent the implementation of project activity prior to start of project activity.					
Please clarify how the operational barriers are specific to project activity.					
Evidence for seriousness of CDM consideration and justification for time gap between start of project activity and validation is needed. Please clarify in light of Annex 46 of EB 41 Report.					
Please provide the original scanned document for application for bank loan, banks reply and letter of wind mill supplier for CDM assistance.					
Project Participant Response:				Date: 25/08/2008	

The PP has selected investment Analysis to establish the additionality of the project activity. The investment analysis has been done prior to the project start date i.e. during conceptualisation of the project. The investment analysis has been corrected as per the latest version of “<i>Guidance on the Assessment of Investment Analysis – version 2</i>”. Now the benchmark has been corrected in light with para 40 of general guidance of EB 40 meeting report. The Benchmark is calculated with reference of CDM – Executive Board, Tool for demonstration and assessment of additionality Step 2 Sub step 2b – Option III (a). The benchmark IRR can be derived from “Government Bond Rates increased by a suitable market risk premium. Government Bond rates during September 2005 was around 7.30% (http://www.rbi.org.in/scripts/BS_ViewBulletin.aspx?Id=7101) for long term investments and the Market Risk Premium considered for power sector is 7.50% (http://cercind.gov.in/rep1304.pdf (2.2 a; page 29)), so we can arrive at a Benchmark IRR by adding both these which comes to 14.80%. Evidence for the each value used in financial calculation has now been updated in financial calculation and same has been submitted to DOE. Though regulatory and other barriers are generic in nature, but these barriers were played an important role in discouraging the project participant to go ahead with the project. These barriers in addition to the investment barrier were capable of non implementation of the project without CDM benefits. The evidentiary documents have been submitted to DOE. The documents demonstrating seriousness of CDM consideration and justification for time gap between start of project activity and validation has been submitted to DOE taking consideration of Annex 46 of EB 41 Report. Original scanned document for application for bank loan, banks reply and letter of wind mill supplier for CDM assistance has been submitted to DOE.	
Documentation Provided by Project Participant:	
Revised PDD version 02, Financial calculation excel sheet, Evidence for Risk premium for power sector Cost of capital for central sector utilities and Govt. Security Bond returns	
Information Verified by Lead Assessor:	
The financial calculation excel sheet checked for the sources for each value	
Reasoning for not Acceptance or Acceptance and Close Out:	Date: 30/08/2008

Risk premium for power sector and Govt. Security Bond returns were considered to arrive benchmark IRR for the project activity. However it is not clear why risk premium of power sector is considered for market risk premium. The market risk premium considered should represent the risk premium for the same type of projects in short market. Risk premium should be project specific or company (project proponent specific) if PP has any earlier investment in the similar type of projects. Pls. refer guidance on investment analysis for more details in this case. Please clarify how the selected values for market risk premium and security bond rate are specific for project activity. The evidence for market risk premium is a report for discussion purpose only and dated 13/04/2000. How such old reference can be considered on 2006 at conceptualization of project activity and considering market situation at that time. Even the market risk premium is a predicted value. It is not clear how exact 7.30 % is taken as Government security bond rates. Please clarify Please clarify the calculation of net annual generation by considering grid availability, machine availability, wind uncertainty and internal losses along with evidences. It is not clear why reduced 95% machine availability considered for generation. Please clarify how these values are conservative for financial calculation. The source is not clear for total cost of machine. Bank loan sanction letter for Raj Infrastructure Development India Pvt. Ltd. mentioned that total wind mill cost is INR 62.6 million and excel sheet has mentioned INR 62.999 million. Project participant need to submit the evidence for the total project cost, debt and equity involved in project activity with their sources from third party like Chartered Accountant. The project participant needs to submit evidence for the insurance charges. Please clarify how bank has not considered CER revenue while sanctioning the loan amount even after asking clarification about CER revenue and please submit the further correspondences for the reply of Raj infrastructure Development (India) Pvt. Ltd. dated 27/12/2005. Please clarify how loan has sanctioned by Janaseva Sahakari Bank, Janakalyan Sahakari Bank and Jalgaon Janata Sahakari bank for Raj Promoters and Civil Engineers Pvt Ltd. Thus CAR #2 is open.	
Project Participant Response:	Date: 13/09/08

