VALIDATION REPORT

TAURIAN IRON & STEEL CO. PVT. LTD.

8.75 MW WIND POWER PROJECT BY TAURIAN IRON & STEEL COMPANY PRIVATE LIMITED IN DISTRICT SANGLI, MAHARASHTRA, INDIA

SGS Climate Change Programme
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Date of Issue:	**Project Number:**
23-10-2008	CDM.VAL1308
Project Title:	
8.75 MW Wind Power Project by Taurian Iron & Steel Company Private Limited in District Sangli, Maharashtra, India	
Organisation:	**Client:**
SGS United Kingdom Limited	Taurian Iron & Steel Co. Pvt. Ltd.
Publication of PDD for Stakeholders Consultation	
Commenting Period:	25/08/2007 to 23/09/2007
First PDD Version and Date:	Version 1 dated 03/05/2007
Final PDD Version and Date:	Version 5 dated 23/10/2008

Summary:

Taurian Iron & Steel Co. Pvt. Ltd. has commissioned SGS to perform the validation of the project: 8.75 MW Wind Power Project by Taurian Iron & Steel Company Private Limited in District Sangli, Maharashtra, India

Methodology used: AMS I D

Version and Date: Version 12, valid from 10th August 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 14 findings which include:

- (08) Corrective Action Requests;
- (06) New Information Requests; and

The findings have been closed out satisfactorily

– Will be recommended to the CDM Executive Board with a request for registration.

Subject:		
CDM Validation		
Validation Team:		
Vikrant Badve – Lead Assessor Jimmy Sah – Local Assessor		☒ No Distribution (without permission from the Client or responsible organisational unit)
Technical Review:	**Trainee Technical Reviewer:**	
Date: 11-08-2008 Name: Sanjeev Kumar	Name: N/A	☐ Limited Distribution
Authorised Signatory:		
Name: Siddharth Yadav Date: 23-10-2008		☐ Unrestricted Distribution

Revision Number:	**Date:**	**Number of Pages:**
0	08/08/2008	58
1	12/08/2008	58
2	23/10/2008	61

Abbreviations

CAR	Corrective Action Request
CDM	Clean Development Mechanism
CEA	Central Electricity Authority
CER	Certified Emission Reductions
CFE	Consent for Establishment
CFO	Consent For Operation
CO2	Carbon Dioxide
COP/MOP	Conference of Parties serving as the Meeting of Parties to Kyoto Protocol
CUF	Capacity Utilization Factor
DNA	Designated National Authority
DOE	Designated Operational Entity
DR	Document Review
EIA	Environment Impact Assessment
GHG	Greenhouse Gas(es)
GWh	Giga Watt Hour
I	Interview
IPCC	Intergovernmental Panel on Climate Change
ISHC	International Stakeholder Consultation
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
MT	Metric Tonne
NIR	New Information Request
NGO	Non Government Organisation
NOC	No Objection Certificate
PDD	Project Design Document
PLF	Plant Load Factor
PPA	Power Purchase Agreement
UNFCCC	United Nations Framework Convention for Climate Change
WACC	Weighted Average Cost of Capital
WTG	Wind Turbine Generators

Table of Content

Annexes:

1. Validation Opinion

SGS United Kingdom Ltd has been contracted by Taurian Iron & Steel Co. Pvt. Ltd. to perform a validation of the project: "8.75 MW Wind Power Project by Taurian Iron & Steel Company Private Limited in District Sangli, Maharashtra, 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 regional 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 12. 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 132280 tCO2e over a 10 year crediting period, averaging **13228** 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: 23rd October 2008

2. Introduction

2.1 Objective

Taurian Iron & Steel Co. Pvt. Ltd. has commissioned SGS to perform the validation of the project: 8.75 MW Wind Power Project by Taurian Iron & Steel Company Private Limited in District Sangli, 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 (WEGs) and supplying the same to the western regional grid. The project will result in replacing the same amount of electricity from western regional grid which is dominated by fossil fuel based power plants. The project activity is located at Sangli district of Maharashtra state in India. The project activity was already commissioned and working in satisfactory condition. The project activity involves installation of seven Wind Electricity Generator of 1.25 MW capacity out of which four project were commissioned on 28th March 2006 and the other three were commissioned on 31st March 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. Jimmy Sah	Local Assessor	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 11th October 2007 by the 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). New Information Request (NIR) is used when the validation team has identified a need for further clarification.

The completed validation protocol for this project is attached as Annex 2 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 **New Information Request (NIR)** 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:

I. mistakes have been made with a direct influence on project results;

II. validation protocol requirements have not been met; or

III. 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 NIR may result in a CAR. Information or clarifications provided as a result of an NIR may also lead to a CAR.

Observations 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 New Information Requests are raised in the draft validation protocol and detailed in a separate form (Annex A.2). In this form, the Project Developer is given the opportunity to "close" outstanding CARs and respond to NIRs and Observations.

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 Aug 2002. A Letter of Approval from Indian DNA was not submitted by the project proponent. CAR (01) was raised asking project proponent to submit the Letter of approval from Indian DNA. Project proponent has received the Host country approval letter for the present project activity dated 15th April 2008 issued by the Indian DNA (reference number 4/13/2007-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. CAR (01) was closed.

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

The PDD of the present project activity have been prepared in accordance with the guidelines for completing CDM-SSC-PDD version 05 and CDM-SSC-PDD template version 03.

The PDD version 1 was not as per the guidance to complete the CDM-SSC PDD as the section A.4.1.4 was exceeding one page limit, thus CAR (05) was raised. In response the project proponent corrected the section A.4.1.4 in the revised PDD, the same was checked and it was found to be described in one page only, thus CAR (05) was closed.

It was found that section C.1.1 of version 01 of the PDD indicated 27th March 2006 as project activity starting date; but evidence against the same was not provided. NIR (09) was raised asking project proponent to provide an evidence for the starting date of the project activity. In response project proponent provided a copy of the purchase order for the Turbine Generator which mentioned the date as 23rd September 2005 and same was corrected in the revised PDD. The revised PDD was checked for the same. Thus NIR (09) was closed and 23rd September 2005 was accepted as starting date for the project activity.

Operational lifetime and the technical specifications mentioned for the project activity were required to be cross-checked with the purchase orders thus NIR (06) was raised. In response the project proponent provided the Purchase order copies dated 23rd September 2005 along with the technical specifications. The technical specifications were cross-checked with the same mentioned in the PDD and were acceptable. The operation lifetime was accepted as 20 years after reviewing the technical specifications for the project activity. Thus NIR (06) was closed. NIR (07) was raised asking project proponent to provide any documentary evidence that the present project technology will not be substituted or replaced by the more efficient technologies during the crediting period. Project proponent has submitted a letter of undertaking dated 9th May 2008 mentioning that the project technology will not be substituted or replaced by more efficient technology during the crediting period. The same was discussed with the project proponent and was accepted; thus NIR (07) was closed.

Project proponent in the PDD mentioned that project activity has not received any public funding from parties listed in Annex 1. NIR (02) was raised asking the project proponent to provide any documentary evidence that ODA was not used for the project activity. The project proponent has submitted an undertaking which states that no ODA was used for the project activity; the same was also discussed with the project proponent and the investment made for the project activity was verified with the records and found acceptable, thus NIR (02) was closed.

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 regional grid and is following AMS I D. The total capacity of the project is 8.75 MW which is less than the 15 MW limit

for the small scale project activity. Thus it is eligible as a small scale project activity. The project is following AMS I D version 12 methodology and the same is applicable.

4.4 Baseline Selection and Additionality

The project has applied baseline as mentioned in the small scale methodology AMS I D version 12 valid from 10th August 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 regional 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 baseline selected for the project activity is the continuation of generation at current level of emissions from the western regional grid.

The project has adopted the Investment barrier to discuss the additionality of the present project activity. The investment barrier calculates Project IRR with and without CDM benefits for the project activity. Project proponent has also mentioned, sensitivity analysis for the project activity considering the net power generation as variable factor. In order to get all the related documents on the basis of which the project was shown additional, CAR (12) was raised.

The investment analysis described under the PDD section B.5 was discussed with the project proponent. The benchmark for the project activity has been taken as Weighted Average Cost of Capital (WACC). The WACC value comes to 14.73%. The assumptions and data involved for the calculation of WACC benchmark value were verified as follows;

1. The risk free return value has been taken from the Annual Report, Reserve Bank of India, 2004-05 for the calculations.
2. The market returns is derived from BSE – 500 Index for 5 years prior to the project activity which comes to 10.05%.
3. The equity beta value for Taurian Iron and Steel Co. has been calculated based on the asset beta value of the only listed firm during that period i.e. BF Utilities. At the time of project investment decision making BF Utilities was the only listed wind power generating company. The same was cross-checked with the link (http://www.moneycontrol.com/stocks/marketstats/sec_performance/bse/index.php?indcode=74&call_option=). Hence the asset beta for BF Utilities was derived and used for estimating the equity beta for Taurian Iron and Steel Co. The value of equity beta thus derived for Taurian Iron and Steel Co. comes to be 2.04. The IRR sheet is attached with validation report for the calculations.
4. The effective tax rate for the company was used to calculate the equity beta value.
5. The cost of equity was calculated based on the risk free return, Market return and the equity beta value available and the value for the same was estimated to be 29.18% the financial calculations were checked and are acceptable.
6. The cost of debt was calculated to be 8.33% which was derived on the values of the interest rate for the project activity and the Tax rate applicable.

Thus the calculations for benchmark determinations were accepted and found inline with the EB guidelines.

The project proponent has mentioned the Project IRR for the project activity both with and without CDM benefits which stands to be 12.15% without CDM benefits and 13.68% with CDM benefits. The calculation and assumptions were provided in the excel sheet which were checked and found acceptable. The PLF value referred as 20% in the electricity generation from the project activity; which was referred from section 2.2.2.B on page 32 of 176 of MERC order (http://www.mercindia.org.in/pdf/Detail_Wind_Energy_Order.pdf) dated 24/11/2003 and cross-checked with PPA signed on 24/04/2006 under Exhibit C for the project activity. Thus PLF (also known as CUF) of 20% for the project activity was accepted. Project proponent has also provided a copy of purchase order for the project activity as evidence against the project cost and capacity which was used in financial analysis sheet. 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 baseline emission factor used by the project proponent for the calculation revenue from CDM was based on the value provided by Senergy Global Private Limited, the consultants for the project activity. The value has been referred from the project UN No. 0237, for which the consultants were Senergy Global Private Limited and the baseline was completed in August 2005, the value used is 0.8613 (tCO2/MWh). This was checked with the project webpage for UN 0237 from UNFCCC website and found accepted.