CRISIL report in 2000 is the only reference of power sector available for Market Risk Premium. Link for Government Bond rates during September 2005 was around 7.30% http://www.rbi.org.in/scripts/BS_ViewBulletin.aspx?Id=7101 . We have arrived at an average rate for the last 12 months October 2004 to September 2005. As per the tool of assessment of additionality for CDM projects Step 2 : Investment Analysis, Sub Step 2 (b) (6) Government bond rates, increased by a suitable risk premium to reflect private investment and/or the project type, as substantiated by an independent (financial) expert or documented by official publicly available financial data; You can refer Market Risk premium calculated by Godrej Consumer Products Ltd. EVA page 3 table 2 http://www.godrejcp.com/investors/annualreports2005-04/eva.pdf . The method of calculating Market Risk premium is as follows:- We have to take annual return on sensdex right from its inception (1979) till the year for which you want MRP Take 10-year GOI treasury bond yield for each of these years (either average for the year or year-end or mid-year). Take the excess of sensdex return over bond yield for each year. Calculate average of these all points. This average is the MRP. The EVA for Godrej Consumer Products Ltd. is developed by Stern, Stewart and Company, an independent consultant recognized worldwide, please visit http://www.sternstewart.com. The study about Market Risk Premium was for Power Projects was published on 13th April 2000 by CRISIL page 29 which predicts the MRP for Power Projects in India at 7.50%, please refer http://cercind.gov.in/rep1304.pdf . Please also refer the 2 attached files named which will give the details for MRP. Regarding difference in the cost considered by Janata Sahakari Bank Ltd. and financials the service tax has not been considered by the bank even though the bank have stated that the value of Rs. 112.50 Lakhs is inclusive of Service Tax. Please refer the work order. A certificate from Chartered Accountant is attached. The project participant has attached the evidence for the insurance charges. The bank asked about the CERs and related revenue available to the project over a period of time and same information was provided by the PP to the bank. It is no where mentioned that the bank didn't considered CDM revenue. Though consideration of CDM revenue has not been documented by the bank in any of the loan documents, but during sanctioning of the loan, CDM revenue was seriously discussed and considered. In case of Raj Promoters & Civil Engineers Pvt. Ltd, loan from three banks were issued. Raj Promoters & Civil Engineers Pvt. Ltd. approached Janaseva Sahakari Bank Ltd., Pune for sanction of a term loan of Rs. 470 Lacs for setting up a 1.25 MW windmill at Dhulia. However Janaseva Sahakari Bank Ltd., Pune informed the company that, as per RBI norms, it can take a single party exposure of Rs. 300 Lacs & the Bank further informed that it would arrange the balance amount of loan through consortium. Accordingly Janaseva Sahakari Bank Ltd., Pune became the lead Bank & approached Janakalyan Sahakari Bank Ltd & Jalgaon Janata Sahakari Bank Ltd. for part financing the windmill. It was Janaseva Banks imitative to form a consortium & the applicant company had submitted application to the Janaseva Sahakari Bank Ltd., Pune.	
Documentation Provided by Project Participant:	
Revised PDD, Report of Stern Stewart & Co. titled "Evaluation July 2002, Stern Stewart Research India"	
Information Verified by Lead Assessor:	
Revised PDD, Market risk premium for India has checked through Report of Stern Stewart & Co. titled "Evaluation July 2002, Stern Stewart Research India"	
Reasoning for not Acceptance or Acceptance and Close Out:	Date: 19/09/2008

Market risk premium for India has checked through Report of Stern Stewart & Co titled "Evaluation July 2002, Stern Stewart Research India" The Market Risk Premium (MRP) table calculated by different methods has been checked and the conservative value is 7.3 % . It is the median value of survey report. Project participant has considered the MRP value as 7.5 % from CRISIL report in 2000. It is found that Report of Stern Stewart & Co is in July 2002 and it is latest than CRISIL report in 2000. Project participant need to consider the latest available information. Please clarify why the conservative value for MRP has not considered for calculating the benchmark. Link for Government Bond rates has been checked http://www.rbi.org.in/scripts/BS_ViewBulletin.aspx?Id=7101 . The average rate for the last 12 months October 2004 to September 2005 was around 7.30% and same is considered for calculation. Please clarify the calculation of net annual generation by considering grid availability, machine availability, wind uncertainty and internal losses along with evidences. It is not clear why reduced 95% machine availability considered for generation. Please clarify how these values are conservative for financial calculation. There is inconsistency in electricity export in financial calculation and estimation of emission reduction calculation, please clarify it. Please clarify what benchmark value is used in financial calculation, whether it is project IRR or equity IRR and why both IRRs are calculated in financial calculation. In response with bank's consideration for CDM revenue, project participant has clarified that It is no where mentioned that the bank didn't considered CDM revenue but it is no where mentioned that bank has considered CDM revenue, please clarify it with evidences. Please provide the confirmation of Janaseva bank to arrange the balance amount of loan through consortium Thus CAR #2 is open	
Project Participant Response:	Date: 01/10/2008
With regards to the market risk premium for India, the project participant has considered CRISIL report, 2000 than Stern Stewart report, 2002 because the CRISIL report is very specific to Power sector where power generation through windmill is also inclusive under power sector. The PP is also ready to consider the values mentioned in Stern Stewart report, July 2002. In the second page of the purchase order of both the machines under the sub heading Generation Guarantee, it is mentioned that any variation in the wind up to 10% of generation shall be considered in case of short fall for calculating generation guarantee. According to O&M contract (section 6.1, page 6 of 13), machine availability of 95% will be maintained and hence same has been considered. The project IRR has been considered as the benchmark values. The equity IRR was considered as the benchmark before the guidelines of the 39th Executive Board meeting came into action. The PP is ready to remove equity IRR calculation if needed. The evidential documents regarding bank's consideration for CDM revenue have been attached. The confirmation document of Janaseva bank to arrange the balance amount of loan through consortium has also been sent.	
Documentation Provided by Project Participant:	
Revised PDD, Janaseva Sahakari Bank Ltd. Pune letter no. BRD/1542/190 dated 25/09/2008	
Information Verified by Lead Assessor:	
Revised PDD and information regarding CDM consideration has been verified.	
Reasoning for not Acceptance or Acceptance and Close Out:	Date: 18/10/2008
The project participant has submitted the letter from Janaseva Sahakari Bank Ltd. Pune regarding the arrangement of Jalgaon Janata Sahakari Bank Ltd. and Jankalyan Sahakari Bank Ltd for arranging remaining 17 million INR out of total 47 million INR project cost. The Janaseva Sahakari Bank Ltd. Pune has declared that the CDM revenue has been considered for sanctioning the loan as per letter no. BRD/1542/190 dated 25/09/2008. Project participant need to submit the feasibility study conducted by Janaseva Sahakari Bank Ltd. Pune The project participant has not considered the conservative electricity generation data for the financial calculation. Please clarify whether the selected benchmark is for equity IRR or Project IRR. Project participant need to consider the latest available data for the determination of market risk premium benchmark value and at the time of conceptualization of project activity. Thus CAR #2 is open	
Project Participant Response:	Date: 24/10/2008

The required document has been submitted to the DOE in connection to the CDM consideration. The PP has now considered the electricity generation for the financial calculation as mentioned in MERC wind tariff order dated 24.11.2003- Section 2.2.2, Page 28. Please refer PDD and the Excel sheet showing updated Financial calculation. The PP has selected benchmark is equity IRR. Project participant has considered the latest available data for the determination of market risk premium benchmark value at the time of conceptualization of project activity. Please refer the Excel sheet showing updated Financial calculation.	
Documentation Provided by Project Participant:	
Revised PDD and excel spreadsheet for financial calculation	
Information Verified by Lead Assessor:	
Revised PDD and excel spreadsheet for financial calculation has been checked for the project activity	
Reasoning for not Acceptance or Acceptance and Close Out:	Date: 30/12/2008
The project participant has considered the conservative electricity generation data for the financial calculation and is accepted. Project participant has considered the market risk premium equity IRR as benchmark for the project activity and is accepted. Thus CAR #2 was closed out.	
Acceptance and Close out by Lead Assessor:	Date: 30/12/2008