The sensitivity analysis for the project activity has been carried out for the project activity with change in generation for 5% and 10%. The sensitivity analysis result indicate with increase in 5% and 10% generation the IRR values would increase to 14.61% and 15.46% respectively without CDM funds while with CDM funds the IRR values would be 16.21% and 17.11% respectively. The calculations for the same was checked and found acceptable. The range of 10% in sensitivity analysis calculation was accepted as the increase in PLF by 10% results PLF value to be 22% which is not a true representation of the PLF for the project activity; which was checked from the performance records of the wind turbines during period from commissioning in year 2006 to March 2008. The generation details mentioned in performance report for the wind turbine which was prepared by Suzlon with the monthly invoices for electricity generation and found accepted.

Based on the above discussion it can be concluded that the project activity without CDM funds was not a financially viable alternative as the financial returns from the project are not crossing the referred benchmark for the investment without CDM funds. Thus the project can be termed as additional and hence CAR (12) was closed.

The project activity start date is 23/09/2005 which is the date mentioned on the purchase order for the project activity. The project proponent provided extract of the Board meeting dated 09/09/2005 as an evidence for CDM consideration; the extract mentions that the board has considered revenue from sale of carbon credit when decided to go ahead with the investment in wind mills. Project proponent also provided the hard copy of communication between project technology supplier i.e. Suzlon and project proponent regarding the facility of carbon credits for the project activity. The communication also mentioned that Suzlon would inform project proponent regarding the consultant giving services for helping to get this credits for the project activity. Original copy of the said communication dated 05/09/2005 and 07/09/2005 was checked in this regard and found acceptable. The following table mentions the chronology of the events for the project activity case

Date	Description
01/09/2005	Offer letter for wind mill installation was sent to the Project proponent by Suzlon Energy which mention availability of CDM benifts for wind projects
05/09/2005	A letter for clarification regarding availing CDM benefits for the proposed wind mill installation was sent to Suzlon Energy by Taurian Iron and Steel Pvt. Ltd depicting their seriousness
07/09/2005	A reply from Suzlon Energy was sent to Taurian Iron and Steel Pvt. Ltd confirming the eligibility of renewable energy projects to avail CDM benefits.
09/09/2005	A board meeting by Taurian Iron and Steel Pvt. Ltd was conducted to discuss risk and CDM benefits from the proposed wind Project.
23/09/2005	Taurian Iron and Steel Pvt. Ltd and Suzlon energy got into an agreement and signed the purchase order.
28/03/2006	Out of 7 turbines, 4 got commissioned on 25.03.2006 and the rest 3 got commissioned on 28.03.2006.
27/01/2007	Side by side the project proponent got in touch with Suzlon Energy for helping them in finding an appropriate CDM consultant. Project proponent got in touch with Senergy Global to provide CDM consultancy for their project in May 2006. After series of negotiation and communication between Project proponent and Senergy Global got into an agreement.
03/05/2007	The first version of PDD was prepared
18/06/2007	The PDD was submitted for Host country approval. A communication was checked and accepted.
14/08/2007	The investor signed the agreement with the DOE.

Thus it can be concluded that CDM funds was seriously considered before going ahead with the project activity.

The PDD version 01 was not clear for the project boundary, the project boundary is described as regional grid, but the same does not describe the metering points, thus CAR (13) was raised and clarification was sought for the same. In response the project proponent revised the PDD incorporating the details for metering points, the same was checked and found acceptable, thus CAR (13) was closed.

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 12 dated valid from 10th August 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 8.75 MW capacity and supplies electricity generated to the western regional grid, thus satisfying the condition for the baseline methodology.

The baseline emission factor used for calculation of emission reductions has been referred from the CEA version 3 data. The weighted average emission rate for the western regional 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) thus the same was acceptable. The emission factor will be monitored ex-post for the project activity.

Project proponent has not provided excel spreadsheet for calculation of project emissions for the project activity and the start date of the crediting period mentioned is not realistic thus CAR (10) was raised and project proponent was asked to provide the excel spreadsheet for the same and clarify regarding the start date. In response the project proponent submitted the excel spreadsheet giving Emission reduction calculations. The calculations were checked for the values described such as the total generation and the emission factor and assumptions used and the same were found acceptable. The start date of the crediting period was corrected to "01/10/2008 or the date of registration of the project activity whichever is later" the same was discussed with the project proponent and found acceptable, thus CAR (10) was closed.

The baseline emission calculations and emission reductions were found to be in order during the desk review and during the local assessments at the site. The emission reduction figures would further be checked during verification. As per methodology AMS I-D version 12 valid from 10th August 2007; leakage due to project activity will be consider only when there is an equipment transfer from one place to another but this is not the case with present project activity as the turbine generators were newly installed hence no leakage was considered.

4.6 Application of Monitoring Methodology and Monitoring Plan

The present CDM project activity uses monitoring methodology AMS I-D version 12 valid from 10th August 2007 for "Grid connected Renewable Electricity generation". The PDD clearly mentions that leakage is not consider in present project activity as methodology AMS I-D version 12 mentions leakage due to project activity will be consider only when there is an equipment transfer from one place to another but this is not the case with present project activity hence no leakage was considered. This was acceptable.

During the review of version 1 of the PDD it was found that project proponent has not mentioned about how the data will be archived and in which form. CAR (14) was raised asking the project proponent to clarify the same. In response the project proponent included the archiving of data under section B.7.1 mentioning that the archiving of data would be for two years after the end of crediting period while the data will be stored in hard copies as well as electronically. This was accepted and the corrections made were cross checked with the rephrased version of the PDD and found acceptable, hence CAR (14) was closed.

NIR (08) was raised and project proponent was asked to discuss if any initial training was provided to the staff for the project activity. In response 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 data monitoring, recording and archiving and also for providing training to its employees. 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 thus NIR (08) was closed.

4.7 Choice of the Crediting Period

The project proponent is claiming credits from 1st October 2008 or from date of registration whichever is later. The present project activity has chosen Ten years fixed crediting period.

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. 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/divisions/iass/eia/Annex1.htm.

NIR (11) was raised and the project participant asked to submit the necessary consents and approvals for the project activity. In response the project proponent submitted the NOC received from the MSEB and the commissioning certificates for the project activity. The commissioning certificate for the project activity was checked and it mentions the commissioning date as 28/03/2006 for 4 machines and 31/03/2008 for the other 3 machines the same was acceptable, thus NIR (11) was closed.

4.9 Local Stakeholder Comments

The project activity involves setting up of 8.75 MW wind power project for electricity generation, which is being fed to the western regional grid. The project proponent identified local villagers, and the government institutions like MSEDCL and MEDA as local stakeholders for the project activity. The PDD version 1 has mentioned that local stakeholder consultation was carried out but the media used to communicate the local stakeholders was not described thus CAR (03) was raised asking project proponent to clarify the same. In response the project proponent clarified that a public notice dated was put up at the Suzlon office and at the village school which mentions about the meeting to be carried out on 10/04/2006 for stakeholder consultation. A copy of the same 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, thus CAR (03) was closed.

The PDD version 01 mentioned the summary of stakeholders comments thus CAR (04) was raised asking the project proponent to provide the MoM of stakeholder consultation process. In response to CAR (04) project proponent provided the MoM of stakeholder consultation process. The same was checked and discussed with stakeholders during the site visit and found acceptable, thus CAR (04) was closed.

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 SGS website http://www.sgsqualitynetwork.com/tradeassurance/ccp/projects/project.php?id=329 which was linked with http://cdm.unfccc.int/Projects/Validation/DB/DDSMNS1KV7BBM9B9QSW65EX881HTRE/view.html and was open for comments from 25-08-2007 until 23-09-2007. International stakeholder comments were invited through the same web page.

5.2 Compilation of all Comments Received

Comment Number	Date Received	Submitter	Comment
01	23/09/2007	Naveen Sharma	Page 16 Investment Barrier: The PP / consultant has mentioned investment barrier; to start with since there are few subheads under investment barrier, it would have been better if the investment analysis is carried out with its clear comparison with the benchmark set out by the state electricity regulatory commission in the tariff order of year 2003 for all group 3 installations. The consultant is harping upon higher capital investment for the subject project without considering the following important information associated with the project - No fuel cost, not even royalty (which is payable in the form of water royalty for hydro projects) thus practically speaking the net exported electricity forms the basis of revenue stream - Preferential tariff of INR 3.50/kWh with annual escalation of INR 0.15/kWh. - A long term firm power purchase agreement of 13 years from the date of implementation of project. - State electricity utility to purchase electricity from renewable energy sources under the present renewable purchase obligation (RPO). Also please refer to the MERC tariff order of 2003 (Annexure to the main order), where the state electricity utility (MSEB) has submitted the actual generation of data for the district of Sangli (where the subject project has been carried out) for both previous installations and new installations. The tables from the MSEB submissions are copied below: (Actual generation of year 2000 – 01) Actual generation of 2002 -03

Comment Number	Date Received	Submitter	Comment
			The last columns are depicting PLF of the projects. It would be worthy to note that only 1 project in each group is operating at a PLF of less than 20%. Thus for this project it's advisable to carry out the financial analysis with sensitivity analysis up to 35.99% PLF, and probability analysis of project for performance beyond 20% PLF. Last and most important the argument of conventional plant as an alternative to this project: - A conventional plant would not be eligible for 80% accelerated depreciation (the DOE may check / reconfirm) - As per the submissions of consultant a conventional plant will have a PLF of 80%, thus the required equivalent capacity would be 25% of this project (which operates at 20% PLF) which means an installed capacity of about 2.20 MW. The DOW will agree that for 2.2 MW installed capacity the available option would be diesel / naptha as there is no possibility of having access to gas at the time of placing purchase orders for wind project with manufacturer. To my information the cost of generation from naptha / diesel / furnace oil will be close of INR 6.00 / kWh which is higher than the cost of production through wind (DOE may please ask the consultant to calculate levellized cost of generation) and thus wind becomes the most profitable option for this project and hence becomes the part of baseline. The DOE may take a decision beyond this stage.
02	23/09/2007	Naveen Sharma	Availability Based Tariff: The existing PPA between the PP and state electricity utility is firm for 13 years with annual escalation. DOE may please suggest if the arguments / submission of consultant have any meaning over here? Also the DOE may please take a look at the present Renewable Purchase Obligation as well as electricity deficit in the state of Maharashtra.
03	23/09/2007	Naveen Sharma	ICRA / CRISIL Rating: The consultant seems to have used the crisil report as per his own convenience. The DOE may confirm the following facts: - In various previous projects from Maharashtra, it has been stated that the state electricity utility (MSEB) delays the payments by 90 days from the date of invoicing; thus the PP could have used additional working capital requirement in the financial analysis for this project to take care of the delay of 90 days. - Two reports have been referred, but the table of only 1 report is reproduced; DOE may please note that in the 2nd report the status of state electricity utility has improved significantly. It is also confirmed that the Dabhol station has started operating in the state (was closed earlier) and the state government is making timely payments to them.