Date:	13/08/2008	Raised by:	Vikrant Badve / Ramkrishna Patil		
Type:	CL	Number:	3	Reference:	B.5.1
Lead Assessor Comment:					
There is inconsistency in KWh generation and grid emission coefficients between excel sheet and PDD Version 01, Please clarify the same. Project participant need to check values for the simple OM for the recent 3 years and for BM of recent year with published CEA Baseline Database, Version 03. Project participant has considered the OM and BM values (expressed in tCO2/MWh) up to two decimal points while calculating emission factor for grid from CEA baseline database version 03. The combined margin emission factor thus calculated is 897.5 tCO2/GWh i.e. 0.8975 tCO2/MWh i.e. expressed in four decimal places. It was found that rounding off the OM and BM values at initial step of calculation is not reflecting the actual values.					
Project Participant Response:				Date: 25/08/2008	
The values were inconsistent due to typographic errors in the excel sheet showing emission reduction. The updated sheet of emission reduction has been submitted with PDD Version 2.					
Documentation Provided by Project Participant:					
Revised PDD,version 02 and excel sheet for emission reduction calculation, CO ₂ Baseline Database version 03 of Central Electricity Authority (CEA) dated 15/12/2007					
Information Verified by Lead Assessor:					
The values for OM and BM mentioned in PDD and excel sheet are checked with CEA published data.					
Reasoning for not Acceptance or Acceptance and Close Out:				Date: 30/08/2008	
The excel sheet submitted has considered the OM data with excluding imports and not including imports, please clarify. The combined emission factor mentioned in PDD (0.8975 tCO ₂ /MWh) is not consistent with excel sheet (0.8970 tCO ₂ /MWh), please clarify and exact values are not considered for the calculations. The project participant need to mention consistency in the unit of emission factor in excel sheet and in PDD. Section B.6.2 of PDD has mentioned that EF _{grid CM y} , EF _{OM y} and EF _{BM y} will be fixed through out the 10 years of crediting period and need to be monitored every year and section B.7.1 ,Data and parameters monitored includes EF _{grid CM y} and EF _{OM y} , Please correct it. Thus CL #3 is open					
Project Participant Response:				Date: 13/09/08	

The value remains the same for both exports and imports of OM data. Please refer excel sheet attached. The consistency regarding the value of combined emission factor in the PDD and excel sheet has been made. Please refer PDD and excel sheet attached. The project participant has made consistency with the unit of emission factor in excel sheet and in PDD. Necessary correction has been made regarding the Data and parameters to be monitored.	
Documentation Provided by Project Participant:	
Revised PDD , Excel Spreadsheet for emission reduction calculation	
Information Verified by Lead Assessor:	
Revised PDD , Excel Spreadsheet for emission reduction calculation	
Reasoning for not Acceptance or Acceptance and Close Out:	Date: 19/09/2008
Project participant need to consider operating margin value with including imports. The excel spreadsheet has not mentioned exact values for the same and there is inconsistency in excel sheet and revised PDD. Please clarify Step 6 in section B.6.1 has mentioned EF_{grid CM y} as 897.5 t CO₂/GWh and section B.6.3 has mentioned EF_{grid CM y} as 897 t CO₂/GWh, please maintain the consistency in terms of decimal points. Project participant need to submit the sources for wind availability and grid non availability considered in emission reduction. Table in section B.6.3 indicates salable units as 2.38 million KWh for each wind mill and total mentioned as 4.45 million KWh, Please correct it. Please clarify why this value is different in financial calculation excel sheet. Thus CL #3 is open	
Project Participant Response:	Date: 01/10/2008
Necessary corrections are made in the attached PDD and Emission reduction sheet with reference to the CL No. 03. In the second page of purchase order of both the machines under the sub heading Generation Guarantee, it is mentioned that any variation in the wind up to 10% of generation shall be considered in case of short fall for calculating generation guarantee. Similarly 95% of grid availability has been considered. Records with Suzlon suggest the same, and as example records of few months has been submitted to DOE.	
Documentation Provided by Project Participant:	
Operating Margin Data values, Emission factor value, Generation of electricity data has provided in the revised PDD, Excel spreadsheet calculation.	
Information Verified by Lead Assessor:	
Operating Margin Data values, Emission factor value, Generation of electricity data has checked	
Reasoning for not Acceptance or Acceptance and Close Out:	Date: 18/10/2008
Project participant need to use SI units for the parameters used in PDD. Please clarify why the project participant has not considered the exact values of simple operating margin values including import. Project participant has given the guaranteed generation for the proposed project activity. Please clarify why the project participant has considered the correction for the long term wind availability and grid non availability for the guaranteed generation. Thus CL #3 is open	
Project Participant Response:	Date: 24/10/2008
The PP has used SI units for the parameters used in PDD. PP has considered the exact values of simple operating margin values including import. The PP has considered only Plant Load Factor for the calculation of generation as mentioned in MERC wind tariff order dated 24.11.2003- Section 2.2.2, Page 28. Hence, no losses have been further deducted	
Documentation Provided by Project Participant:	
Revised PDD, Latest version of CEA for emission factor at the time of PDD submission	
Information Verified by Lead Assessor:	
The values of OM and BM have been checked as per latest version of CEA for emission factor at the time of PDD submission. The CEA version 03 has been checked for emission factor calculation.	
Reasoning for not Acceptance or Acceptance and Close Out:	Date: 30/12/2008

Project participant has used the correct values of OM and BM as per version 03 of CEA for the emission factor calculation. PP has considered the correct vales for OM and BM values expressed in tCO2/MWh up to three decimal points as per the latest available version of CEA at the time of PDD submission for validation. The CM EF thus calculated is 901.0 tCO2/GWh and same is acceptable. This EF was further used in estimating the emission reductions from the project activity.	
Project participant has used plant load factor for emission reduction calculation and neglected the corrections due to machine availability and grid non availability and is accepted. Thus CL #3 was closed out.	
Acceptance and Close out by Lead Assessor:	Date: 30/12/2008

Date:	13/08/2008	Raised by:	Vikrant Badve / Ramkrishna Patil		
Type:	CAR	Number:	4	Reference:	C.1.1
Lead Assessor Comment:					
Evidence is required for the start date of the project activity. The initial purchase order of Raj Infrastructure Development dated 9/01/2008 need to submit by project participant.					
Project participant need to mention appropriate date for start of crediting period.					
Project Participant Response:				Date: 25/08/2008	
The initial purchase order of Raj Infrastructure Development dated 9/01/2006 has been submitted to DOE. The starting date of the crediting period shall be 01/10/2008 or date of registration, whichever is later					
Documentation Provided by Project Participant:					
Revised PDD version 02					
Information Verified by Lead Assessor:					
The start date of crediting period is checked.					
Reasoning for not Acceptance or Acceptance and Close Out:				Date: 30/08/2008	
The project participant needs to mention appropriate date for the start date of crediting period. The start date of project activity has not mentioned in revised PDD version 02 , please clarify					
Project Participant Response:				Date: 13/09/08	
The project participant has mentioned appropriate date for the start date of crediting period. The start date of project activity has been mentioned in the attached PDD.					
Documentation Provided by Project Participant:					
Revised PDD					
Information Verified by Lead Assessor:					
Section C.2.2.1 of revised PDD has checked.					
Reasoning for not Acceptance or Acceptance and Close Out:				Date: 30/12/2008	
Project participant has mentioned the appropriate start date of crediting period and is accepted.					
Thus CAR #4 was closed out					
Acceptance and Close out by Lead Assessor:				Date: 30/12/2008	

Date:	13/08/2008	Raised by:	Vikrant Badve / Ramkrishna Patil		
Type:	CAR	Number:	5	Reference:	C.1.1
Lead Assessor Comment:					
The purchase order of wind mill of Raj Infrastructure Development is not stating the operation & maintenance contract. Please clarify who is doing operation & maintenance of wind mill. Project proponent need to mention the procedure for data monitoring, emergency preparedness, data archiving and calibration used for the project activity. It is found that one feeder consist of many wind mills and one feeder is having one main meter and one check meter.Net energy supplied is calculated from monitoring of main meter and deducting losses from individual wind mill proportionately. Project participant need to incorporate the procedure for calculation of net energy supplied by individual wind mill connected to common feeder.					