Comment Number	Date Received	Submitter	Comment
			- The consultant / PP has clean forgot the alternate option of selling the electricity to private utility in the state (Reliance) which is also bound to procure power from renewable sources of energy under the present RPO. In case they think that the MSEB (state utility) is not making payments, they can always move out. - In addition to this, not only Relinace (which is a electricity utility company); the state electricity regulatory commission of Maharashtra permits a 3rd party sale in the state. The argument is thus totally baseless.
04	23/09/2007	Naveen Sharma	Operational Risk Right of Way The details furnished clearly indicate that the project has serious stakeholder consultation issue. I urge the DOE to please check if a proper news paper advertisement was given in the local news papers of the Sangli disctrict or regional news papers of Maharashtra and the details of stakeholder meeting beyond this news paper advertisement. Also the people present in the meeting from all 4 villages where installations have been carried out. This kind of behaviour from the local population can be only observed if stakeholders are not taken into confidence and the so called NOC has been obtained by the head of village governing councils through some relationship? The project thus therefore does not completes the stakeholder consultation requirements as set out by the UNFCCC CDM EB.
05	23/09/2007	Naveen Sharma	Grid related problem: A total absurd argument of the consultant. Just a simple comment – was this disturbance had an impact only on wind power projects? and how many times this has happened in past?
06	23/09/2007	Naveen Sharma	Regulatory Barrier: I think, the consultant is a day dreamer. The DOE may please check the following: - Duration of PPA in all 8 states with wind potential in India and the answer will come on its own and if in other states wind projects are happening then why in this world there is a need to point fingers on Maharashtra which is paying the highest tariff in India. The consultant is talking about the behaviour of independent power producers. The opportunity available to the PP was of 2.2 MW (looking at the argument made on page 16 for equivalent power production) – Can the consultant elaborate on the details of IPPs in the state for investment in 2.2 MW capacity using conventional fuel for sale to EB.
07	23/09/2007	Naveen	CDM benefit sharing with the utility:

Comment Number	Date Received	Submitter	Comment
		Sharma	There have been many registered projects in the state till date; the DOE may please check if any revisions in the PPA are being carried out for them? Also the MERC notice (which is referred in the arguments is dated 12 Dec 2005). The notice clearly states - It will be applicable if the project is registered as a CDM project - The sharing with be on equitable basis (i.e. 50:50) The consultant may please explain the facts which he could not understand from the notification? The revision in tariff in the MERC notification has been talked so that the flow of money should not be bi-directional that PP pays to state utility (for CDM revenue sharing) and the state utility pays to PP (for payment against procurement of electricity) instead the procurement tariff will be adjusted equivalent to 50% of CDM revenue. Above all, to reiterate, state government has still not asked for any sharing to the already registered projects in the state.
08	23/09/2007	Naveen Sharma	Section E of the PDD I urge the DOE to please take a look at the NOC and the stakeholder issues to this project (as stated in the PDD). The DOE may take a decision accordingly.

5.3 Explanation of How Comments Have Been Taken into Account

Date:	23/09/2007	Raised by:	Naveen Sharma

Page 16

Investment Barrier:

The PP / consultant has mentioned investment barrier; to start with since there are few subheads under investment barrier, it would have been better if the investment analysis is carried out with its clear comparison with the benchmark set out by the state electricity regulatory commission in the tariff order of year 2003 for all group 3 installations.

The consultant is harping upon higher capital investment for the subject project without considering the following important information associated with the project

- No fuel cost, not even royalty (which is payable in the form of water royalty for hydro projects) thus practically speaking the net exported electricity forms the basis of revenue stream
- Preferential tariff of INR 3.50/kWh with annual escalation of INR 0.15/kWh.
- A long term firm power purchase agreement of 13 years from the date of implementation of project.
- State electricity utility to purchase electricity from renewable energy sources under the present renewable purchase obligation (RPO).

Also please refer to the MERC tariff order of 2003 (Annexure to the main order), where the state electricity utility (MSEB) has submitted the actual generation of data for the district of Sangli (where the subject project has been carried out) for both previous installations and new installations. The tables from the MSEB submissions are copied below: (Actual generation of year 2000 – 01)

Actual generation of 2002 -03

The last columns are depicting PLF of the projects. It would be worthy to note that only 1 project in each group is operating at a PLF of less than 20%.

Thus for this project it's advisable to carry out the financial analysis with sensitivity analysis up to 35.99% PLF, and probability analysis of project for performance beyond 20% PLF.

Last and most important the argument of conventional plant as an alternative to this project:

- A conventional plant would not be eligible for 80% accelerated depreciation (the DOE may check / reconfirm)
- As per the submissions of consultant a conventional plant will have a PLF of 80%, thus the required equivalent capacity would be 25% of this project (which operates at 20% PLF) which means an installed capacity of about 2.20 MW. The DOW will agree that for 2.2 MW installed capacity the available option would be diesel / naptha as there is no possibility of having access to gas at the time of placing purchase orders for wind project with manufacturer. To my information the cost of generation from naptha / diesel / furnace oil will be close of INR 6.00 / kWh which is higher than the cost of production through wind (DOE may please ask the consultant to calculate levellized cost of generation) and thus wind becomes the most profitable option for this project and hence becomes the part of baseline. The DOE may take a decision beyond this stage.

Project Participant Response:	Date: 24/07/2008

Taking into account all the above said information and data, investment analysis is done using project IRR considering Weighted Average Cost of Capital (WACC) as the Benchmark. The project return is far below the benchmark considered (WACC) i.e 15.63%. The project IRR obtained for the project activity without CDM benefits is 13.74% thus even considering the entire above parameters project is not financially viable. Maharashtra Electricity Regulatory Commission assessed that the CUF for the Group-III WTGs that are commissioned after 31st March 2003 could be 20% and the same was being used for the tariff determination. Project Proponent has utilized the same data for the conservative estimation of electricity generation from their windmill installations. The actual CUF realized by the project activity is around 16% which is far below the anticipated generation. The sensitivity analysis was carried out taking 5% variation in wind power generation starting from year 1995 till 2005 as given in Indian wind power directory-2006. The location selected is a wind monitoring station named Gudepanchgani in Sangli district, Maharashtra for which micro survey has been done. The analysis shows that even after 5% increase in wind power generation the equity IRR for the project remains below the benchmark.

Acceptance and Close out by Lead Assessor:	Date: 25/07/2008
Information Provided: The financial calculations, CER estimation sheet, MERC order Information Verified: The financial calculations were checked and the data and assumptions were cross-checked with the references and found acceptable. The same is also described under the section B.5 of the revised PDD and is acceptable.	Verified Document Reference: The financial calculations, CER estimation sheet, MERC order
Reasoning for not acceptance or acceptance and close out: The financial calculations were checked and the data and assumptions were cross-checked with the references and found acceptable. The same is also described under the section B.5 of the revised PDD and is acceptable.	

Date:	23/09/2007	Raised by:	Naveen Sharma
Availability Based Tariff: The existing PPA between the PP and state electricity utility is firm for 13 years with annual escalation. DOE may please suggest if the arguments / submission of consultant have any meaning over here? Also the DOE may please take a look at the present Renewable Purchase Obligation as well as electricity deficit in the state of Maharashtra.			
Project Participant Response:		Date: 24/07/2008	
The above argument is for the uncertain tariff rate that would come in picture after the life time of PPA expires i.e after 13 years. If ABT comes in force then the feed-in-tariffs may be replaced by the Availability Based Tariff (ABT) in which the generators with firm delivery of power against commitment will start getting more prices for the generated power, whereas wind power producers cannot guarantee supply of electricity and will be thus receive lower rates. Introducing the ABT to Maharashtra for investors in renewable energy occurs as a new barrier as wind energy cannot provide certainties of delivery concerning intra-day power transfers the MSEB has to buy energy from certain energy sources which are thermal power plants. As per the ATB the MSEB buys this safe energy for Rs. 5.70 per kWh whereas the price for wind energy is Rs. 3.50 per kWh. Therefore even at lower prices the investor relies on the risk of not selling his energy. Thus uncertainty in tariff rate exists if ABT comes in force in the state and thus would prove to be additional for wind projects.			
Acceptance and Close out by Lead Assessor:		Date: 25/07/2008	

Information Provided: PPA for the project activity. Information Verified: The PPA signed for the project activity is for 13 years, thus the explanation provided by the project proponent is acceptable.	Verified Document Reference: PPA for the project activity.
Reasoning for not acceptance or acceptance and close out: The PPA signed for the project activity is for 13 years, thus the explanation provided by the project proponent is acceptable. The comment is closed.	