Project Participant Response:	Date: 25/08/2008
The purchase order stating operation & maintenance contract has been submitted to DOE. The WTG supplier is doing operation & maintenance. The procedure for data monitoring, emergency preparedness, data archiving and calibration used for the project activity has now been described in PDD version 02 at respective places in Section B.7. The procedure for calculation of net energy supplied by individual wind mill connected to common feeder has now been incorporated in PDD version 02 under section B.7.2.	
Documentation Provided by Project Participant:	
O/M contract for Raj Infrastructure Development India Pvt. Ltd with Suzlon Infrastructure Services Limited dated 11/02/2008. O/M contract for Raj Promoters and Civil Engineers Pvt Ltd with Suzlon Infrastructure Services Limited dated 11/02/2008. Revised PDD version 02	
Information Verified by Lead Assessor:	
The operation and maintenance contract has been checked for both wind mills. Monitoring procedure for data monitoring, emergency preparedness, data archiving and calibration has been checked in revised PDD version 02. The procedure for calculation of net electricity generation for each wind mill is described in section B.7.2 of PDD.	
Reasoning for not Acceptance or Acceptance and Close Out:	Date: 30/08/2008
The operation and maintenance contract has been checked for both wind mills and is accepted. Monitoring procedure for data monitoring, emergency preparedness, data archiving and calibration has been checked in revised PDD version 02. The procedure for calculation of net electricity generation for each wind mill is described in section B.7.2 of PDD. However the project participant need to include all parameters required for calculation of net electricity generation in monitoring plan. CAR #5 is open.	
Project Participant Response:	Date: 13/09/08
The project participant has included all parameters required for calculation of net electricity generation in monitoring plan. Please refer PDD.	
Documentation Provided by Project Participant:	
Revised PDD	
Information Verified by Lead Assessor:	
Section B.7.2 of revised PDD has checked for monitoring parameters.	
Reasoning for not Acceptance or Acceptance and Close Out:	Date: 19/09/2008
Please clarify about the panel meter calibration used for electricity generation measurement. Please clarify whether proportioning is done on the basis of net generation of MSEDCL meter or for export and import of MSEDCL meter separately. To proportionate and calculate the net electricity export to grid, following parameters need to be monitored 1. Total electricity generated from project activity 2. Total electricity generated from other wind turbines attached to common MSEDCL meter at substation 3. Electricity supplied to the grid from Suzlon wind farm from all wind turbines (including project activity) attached to the common MSEDCL meter at the substation 4. Electricity drawn from the grid by Suzlon wind farm for all wind turbines (including project activity) attached to the common MSEDCL meter at the substation 5. Electricity supplied to the grid from the project activity Electricity drawn from the grid by the project activity CAR #5 is open.	
Project Participant Response:	Date: 01/10/2008

All panel meter used for electricity generation measurement, are electronic meters and calibration is done internally by Suzlon as per their quality control policy. To proportionate and calculate the net electricity export to grid, following parameters will be monitored throughout the crediting period and same has been described in the revised PDD. 1. Total electricity generated from project activity - The source will be Invoice raised by PP to MSEDCL. 2. Total electricity generated from other wind turbines attached to common MSEDCL meter at substation - The source will be JMR of the meters, from which WTGs are connected. 3. Electricity supplied to the grid from Suzlon wind farm from all wind turbines (including project activity) attached to the common MSEDCL meter at the substation - The source will be JMR of the meters, from which WTGs are connected. 4. Electricity drawn from the grid by Suzlon wind farm for all wind turbines (including project activity) attached to the common MSEDCL meter at the substation - The source will be JMR of the meters, from which WTGs are connected. 5. Electricity supplied to the grid from the project activity - The source will be Invoice raised by PP to MSEDCL. Electricity drawn from the grid by the project activity - The source will be Invoice raised by PP to MSEDCL.	
Documentation Provided by Project Participant:	
Monitoring parameters are included in section B.7.1 of revised PDD.	
Information Verified by Lead Assessor:	
The monitoring parameters are checked in revised PDD and not found acceptable.	
Reasoning for not Acceptance or Acceptance and Close Out:	Date: 18/10/2008
The net electricity supplied by project activity is a calculated figure (by proportioning of the measured value), then please clarify how it was mentioned that data can be accurately measured for parameter in section B.7.1 of revised PDD. Please clarify which meter is used to measure the total electricity generated from project activity and how the source of data is invoice raised by project participant. It is not clear how panel meter has not considered for the measuring of generated electricity. Project participant need to mention about the calibration of panel meter. Project participant need to mention single unit for the data parameter mentioned in section B.7.2 of revised PDD. CAR #5 is open.	
Project Participant Response:	Date: 24/10/2008
The PP has mentioned in the parameter of section B.7.1 of the revised PDD that data can be calculated by proportioning of the measured value. The panel meter in the base of WTGs is used to measure the total electricity generated from the project activity. The credit reports issued by MSEDCL are used as a source of data for the total electricity generated from project activity. The technicality involved in the operation of the Panel Meter i.e. the meter that is located at the base of the WTG is mentioned below. The controller used for the WTG is SCS Controller is a micro-processor based intelligent controller which has been specially designed for control of wind turbines. It uses a Woodward Multi function Relay that has three current inputs from CT and three direct voltage inputs (690 Volts). The analog values of current / voltage is converted into digital signal internally using A/D Converters at very high sampling rate. A software program reads these values and displays instantaneous parameters such as voltage, current, power factor, kVAh, kVArh and kWh. These instantaneous values are then time integrated and displayed / stored. Woodward relay is having no display and needs special protocol to view energy readings as this relay is communicating digital signal through special communication protocol. In case of any problem related to the panel meter, the WTG will automatically get shut down and the meter will be replaced by a new meter immediately. The PP has mentioned single unit for the data parameter mentioned in section B.7.2 of revised PDD.	
Documentation Provided by Project Participant:	
Revised PDD version 03 dated 20/10/2008	
Information Verified by Lead Assessor:	