Date:	23/09/2007	Raised by:	Naveen Sharma
ICRA / CRISIL Rating: The consultant seems to have used the crisil report as per his own convenience. The DOE may confirm the following facts: - In various previous projects from Maharashtra, it has been stated that the state electricity utility (MSEB) delays the payments by 90 days from the date of invoicing; thus the PP could have used additional working capital requirement in the financial analysis for this project to take care of the delay of 90 days. - Two reports have been referred, but the table of only 1 report is reproduced; DOE may please note that in the 2nd report the status of state electricity utility has improved significantly. It is also confirmed that the Dabhol station has started operating in the state (was closed earlier) and the state government is making timely payments to them. - The consultant / PP has clean forgot the alternate option of selling the electricity to private utility in the state (Reliance) which is also bound to procure power from renewable sources of energy under the present RPO. In case they think that the MSEB (state utility) is not making payments, they can always move out. - In addition to this, not only Relinace (which is a electricity utility company); the state electricity regulatory commission of Maharashtra permits a 3rd party sale in the state. The argument is thus totally baseless.			
Project Participant Response:		Date: 24/07/2008	

It is clearly mentioned in the PDD that when the commissioning of the project took place there was only data of 2004 available and therefore the data of first report is considered. The initial report, which was finalized based primarily on the information available / made available till August 2002, was released in January 2003. In fact the current third review of the report, which is based primarily on the data obtained till December 2005, has been released in June 2006. Nevertheless, when the commissioning of the project took place there was only data of 2004 available and therefore this data is mentioned in the PDD. Second report based on review of data obtained till December 2005, has been released in June 2006 which is after the commissioning of the turbines which states the improved position of Maharasthra, but as the report was published after the commissioning of the turbines the report does not effect the decision of the PP as it was already made. In the public comment the 8.75 MW wind project is compared with Dabhol station which is a gas based station and in any ways cannot be compared with an 8.75 MW wind project. Beside this the chances of complete loss of revenue for such investments, was the example of failure of Dabhol power plant (now funcitional) which depicts the unpredictability the private investors could face concerning investments in the Maharashtra power sector and non healthy state government policies which develops doubt within the private investors in the state. In the Dabhol case in 1992 the Indian Government invited private investors – one well known participant is ENRON - to contribute in building a large power plant in Maharashtra. One year later the MSEB signed a power purchase agreement with the new founded ENRON-controlled Dabhol power corporation (DPC). However, in 1995 after the state elections the new government abandoned the project due to alleged corruption and high costs. Renegotiations of the project resulted in a better position for the MSEB. When the first phase of the project started its operation in 1999, Maharashtra government allies tried to cancel the project as the power prices were too high for their estimation, moreover they stopped their payments to DPC. The conflict continued and in 2001 the board of DPC decided to authorize the management to terminate the contract any time it chooses. In fact Enron being not famous for financial integrity this case although shows the unpredictability private investors could face concerning investments in the Maharashtra power sector. Also the ICRA/CRISIL rating was taken to show case the status of the power sector in all and is not project specific as such and thus has been removed from the PDD.		
Acceptance and Close out by Lead Assessor:	Date: 25/07/2008	
Information Provided: Information Verified: The same was discussed with the project proponent and found acceptable.		Verified Document Reference:
Reasoning for not acceptance or acceptance and close out: The explanation provided is self explanatory. Comment is closed.		

Date:	23/09/2007	Raised by:	Naveen Sharma
Operational Risk Right of Way The details furnished clearly indicate that the project has serious stakeholder consultation issue. I urge the DOE to please check if a proper news paper advertisement was given in the local news papers of the Sangli disctrict or regional news papers of Maharashtra and the details of stakeholder meeting beyond this news paper advertisement. Also the people present in the meeting from all 4 villages where installations have been carried out. This kind of behaviour from the local population can be only observed if stakeholders are not taken into confidence and the so called NOC has been obtained by the head of village governing councils through some relationship? The project thus therefore does not completes the stakeholder consultation requirements as set out by the UNFCCC CDM EB.			
Project Participant Response:		Date: 24/07/2008	

Stakeholder consultation was carried out by Suzlon when the land was bought from the villagers for wind turbine installation. Villagers were prior informed about the meeting by putting up public notice in village school notice board and Gram Panchayat notice board by the project proponent. Proper stakeholder consultation was carried out with villagers from all the four villages. They were informed about the project .The minutes of the meeting for stakeholder consultation are also available to further assure that consultation was carried out. Only after consent received from villagers the project was carried out.

Acceptance and Close out by Lead Assessor:	Date: 25/07/2008
Information Provided: Information Verified: The same was checked and discussed with the local stakeholders during the site visit and found acceptable.	Verified Document Reference:
Reasoning for not acceptance or acceptance and close out: The notice and Mom of stakeholder consultation has been provided the same was checked and cross-checked during discussions with the local stakeholders during the site visit and found acceptable.	

Date:	23/09/2007	Raised by:	Naveen Sharma
Grid related problem: A total absurd argument of the consultant. Just a simple comment – was this disturbance had an impact only on wind power projects? and how many times this has happened in past?			
Project Participant Response:		Date: 24/07/2008	

Wind energy being an infrequent source of electricity generation can not be considered to serve base load to the grid. If ever demand for electricity in the state reduces then it's the wind energy which is shut down at first. If there is any mismatch in frequency or any other reason which causes Grid imbalance, the first option to cut of from Grid is the wind Farm. The reason for the same is:

1. Restarting of Thermal Power Plant is a very tedious process as well as time taking and also involves lot of money.
2. Restarting of Hydro Power is also difficult.
3. There is no question of shutting down any Nuclear Power Plant.

That makes Wind Farm to be the easiest option and also restarting of WTG is the easiest and thus such grid disturbances have an impact on wind power projects the most.
Such case has happened in Tamil Nadu in the past for which the news article is attached herein, such incidence can happen in any state

Home

News Update

News

Front Page

Corporate

Markets

Industry & Economy - Non-conventional Energy
States - Tamil Nadu

THE HINDU Business Line

TN windmills asked to back down turbines

Financial Daily from THE HINDU group of publications
Wednesday, May 31, 2006

Our Bureau

Info-Tech
Marketing
Money & Banking
Agri-Biz & Commodities
Industry & Economy
Logistics
Government
Opinion
Variety
Corporate Results
Columns
States
Index
Archives
Features
Investment World
eWorld
Brand Line
Mentor
Life
Canvas
Praxis

Peak generation from thermal stations leading to high frequency in grid

The May-September period is most conducive for generating wind power because wind speeds touch 11 to 20 m a second.

Chennai, May 30
Wind power generators in Tamil Nadu feeding power to the State grid are facing problems once again, with the Tamil Nadu Electricity Board asking them to back down the turbines. This move has come at a time when the wind speed is at its highest in the State, according to sources in the wind power industry.

The sources say that the electricity board has resorted to this move because of peak generation from thermal stations, resulting in high frequency in the grid. The wind power industry faced a similar problem last year too during the peak season when the Tamil Nadu Electricity Board asked them to back down their machines due to evacuation problems.

Tamil Nadu has an installed capacity of 2,930 MW of wind power, of which 65 per cent is used for captive consumption and the remaining is sold to the State grid. According to the sources, the May-September period is most conducive for generating wind power because wind speeds touch 11 to 20 m a second.
Last year, the windmill owners represented to the TNEB after the severe evacuation problem they faced. The electricity board promised to improve evacuation infrastructure and also permit new sub stations.
In the last three to four days, according to the sources, TNEB has asked wind power generators to shut down their turbines for periods ranging from nine hours to 20 hours a day. The Tirunelveli region and Coimbatore district are major wind energy producing centres in Tamil Nadu.
This move comes even as the Tamil Nadu Electricity Regulatory Commission had reiterated, in a recent order, that wind power (along with other infirm power or non-conventional energy) would come under the "must run" category and would be outside the purview of merit order despatch.
Wind energy representatives felt that the TNEB could back down its thermal stations during this period as they are assured of good quality power from the windmills in the State. The TNEB could also sell this power to power-deficit States such as Andhra Pradesh and Maharashtra.
According to sources in the know, the TNEB asked the wind power generators to shut down their turbines when the frequency exceeded 50 cycles due to an overall increase in generation.

Urban Pulse Brand Quest The New Manager	The Indian Wind Power Association, a representative body of those who have invested in wind power and turbine manufacturers, has asked the State Government and the TNEB to ensure that the wind turbines operated at their maximum capacity now. This would not only provide green power to the State and help it conserve coal (if thermal stations are backed down), but also help those who have invested in wind power to repay their bank loans.

As the above argument does not effect the project directly and is not specific to this project, thus the argument has been removed from the PDD.

[Response from project developer]

Acceptance and Close out by Lead Assessor:	Date: 25/07/2008
Information Provided: Information Verified: The same was discussed with the project proponent and it was observed that the problem is generic and not specific to the project activity thus was removed from the PDD.	Verified Document Reference:
Reasoning for not acceptance or acceptance and close out: The same was discussed with the project proponent and it was observed that the problem is generic and not specific to the project activity thus was removed from the PDD. Comment is closed.	

Date:	23/09/2007	Raised by:	Naveen Sharma

Regulatory Barrier:
I think, the consultant is a day dreamer. The DOE may please check the following:

- Duration of PPA in all 8 states with wind potential in India and the answer will come on its own and if in other states wind projects are happening then why in this world there is a need to point fingers on Maharashtra which is paying the highest tariff in India.

The consultant is talking about the behaviour of independent power producers. The opportunity available to the PP was of 2.2 MW (looking at the argument made on page 16 for equivalent power production) – Can the consultant elaborate on the details of IPPs in the state for investment in 2.2 MW capacity using conventional fuel for sale to EB.

Project Participant Response:	Date: 24/07/2008

The PPA agreement duration for other states with wind potential is as given below:
Gujarat: 10 years
Rajasthan: 20 years
Maharashtra: 13 years
Tamil Nadu: 20 years
Karnataka: 20 years
It is clearly visible that the PPA agreement is different and Maharahtra has one of the lowest PPA duration and thus act as a barrier for the projects in Maharashtra.

As the DOE would also agree investment into a 2.2 MW thermal power plant will not be feasible to any investor and is not to be considered as it is not a valid point. The barrier not being a strong barrier has been removed from the PDD.

Acceptance and Close out by Lead Assessor:	Date: 25/07/2008

Information Provided: Information Verified: The same was discussed with the project proponent and is acceptable.	Verified Document Reference:
Reasoning for not acceptance or acceptance and close out: The same was discussed with the project proponent and is acceptable. Comment is closed.	

Date:	23/09/2007	Raised by:	Naveen Sharma

CDM benefit sharing with the utility:

There have been many registered projects in the state till date; the DOE may please check if any revisions in the PPA are being carried out for them?

Also the MERC notice (which is referred in the arguments is dated 12 Dec 2005). The notice clearly states

- It will be applicable if the project is registered as a CDM project
- The sharing with be on equitable basis (i.e. 50:50)

The consultant may please explain the facts which he could not understand from the notification?

The revision in tariff in the MERC notification has been talked so that the flow of money should not be bi-directional that PP pays to state utility (for CDM revenue sharing) and the state utility pays to PP (for payment against procurement of electricity) instead the procurement tariff will be adjusted equivalent to 50% of CDM revenue.

Above all, to reiterate, state government has still not asked for any sharing to the already registered projects in the state.

Project Participant Response:	Date: 24/07/2008

The argument that till now CDM sharing has not been done for registered projects doesn't mean that in future it can not be applied. As it is clearly written in the PPA, the chances for it to come in application can not be ignored even if there are no past records of it happening.

Regarding MERC order referred in the PDD, it is understood that CDM sharing will be done only once project is registered but equitable basis does not mean it has to be at 50: 50 basis. The uncertainty of the CDM share between PP and MSEDCL is not yet clear and ones the project is registered as a CDM project the tariff for the project would be reviewed. Thus, uncertainty also lies in the tariff rate which would be applicable to the entire project and thus is additional to the project.

Acceptance and Close out by Lead Assessor:	Date: 25/07/2008
Information Provided: Information Verified: The explanation provided was discussed with the project proponent and is acceptable.	Verified Document Reference:
Reasoning for not acceptance or acceptance and close out: The explanation provided was discussed with the project proponent and is acceptable. Comment is closed.	

Date:	23/09/2007	Raised by:	Naveen Sharma

Section E of the PDD I urge the DOE to please take a look at the NOC and the stakeholder issues to this project (as stated in the PDD). The DOE may take a decision accordingly.		
Project Participant Response:	Date: 24/07/2008	
The required documents are made available to DOE and also during validation site visit the following issues were discussed.		
Acceptance and Close out by Lead Assessor:	Date: 25/07/2008	
Information Provided: Information Verified: The NOC from the villages has been submitted along with the NOC from the Government Institutions like MEDA, the same was checked and is acceptable.		Verified Document Reference:
Reasoning for not acceptance or acceptance and close out: The NOC from the villages has been submitted along with the NOC from the Government Institutions like MEDA; the same was checked and is acceptable. Comment is closed.		

6. List of Persons Interviewed

Date	Name	Position	Short Description of Subject Discussed
11/10/2007	Mr. Sandeep Bhadersa and Mr. Ravindra Kunawat	Project proponent	Project Financials
11/10/2007	Ms Taruna Tomar	Consultant	Additionality, Baseline
11/10/2007	Mr. Animesh Sinha	Suzlon	Monitoring for the project activity
11/10/2007	Mr.Ravi	Local Stakeholder	Stakeholder consultation

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 03/05/2007 (submitted for international stakeholder's comments)

/2/ PDD version 2 dated 09/01/2008
/3/ PDD version 3 dated 05/02/2008
/4/ PDD version 4 dated 24/07/2008 (submitted with request for registration)
/5/ PDD version 5 dated 23/10/2008 (submitted against completeness check comments)
/6/ Host Country Approval, reference number 4/13/2007-CCC dated 15/04/2008
/7/ Financial calculation sheet for the project
/8/ Board note dated 13/08/2005 as CDM consideration proof
/9/ Modalities of communication dated 09/05/2008
/10/ Emission reduction calculation sheet
/11/ Letter from Taurian Iron and Steel co. to Suzlon for availing CDM benefits dated 05/09/2005.
/12/ Letter from Suzlon Energy Limited to Taurian Iron and Steel Co. discussing CDM funds dated 07/09/2005.

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):

/1/ Letter of undertaking for no use of ODA dated 9th May 2008
/2/ Notice for stakeholder consultation process dated 29/03/2006
/3/ MoM for stakeholder consultation process carried on 10/04/2006
/4/ Letter of undertaking for no change in technology dated 9th May 2008
/5/ Purchase order for the project activity dated 23/09/2005
/6/ ISO 9001:2000 valid till 17th September 2009 and ISO 14001:2004 valid till 13/04/2009
/7/ PPA for the project activity dated 24/04/2006
/8/ Commissioning certificates dated 28/03/2006 and 31/03/2006
/9/ NOC from MEDA dated 22/03/2005 and 28/03/2005
/10/ MERC Order dated 24/11/2003; http://www.mercindia.org.in/pdf/Detail_Wind_Energy_Order.pdf
/11/ Email Tailings for correspondence between Senergy Global and Taurian Iron and Steel co. dated 16th June 2006.
/12/ Wind turbine generation details for year 2006-07 and 2007-08

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 **8.75 MW Wind Power Project by Taurian Iron & Steel Company Private Limited in District Sangli, Maharashtra, India**

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

Issue	Findings	Source/Means of Verification	Further Action / Clarification / Information Required?
The copy of Host Country Approval (HCA) letter is to be submitted by the Project Proponent.	The HCA for the project activity dated 15/02/2008 has been submitted the reference no for the same is 4/13/2007-CCC	Document Review, Site visit and discussion with CDM project team	Review and Submission
Evidence for No use of ODA has to be submitted for the project.	The letter of undertaking for the same has been submitted.		Review and Submission
The media used for inviting local stakeholders comment. Evidence for the same is required.	The public notice for inviting the stakeholders has been submitted.		Review and Submission
The regulatory approval (consent to establish and operate the project) from the Pollution Control Board is required to to verify that local/legal requirements have been met.	NOC from MEDA and commissioning letters for the project activity has been submitted; the same was checked and is acceptable.		Review and Submission
Local stakeholders' comments are required to be verified for any adverse comment. MoM of stakeholder consultation meeting Due account of stakeholder comments received required to be verified. Discussions witht the Local Stakeholders	The MoM for stakeholders consultation has been submitted, the same was checked and cross-checked during the site visit and is acceptable.		Review and Submission
Project design engineering documents from	The Purchase orders along with the specifications for		Review and Submission

Issue	Findings	Source/Means of Verification	Further Action / Clarification / Information Required?
the technology supplier are required to be checked. Copy of offer made/ specifications given by technology supplier.	the project activity has been submitted, the same was cross-checked with the PDD and is acceptable.		
It is required to be checked whether the project technology used is likely to be substituted by other or more efficient technologies within the project period.	Letter of undertaking which mentions that the technology would not be substituted during the crediting period has been submitted, the same is acceptable.		Review and Submission
Proof of CDM consideration/ board meeting extracts.	The project proponent has submitted the board note as proof for CDM consideration dated 09/09/2005, the same was checked and is acceptable.		Review and Submission
Proof for starting date of the project activity.	Purchase order for the project has been submitted and is acceptable.		Review and Submission
Quality Assurance (QA) and Quality Control (QC) procedures for data monitoring or ISO certificate for the EPC contractor.	ISO certificates for Suzlon has been submitted and is acceptable.		Review and Submission
Power purchase agreement between MSEDCL and Project proponent.	PPA for the project activity has been submitted, the same was checked and is acceptable.		Review and Submission
Financial analysis for the project activity. IRR sheet, excel files, assumption for IRR.	IRR sheet has been submitted		Review and Submission
Training module / material used during training programme for the employees.	ISO certificates have been submitted for Suzlon		Review and Submission
Modalities for Communication for the project activity.	MOC for the project activity has been submitted		Review and Submission

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 26th 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 to be provided by the project proponent.	Y CAR 1closed

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 (http://cdm.unfccc.int/Projects/Validation/DB/DDSMNS1KV7BBM9B9QSW65EX881HTRE/view.html) from 25th August 2007 to 23rd September 2007 which was linked to the SGS website http://www.sgsqualitynetwork.com/tradeassurance/ccp/projects/project.php?id=329 Number of comments received during web-hosting period - 1	Y
5. The project design document shall be in conformance with the UNFCCC SSC PDD format		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.	Y
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	DR	The title of the project activity mentioned is "8.75 MW Wind Power Project by Taurian Iron & Steel Company Private Limited in District Sangli, Maharashtra, India". This is unique. The title of project activity will be further checked with the LoA from Host country.	Pending closure of CAR 1	Y CAR 1 closed
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 03/05/2007.	Y	Y
A.1.3. Is this in consistency with the time line of the project's history?	01	DR	The start date of the project activity is 27/03/2006and the PDD is dated 03/05/2007. The same is in time line. This will be further checked during the site visit.	Site visit	Y
A.2. Description of the Project Activity					
A.2.1. Is the description delivering a transparent overview of the project activities?	01	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
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, the same would be checked during the site visit.	Site visit.	Y

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	DR	The table is applied correctly.	Y	Y
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 project proponent for the project is consistent throughout the 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 Sangli district in Maharashtra state. The coordinates have been described in the PDD. The section A.4.1.4 is not as per guidelines, kindly clarify.	Y	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	DR	The same needs to be checked during the site visit.	CAR 05	Y CAR 05 closed
A.4.3. Does the description of the technology to be applied provide sufficient and transparent input to evaluate its impact on the greenhouse gas balance and is the explanation how the project will reduce greenhouse gas emission transparent and suitable?	01	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

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
A.4.4. Does the project design engineering reflect current good practices?	01	DR	The project activity involves electricity generation through wind mills. The technical specifications and Purchase orders for equipments used in the project activity needs to be submitted by the project proponent.	NIR 06	Y NIR 06 closed
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
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	Pending NIR 06	Pending NIR 06	Y NIR 06 Closed
A.4.7. Is the project technology likely to be substituted by other or more efficient technologies within the project period?	01	DR	The lifetime of the project activity as mentioned in the PDD is 20 years. Evidence is required that the project technology would not be substituted during the crediting period.	NIR 07	Y NIR 07 closed
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	Training and maintenance is a part of QA/QC procedures the same has not been discussed in the PDD, kindly clarify.	NIR 08	Y NIR 08 closed
A.4.9. Does the project make provisions for meeting training and maintenance needs?	01	DR	Training requirements is not discussed in the PDD. The same needs to be checked during the site visit. Pending NIR 08	Pending NIR 08	Y NIR 08 closed
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

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
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	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.	NIR 02	Y NIR 02 closed
A.5.2. Is all information provided consistent with details provided by further chapters of the PDD (in particular annex 2)?	01	DR	Pending and NIR 02	Pending NIR 02	Y NIR 02 Closed
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	To be checked during the site visit. Pending NIR 02	Pending NIR 02	Y NIR 02 Closed
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 proponent does not have any other any other CDM project activity in the 1 km area from the present project activity. The same will be checked during the site visit.	Site visit	Y
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

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	DR	The methodology used is AMS I D version 12; 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 8.75 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
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
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
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