The monitoring section has been checked in revised PDD version 03 dated 20/10/2008	
Reasoning for not Acceptance or Acceptance and Close Out:	Date: 30/12/2008
The project participant has mentioned all required parameters used to calculate the net electricity supplied to grid in monitoring section B.7.1. The proportioning procedure is also mentioned in PDD. Project participant has mentioned the calibration procedure of panel meter. As this meter is controller based and gives the digital signal which is time integrated. If there is problem related to panel meter, WTG will shut down and meter will be replaced immediately. Thus panel meter accuracy is accepted. Thus CAR #5 was closed out	
Acceptance and Close out by Lead Assessor:	Date: 30/12/2008

A.4 Annex 4: Team Members Statements of Competency

Statement of Competence

Name: Vikrant Badve

SGS Affiliate: SGS India Pvt. Ltd.

Status

- Product Co-ordinator ☐
- Operations Co-ordinator ☐
- Technical Reviewer ☐
- Expert ☒

Validation

Verification

- | | | |
|-------------------------|-------------------------------------|-------------------------------------|
| - Local Assessor | ☒ | ☒ |
| - Lead Assessor | ☒ | ☒ |
| - Assessor | ☐ | ☐ |
| / Trainee Lead Assessor | | |

Scopes of Expertise

- | | |
|--|-------------------------------------|
| 1. Energy Industries (renewable / non-renewable) | ☒ |
| 2. Energy Distribution | ☒ |
| 3. Energy Demand | ☒ |
| 4. Manufacturing | ☒ |
| 5. Chemical Industry | ☐ |
| 6. Construction | ☒ |
| 7. Transport | ☐ |
| 8. Mining/Mineral Production | ☐ |
| 9. Metal Production | ☐ |
| 10. Fugitive Emissions from Fuels (solid,oil and gas) | ☐ |
| 11. Fugitive Emissions from Production and Consumption of Halocarbons and Sulphur Hexafluoride | ☐ |
| 12. Solvent Use | ☐ |
| 13. Waste Handling and Disposal | ☐ |
| 14. Afforestation and Reforestation | ☐ |
| 15. Agriculture | ☐ |

Approved Member of Staff by Siddharth Yadav Date: 09/07/2007

Statement of Competence

Name: Ramkrishna Patil

SGS Affiliate: SGS India Pvt. Ltd

Status

- Product Co-ordinator ☐
- Operations Co-ordinator ☐
- Technical Reviewer ☐
- Expert ☒

Validation

Verification

- Local Assessor ☒
- Lead Assessor ☐
- Assessor ☒
- / Trainee Lead Assessor

Scopes of Expertise

- | | | |
|--|-------------------------------------|-------------------------------------|
| 1. Energy Industries (renewable / non-renewable) | ☒ | |
| 2. Energy Distribution | ☒ | |
| 3. Energy Demand | | ☒ |
| 4. Manufacturing | ☐ | |
| 5. Chemical Industry | ☐ | |
| 6. Construction | ☐ | |
| 7. Transport | ☐ | |
| 8. Mining/Mineral Production | ☐ | |
| 9. Metal Production | ☐ | |
| 10. Fugitive Emissions from Fuels (solid,oil and gas) | ☐ | |
| 11. Fugitive Emissions from Production and Consumption of Halocarbons and Sulphur Hexafluoride | ☐ | |
| 12. Solvent Use | ☐ | |
| 13. Waste Handling and Disposal | ☐ | |
| 14. Afforestation and Reforestation | ☐ | |
| 15. Agriculture | ☐ | |

Approved Member of Staff by Shivananda Shetty

Date: 17-07-2008