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, but the same does not describe the metering points. The same needs to be checked during the site visit and discussion with the project proponent.	CAR 13	Y CAR 13 closed
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. 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					
B.3.1. Does the PDD discuss the identification of the most likely baseline?	01, 02	DR	The baseline selected is the continuation of generation in the western regional grid and is most likely the baseline scenario in the absence of the project activity.	Y	Y
B.3.2. Is the discussion and determination of the chosen baseline transparent and supported by the available data?	01, 02	DR	The baseline selected is western regional grid and is as per the CEA data.	Y	Y
B.3.3. Is conservativeness addressed in the way of identifying the baseline?	01, 02	DR	The baseline selected is western regional grid and is as per the CEA data.	Y	Y

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	DR	The start date for the project activity is 31/12/2005. Evidence for the same is required.	NIR 09	Y NIR 09 closed
B.4.2. Is the discussion on additionality based on a comparison with realistic and credible alternatives?	01	DR	Supporting as mentioned in the PDD is required to be submitted. Alternatives to the project activity are not described. Barrier due to generation risk is not clear, kindly clarify. Kindly clarify the Grid availability for the project activity. Regulatory barrier is not clear, kindly clarify Kindly provide the supporting for Prevailing practice. Project IRR values have not been discussed, kindly clarify the same.	CAR 12	Y CAR 12 closed
B.4.3. Does the discussion on additionality take into account relevant national and/or sectoral policies, macro-economic trends and political aspirations??	01	DR	Pending CAR 12	Pending CAR 12	Y CAR 12 closed

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
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	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 12	Pending CAR 12	Y CAR 12 closed
B.4.5. Is it demonstrated/justified that the project activity itself is not a likely baseline scenario	01, 02	DR	Pending CAR 12	Pending CAR 12	Y CAR 12 closed
B.5. Application of the Simplified Methodology					
B.5.1. Has the simplified methodology been applied correctly for determining **baseline emissions**?	01, 02	DR	The Excel spreadsheet of the calculation of emission reductions need to be provided by the project proponent. The start date of crediting period assumed is not realistic, kindly clarify	CAR 10	Y CAR 10 closed
B.5.2. Has the simplified methodology been applied correctly for determining **project emissions**?	01, 02	DR	The Excel spreadsheet of the calculation of emission reductions need to be provided by the project proponent.	Pending CAR 10	Y CAR 10 closed
B.5.3. Has the simplified methodology been applied correctly for determining **leakage**?	01, 02	DR	The Excel spreadsheet of the calculation of emission reductions need to be provided by the project proponent.	Pending CAR 10	Y CAR 10 closed
B.5.4. Have all the methodological choices been explained, have they been properly justified and are they correct	01, 02	DR	Pending closure of CARs/NIRs.	Pending CARs/NIRs	Y

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
B.5.5. Are uncertainties in the GHG emissions estimates properly addressed in the documentation?	01, 02	DR	Pending closure of CARs/NIRs.	Pending CARs/NIRs	Y
B.6. Ex-ante Data and Parameters Used					
B.6.1. Are the data provided in compliance with the simplified methodology?	01, 02	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
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 CAR 10 The emission factor used is from CEA and the same is from an official source.	Pending CAR 10	Y CAR 10 closed
B.6.3. Is the vintage of the baseline data correct?	01	DR	Pending closure of CARs/NIRs.	Pending CARs/NIRs	Y
B.7. Calculation of Emissions Reductions					
B.7.1. Has the approved methodology been applied correctly for determining **emission reductions**?	01, 02	DR	Pending CAR 10	Pending CAR 10	Y CAR 10 closed
B.7.2. Are the emission reduction calculations documented in a complete and transparent manner?	01, 02	DR	The emission reductions calculation has been described in the PDD, Pending closures of CARs/NIRs	Pending closure of CARs/NIRs	Y
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
B.7.4. Is the projection based on provable input parameter?	01, 02	DR	To be checked during site visit.	Site visit	Y

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
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
B.7.6. Is the calculation of the emission reduction correct?	01, 02	DR	Pending closures of CARs/NIRs	Pending closure of CARs/NIRs	Y
B.8. Emission Reductions					
B.8.1. Will the project result in fewer GHG emissions than the baseline scenario?	01, 02	DR	The PDD mentions the emission reduction of 15,517 tCO2e per annum, pending closure of CARs and NIRs.	Pending	Y
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
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 01/10/2007. The same is not realistic and needs to be corrected. The same would to be discussed during the site visit.	Y	Y
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
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

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
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	DR	The data archiving system has not been discussed for the parameters to be monitored in the PDD. Kindly clarify	CAR 14	Y CAR 14 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
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 reductions 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
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
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/NIRs	Pending	Y

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
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/NIRs	Pending	Y
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	DR	The same needs to be checked during the site visit. The ISO certificates of the EPC contractor are required to be submitted. Pending NIR 08.	Pending NIR 08	Y NIR 08 closed
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
B.11.3. Are quality control procedures and quality assurance procedures sufficiently described to ensure the delivery of high quality data?	01	DR	QA/QC procedures have been described for all the parameters in the PDD. The same needs to cross-checked during the site visit.	Site visit	Y
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
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

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
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
B.12.3. Are procedures identified for training of monitoring personnel?	01	DR	Training requirements have not been discussed in the PDD, Pending NIR 08	Pending NIR 08	Y NIR 08 closed
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/NIRs	Pending CARs/NIRs	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/NIRs	Pending CARs/NIRs	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
B.13.4. Are procedures identified for calibration of monitoring equipment?	01	DR	The PDD describe the procedures for calibration of monitoring equipment the needs to be cross-checked during the site visit.	Site visit	Y
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

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
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
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
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
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
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 08/06/2007, as mentioned in the PDD.	Y	Y
B.14.2. Is this in consistency with the time line of the PDD history?	01	DR	The start date of the project activity is 27/03/2006 this is in time line with the project activity.	Y	Y
B.14.3. Is all data required provided in a complete manner by annex 3 of the PDD?	01	DR	Pending Closure of CARs/NIRs	Pending closure of CARs/NIRs	Y

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
C. **Duration of the Project / Crediting Period**					
C.1.1. Are the project's starting date and operational lifetime clearly defined and reasonable?	01	DR	The start date of the project activity is 30/12/2005 and the operation lifetime is 20 years as described in the PDD. Evidence is required for the start date of the project activity.	NIR 09	Y NIR 09 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	DR	The necessary government approvals and consents are required to be submitted.	NIR 11	Y NIR 11 Closed
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. Pending NIR 11	Pending NIR 11	Y NIR 11 Closed

Checklist Question	Ref. ID	MoV*	Comments	Draft Concl	Final Concl
E. Stakeholder Comments					
E.1.1. Have relevant stakeholders been consulted?	01	DR, I	The PDD mentions the stakeholders; 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
E.1.2. Have appropriate media been used to invite comments by local stakeholders?	01	DR, I	The Media used to communicate the stakeholders has not been described in the PDD. Kindly clarify	CAR 03	Y CAR 03 closed
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	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 required to be submitted.	CAR 04	Y CAR 04 closed
E.1.4. Is the undertaken stakeholder process described in a complete and transparent manner?	01	DR	MoM of the stakeholder consultation process is required to be submitted.	Pending CAR 4	Y CAR 04 closed
E.1.5. Is a summary of the stakeholder comments received provided?	01	DR	The same is provided and would further be checked during the site visit.	Site visit	Y
E.1.6. Has due account been taken of any stakeholder comments received?	01	DR	The same is provided and would further be checked during the site visit.	Site visit	Y

References

S.No	Title / Description	Reference No.	Comments
1.	PDD, version 1 dated 03/05/2007	Table 2 section A, B, C, D and E	Y
2.	AMS I D version 12	Table 2 section B	Y
3.	UNFCCC website (http://cdm.unfccc.int/index.html)	Table 1, Table 2 section B	Y

A.3 Annex 3: Overview of Findings

Findings Overview

Findings from validation of **8.75 MW Wind Power Project by Taurian Iron & Steel Company Private Limited in District Sangli, 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.

Description of Table:

Type	Findings are either New Information Requests (NIR) or Corrective Action Requests (CAR). CARs are items that must be addressed before a project can receive a recommendation for registration. NIRs may lead to the raising of CARs. Observations are included at the end and may or may not be addressed. They are primarily to act as signposts for the verifying DOE.
Issue	Details the content of the finding
Ref	Refers to the item number in the Validation Protocol
Response	Please insert response to finding, starting with the date of entry.

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.

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

Date:	02/10/2007			Raised by:	Vikrant Badve		
No.:	*01*	Type:	CAR	Issue :	Host country approval	Ref.:	1.3
Lead Assessor Comment					Date: 02/10/2007		
The project proponent needs to submit the Host Country Approval for the project activity.							
Project Participant Response:					Date: 10.12.07		
MOEF has been requested to furnish HCA for the project. The document will be submitted to you as soon as it is received							
Acceptance and Close out by Lead Assessor:					Date: 10/07/2008		
Information Provided: HCA for the project activity. Information Verified:					Verified Document Reference:		
Reasoning for not acceptance or acceptance and close out: The host country approval letter has been provided dated 15th April 2008, reference number is 4/13/2007 – CCC. The same was checked and the name of the project mentioned is the same as in section A.1 of the PDD. CAR is closed.							

Date:	02/10/2007			Raised by:	Vikrant Badve		
No.:	*02*	Type:	NIR	Issue :	No ODA	Ref.:	
Lead Assessor Comment					Date: 02/10/2007		
The project proponent needs to submit the evidence for no use of ODA							
Project Participant Response:					Date: 10.12.07		
The said document is send to your office through courier with other required documents.							
Acceptance and Close out by Lead Assessor:					Date: 31/12/2007		

Information Provided: Letter by the project proponent Information Verified: The letter of undertaking was checked and it mentions that no ODA was used; the same was discussed with the project proponent and found acceptable.	Verified Document Reference: Letter of undertaking for no use of ODA
Reasoning for not acceptance or acceptance and close out: A letter of undertaking has been provided by the project proponent that mentions that no ODA was used for the project activity, it was checked and is acceptable thus NIR is closed.	

Date:	02/10/2007			Raised by:	Vikrant Badve		
No.:	*03*	Type:	CAR	Issue :	Media used for LSC	Ref.:	E.1.2
Lead Assessor Comment					Date: 02/10/2007		
The media used to invite the comments from the local stakeholders is not described in the PDD. Evidence for the same is required.							
Project Participant Response:					Date: *10/12/07*		
The media used to invite was the public forum. Notice was used to invite stakeholders for the meeting. The copy of the notice is sent to your office through courier							
Acceptance and Close out by Lead Assessor:					Date: *31/12/2007*		
Information Provided: Public notice Information Verified: The copy of notice was checked and it mentions about the meeting to be carried on 10/04/2006.					Verified Document Reference: Public notice		
Reasoning for not acceptance or acceptance and close out: The copy of the notice has been submitted, it mentions the details about the stakeholder meeting which was to be carried on 10/04/2006, but the same is not mentioned in the PDD, kindly clarify.							
Project Participant Response:					Date: 08.01.08		
The details about the about the stakeholder meeting and the date of meeting is now mentioned in the revised PDD of version 3.							
Acceptance and Close out by Lead Assessor:					Date: *05/02/2008*		
Information Provided: PDD version 3 Information Verified: The details of the stakeholder meeting as mentioned in the section E of the PDD was cross-checked during the discussions with the stakeholders during the site visit and found acceptable.					Verified Document Reference: PDD version 3		
Reasoning for not acceptance or acceptance and close out: The details of the stakeholder meeting as mentioned in the section E of the PDD was cross-checked during the discussions with the stakeholders during the site visit and found acceptable. Thus CAR is closed.							

Date:	02/10/2007			Raised by:	Vikrant Badve		
No.:	*04*	Type:	CAR	Issue :	MoM of LSC	Ref.:	E.1.3
Lead Assessor Comment					Date: 02/10/2007		
MoM of the stakeholder consultation meeting is required to be submitted by the project proponent for the project activity.							

Project Participant Response:	Date: 10.12.07
The minutes of meeting for the project are sent to your office through courier.	
Acceptance and Close out by Lead Assessor:	Date: 31/12/2007
Information Provided: MoM for the project activity Information Verified: The MoM of the stakeholder meeting is provided, the comments made were cross-checked during discussions with the local stakeholders and found acceptable. The section E.1 of the revised PDD still does not mention who are the local stakeholders for the project activity.	Verified Document Reference: MoM for the Local stakeholder consultation for the project activity
Reasoning for not acceptance or acceptance and close out: The MoM of the stakeholder meeting is provided, the comments made were cross-checked during discussions with the local stakeholders and found acceptable. The section E.1 of the revised PDD still does not mention who are the local stakeholders for the project activity.	
Project Participant Response:	Date: 08.01.08
The local stakeholders for the project activity are identified and mentioned under section E.1 of the revised PDD version 3.	
Acceptance and Close out by Lead Assessor:	Date: 05/02/2008
Information Provided: Revised PDD Information Verified: The PDD under section E.1 mentions the stakeholders as local government bodies and the people of the nearby villages.	Verified Document Reference: Revised PDD version 3
Reasoning for not acceptance or acceptance and close out: The PDD under section E.1 mentions the stakeholders as local government bodies and the people of the nearby villages. The same is acceptable. CAR is closed.	

Date:	02/10/2007			Raised by:	Vikrant Badve		
No.:	*05*	Type:	CAR	Issue :	Guidelines for completion of CDM SSC PDD not followed	Ref.:	A.4.2
Lead Assessor Comment					Date: 02/10/2007		
The PDD does not follow the guidelines for completing the CDM-SSC PDD, the section A.4.1.4 is not as per the guidelines. Kindly clarify.							
Project Participant Response:					Date: 10.12.07		
The section A.4.1.4 has been revised in the PDD as per the CDM-SSC guidelines.							
Acceptance and Close out by Lead Assessor:					Date: 31/12/2007		
Information Provided: Revised PDD, Information Verified: The revised PDD under section A.4.1.4 is mentioned within one page which is as per the guidelines.					Verified Document Reference: Revised PDD		
Reasoning for not acceptance or acceptance and close out: The revised PDD under section A.4.1.4 is mentioned within one page which is as per the guidelines, thus CAR can be closed.							

Date:	02/10/2007			Raised by:	Vikrant Badve		
No.:	*06*	Type:	NIR	Issue :	Purchase Orders	Ref.:	A.4.4
Lead Assessor Comment					Date: 02/10/2007		

The purchase order for the project activity is required to be submitted by the project proponent to cross-check the technical specifications as mentioned in the PDD for the specific project activity.	
Project Participant Response:	Date: 10.12.07
The purchase order for the project is also sent to your office through courier.	
Acceptance and Close out by Lead Assessor:	Date: 31/12/2007
Information Provided: Purchase orders for the project activity. Information Verified: The purchase order copies have been checked which was issued on 23rd September 2005 and is acceptable.	Verified Document Reference: Purchase orders for the project activity
Reasoning for not acceptance or acceptance and close out: The purchase order copies have been checked which was issued on 23rd September 2005 and is acceptable, NIR can be closed.	

Date:	02/10/2007			Raised by:	Vikrant Badve		
No.:	*07*	Type:	NIR	Issue :	No change in technology	Ref.:	A.4.7
Lead Assessor Comment					Date: 02/10/2007		
The project proponent needs to provide evidence that the technology would not be changed during the crediting period for the specific project activity.							
Project Participant Response:					Date: 10.12.07		
The evidence for the above said is provided by the project proponent and is sent to your office through courier.							
Acceptance and Close out by Lead Assessor:					Date: 31/12/2007		
Information Provided: Information Verified: The copy of letter has not been submitted, kindly submit the same					Verified Document Reference:		
Reasoning for not acceptance or acceptance and close out: The copy of letter has not been submitted, kindly submit the same. NIR is open							
Project Participant Response:					Date: 08.01.08		
The document stating that the technology would not be changed during the crediting period for the project activity is furnished to the DOE.							
Acceptance and Close out by Lead Assessor:					Date: 05/02/2008		
Information Provided: Letter mentioning technology would not be changed. Information Verified: The project proponent has submitted a letter of undertaking which mentions that the technology used for the project would not be changed during the crediting period.					Verified Document Reference: Letter of undertaking mentioning no change in technology.		
Reasoning for not acceptance or acceptance and close out: The project proponent has submitted a letter of undertaking which mentions that the technology used for the project would not be changed during the crediting period. The same is acceptable, NIR can be closed.							

Date:	02/10/2007			Raised by:	Vikrant Badve		
No.:	*08*	Type:	NIR	Issue :	Training requirements	Ref.:	A.4.8
Lead Assessor Comment					Date: 02/10/2007		

Initial training requirements are not discussed in the PDD for the project activity, kindly clarify the same. ISO certificate for the EPC contractor is required to be submitted.	
Project Participant Response:	Date: 10.12.07
The initial training requirement is added under section B7.2 of the revised PDD Initial training procedures have been identified as part of existing ISO 9000 system procedures. The certificate is sent to you to verify. ISO certificates is submitted to the DOE.	
Acceptance and Close out by Lead Assessor:	Date: 31/12/2007
Information Provided: ISO certificates, Information Verified: The Revised PDD under section B.7.2 mentions the training requirement, also the O&M contractor Suzlon is ISO 9000:2001 certified and has proper QA/QC procedures. The ISO certificates were checked and are acceptable. NIR can be closed.	Verified Document Reference: ISO certificates for Suzlon
Reasoning for not acceptance or acceptance and close out: The Revised PDD under section B.7.2 mentions the training requirement, also the O&M contractor Suzlon is ISO 9000:2001 certified and has proper QA/QC procedures. The ISO certificates were checked and are acceptable. NIR is closed.	

Date:	02/10/2007			Raised by:	Vikrant Badve		
No.:	*09*	Type:	NIR	Issue :	Start date	Ref.:	B.4.1 & C.1.1
Lead Assessor Comment					Date: 02/10/2007		
The project proponent needs to provide evidence for the start date of project activity.							
Project Participant Response:					Date: 10.12.07		
The project start date is considered as the date when purchase order for the turbines was placed i.e 23.09.05. The said document is submitted to you through courier.							
Acceptance and Close out by Lead Assessor:					Date: 31/12/2007		
Information Provided: Purchase order for the project activity Information Verified: The purchase order copy was checked and it mentions the date as 23rd September 2005, the same is mentioned in the PDD, thus NIR can be closed.					Verified Document Reference: Purchase order for the project activity		
Reasoning for not acceptance or acceptance and close out: The purchase order copy was checked and it mentions the date as 23rd September 2005, the same is mentioned in the PDD, thus NIR is closed.							

Date:	02/10/2007			Raised by:	Vikrant Badve		
No.:	*10*	Type:	CAR	Issue :	Emission reductions	Ref.:	B.5
Lead Assessor Comment					Date: 02/10/2007		
The emission reductions excel sheets need to be provided for the project activity. Evidence is required for the assumptions used in the same. The start date of crediting period assumed is not realistic, kindly clarify							
Project Participant Response:					Date: 10.12.07		

The excel sheet used to calculate the emission reductions is attached here in. 2. The calculation has been done using the publicly available document **'The CO2 Baseline Database for the Indian Power Sector'** Ministry of Power: Central Electricity Authority (CEA) Version 3,Dated: 15th December 2007 This database is prepared as per ACM0002 version 7. 3. The starting date for crediting period is revised and has been changed in the revised PDD.	
Acceptance and Close out by Lead Assessor:	Date: 31/12/2007
Information Provided: Emission reduction sheet Information Verified: The CEA data used is acceptable. The emission reductions sheet has been provided but the start date of crediting period mentioned is not matching along with the IRR values.	Verified Document Reference: Emission reduction sheet
Reasoning for not acceptance or acceptance and close out: The emission reductions in the CER estimation sheet is from 1/10/2007 while the start date of the crediting period mentioned is different, kindly clarify. The IRR values mentioned in the PDD does not match with the same mentioned in the excel sheets, kindly clarify. The Excel sheet does not provide the reference or source of data and the units of the data used, kindly incorporate the same. The start date of crediting period mentioned under the section C.2.2.1 is not as per the guidelines for completing the CDM-SSC-PDD, kindly clarify.	
Project Participant Response:	Date: 08.01.08
The start date in the excel sheet has been revised and is matching with the start date of crediting period mentioned in the PDD. The IRR values have been revised as per the excel sheet. The references and units of data used are incorporated in the IRR sheet The start date of crediting period mentioned under section C.2.2.1 has been revised as per the guidelines for completing the CDM-SSC-PDD in the revised PDD version 3.	
Acceptance and Close out by Lead Assessor:	Date: 05/02/2008
Information Provided: Revised PDD and excel sheet Information Verified: Revised PDD and Excel sheet	Verified Document Reference: Revised PDD Excel sheet
Reasoning for not acceptance or acceptance and close out: The calculation sheet mentions the working days as 350 only, but the CUF considered as per the PPA is already inclusive of the days of operation, kindly clarify why 350 days of operation has been considered. Evidence is required for the deration of the machines after 10 years of operation as mentioned in the calculation sheet. The total cost of maintenance as mentioned in the excel sheet does not match with the agreement provided. Kindly clarify. CAR is open	
Project Participant Response:	Date: 18.02.2007

In the calculation sheet 365 operation days has been considered now and changes has been done accordingly in the PDD and financial sheet. Evidence for deration of the machines after 10 years is submitted to the DOE. The O&M cost mentioned in the excel sheet is inclusive of taxes. The cost in the agreement is exclusive of taxes.

Acceptance and Close out by Lead Assessor:	Date: *10/07/2008*
Information Provided: Emission reductions sheet Information Verified: The emission reduction sheet was checked and it mentions 365 days of operation, the assumptions used were discussed and are acceptable.	Verified Document Reference: Emission reductions sheet.
Reasoning for not acceptance or acceptance and close out: The emission reduction sheet was checked and it mentions 365 days of operation, the assumptions used were discussed and are acceptable. CAR is closed.	

Date:	02/10/2007			Raised by:	Vikrant Badve		
No.:	*11*	Type:	NIR	Issue :	Government Approvals	Ref.:	D.1.1
Lead Assessor Comment					Date: 02/10/2007		
The project proponent requires to submit the necessary government approval and consents for the project activity.							
Project Participant Response:					Date: 10.12.07		
The No objection certificate received from MEDA (Maharashtra Energy Development agency) is submitted for installation of turbines. Also commissioning certificate for the turbines is provided.							
Acceptance and Close out by Lead Assessor:					Date: 31/12/2007		
Information Provided: NOC from MEDA, Commissioning letters. Information Verified: The NOC from MEDA and the commissioning certificate for the project activity has been submitted the same was checked and found acceptable. Four machines for the project activity were commissioned on 25/03/2006 while the rest three were commissioned on 28/03/2007. NIR can be closed.						Verified Document Reference: NOC from MEDA, Commissioning letters.	
Reasoning for not acceptance or acceptance and close out: The NOC from MEDA and the commissioning certificate for the project activity has been submitted the same was checked and found acceptable. Four machines for the project activity were commissioned on 25/03/2006 while the rest three were commissioned on 28/03/2007. NIR is closed.							

Date:	02/10/2007			Raised by:	Vikrant Badve		
No.:	*12*	Type:	CAR	Issue :	Additionality	Ref.:	B.4.2
Lead Assessor Comment					Date: 02/10/2007		

Supporting as mentioned in the PDD is required to be submitted. Alternatives to the project activity are not described. Barrier due to generation risk is not clear, kindly clarify. Kindly clarify the Grid availability for the project activity. Regulatory barrier is not clear, kindly clarify Kindly provide the supporting for Prevailing practice. Project IRR values have not been discussed, kindly clarify the same.	
Project Participant Response:	Date: 10.12.07
All the supporting for the PDD is submitted According to the attachment A to appendix B for simplified modalities and procedures for small scale CDM project activities, identifying alternatives to project activity is not required. To prove additonality at least one of the following four barriers is to be proved which are Investment barrier, Technological barrier, Barrier due to prevailing practise and other barriers. The above said requirement is fulfilled and thus alternatives for the small sale project activity are not required. The gird availability for the project is around 98% The regularity risk has been modified under section B.5 of the revised PDD to strengthen the additionality. The financials for the project has been done and included under investment analysis of section B.5 of the revised PDD. The required change has been done in section B.5 of the revised PDD and is dated before the project activity start date. The major barrier faced by the project activity is financial. An investment analysis has been done for the project which has been added in the revised PDD.	
Acceptance and Close out by Lead Assessor:	Date: 31/12/2007
Information Provided: revised PDD and excel sheet Information Verified: revised PDD and excel sheet	Verified Document Reference: revised PDD and excel sheet
Reasoning for not acceptance or acceptance and close out: Evidence is required for the assumptions mentioned in the PDD and the IRR calculation sheet. The regulatory risk mentioned in the revised PDD was checked and the same was cross-checked with Article 18 of the PPA and was found acceptable. Pending CAR 10.	
Project Participant Response:	Date: 08.01.08
The assumptions considered for the IRR calculations have been provided in the revised IRR sheet and supporting documents has been furnished.	
Acceptance and Close out by Lead Assessor:	Date: *05/02/2008*
Information Provided: revised PDD and excel sheet Information Verified: revised PDD and excel sheet	Verified Document Reference: revised PDD and excel sheet
Reasoning for not acceptance or acceptance and close out: The calculation sheet mentions the working days as 350 only, but the CUF considered as per the PPA is already inclusive of the days of operation, kindly clarify why 350 days of operation has been considered. Evidence is required for the deration of the machines after 10 years of operation as mentioned in the calculation sheet. The total cost of maintenance as mentioned in the excel sheet does not match with the agreement provided. Kindly clarify.	
Project Participant Response:	Date: 18.02.2007
In the calculation sheet 365 operation days has been considered now and changes has been done accordingly in the PDD and financial sheet. Evidence for deration of the machines after 10 years is submitted to the DOE. The O&M cost mentioned in the excel sheet is inclusive of taxes. The cost in the agreement is exclusive of taxes.	

Acceptance and Close out by Lead Assessor:	Date: *26/06/2008*
Information Provided: Information Verified: The emission reduction sheet was checked and it mentions 365 days of operation, the assumptions used were discussed and are acceptable.	Verified Document Reference:
Reasoning for not acceptance or acceptance and close out: The emission reduction sheet was checked and it mentions 365 days of operation, the assumptions used were discussed and are acceptable. The benchmark used selected is not as per the para 40 EB 40 kindly clarify. Kindly provide a timeline for the project activity and the reason for delay to approach CDM funds. CAR is open.	
Project Participant Response:	Date: *24/07/2008*
The benchmark analysis was carried out in accordance with Sub-step 2b: Option III and the benchmark is chosen using (6) b of the additionality tool version 05. For the financial analysis the project IRR was identified as a financial indicator. Project IRR had been calculated based on project cash outflows and inflows. The project IRR is a measure for return on investment. The Weighted Average Cost of Capital (WACC) was identified as a relevant benchmark value for the project activity, as the WACC represents the actual cost of debt and return on equity for the project activity based on conservative assumptions and estimates relevant to the Indian power sector (example beta value). WACC represents the weighted average of the required returns of the project proponent for the project activity -the equity investors and debt creditors. It can be considered as a minimum rate of return which the project should earn to merit consideration by all investor groups (investors and creditors). The financial analysis done is for complete life time of the project activity i.e 20 years. Chronological description of project development The time gap between the consideration of CDM by project proponent and appointment of the DOE is because of various reasons which are pointed out in a chronological order in the explanation given below. The project proponent Taurian Iron and Steel did serious consideration of CDM in their board resolution dated 09 September 2005 prior to which they had meeting with Suzlon Energy in order to have a clarification on availing CDM benefits for their wind project. After getting confirmation from Sulzon energy that environmental friendly project is eligible for registration with UNFCCC for CDM projects the project proponent in their board meeting on 09.09.05 considered to avail CDM benefits for their Wind project. Project Proponent signed an agreement with the EPC Contractor i.e Suzlon Energy Ltd. on 23 September 2005. Soon after the purchase order the project proponent started looking for appropriate CDM consultant for their wind project. Sulzon Energy assisted Taurian Iron and Steel Pvt. Ltd in finalizing a CDM Consultant. Senergy Global being a sister concern to Suzlon Energy provided required information to the investor from the start itself. The copy of trailing mails regarding the communication is provided to the DOE. Project proponent got in touch with Senergy Global in May 2006 and then further communication followed in which negotiations were done. Finally the agreement was signed 27 January 2007.Due to lack of manpower at Senergy Global PVT Ltd. at that point of time, there was delay in starting the work on the PDD. The Project was presented at the Ministry of Environment and Forest on 30th July 2007. Simultaneously the DOE was finalized and the project was sent to for webhosting for international stakeholder comments from 25.08 07 to 23.09.07. Thus the delay earlier in signing the agreement even after considering CDM right from the start of the project activity and then delay from the Consultant's side led to delay in appointing the DOE.	
Acceptance and Close out by Lead Assessor:	Date: *25/07/2008*

Information Provided: Financial Calculation sheet, Email correspondences, Extracts of Board Meeting, Revised PDD Information Verified: The calculations for the Benchmark and project IRR were checked the assumptions were cross-checked by the relevant sources and are acceptable. The Reason for delay was discussed with the project proponent and it was observed that though CDM was considered initially but due to unavoidable circumstances the project got delayed to approach for CMD funds.	Verified Document Reference: Financial Calculation sheet, Email correspondences, Extracts of Board Meeting, Revised PDD
Reasoning for not acceptance or acceptance and close out: The calculations for the Benchmark and project IRR were checked the assumptions were cross-checked by the relevant sources and are acceptable. The Reason for delay was discussed with the project proponent and it was observed that though CDM was considered initially but due to unavoidable circumstances the project got delayed to approach for CMD funds. CAR is closed.	

Date:	02/10/2007			Raised by:	Vikrant Badve		
No.:	*13*	Type:	CAR	Issue :	Project boundary	Ref.:	B.2.1
Lead Assessor Comment					Date: 02/10/2007		
The project boundary mentioned for the project activity is not clear. The metering location is not described.							
Project Participant Response:					Date: 10.12.07		
The metering location and project boundary has been mentioned under section B.3 of the revised PDD.							
Acceptance and Close out by Lead Assessor:					Date: 31/12/2007		
Information Provided: Information Verified: The project boundary in the revised PDD was checked and the same is acceptable. CAR can be closed.					Verified Document Reference:		
Reasoning for not acceptance or acceptance and close out: The project boundary in the revised PDD was checked and the same is acceptable. CAR is closed.							

Date:	02/10/2007			Raised by:	Vikrant Badve		
No.:	*14*	Type:	CAR	Issue :	Data Archiving	Ref.:	B.10.1
Lead Assessor Comment					Date: 02/10/2007		
The monitoring plan mentioned in the PDD does not discuss how long the archived data would be stored, kindly clarify.							
Project Participant Response:					Date: 10.12.07		
The archived data will be stored for 10 + 2 years							
Acceptance and Close out by Lead Assessor:					Date: 31/12/2007		
Information Provided: Revised PDD, Information Verified: The PDD under section B.7.2 mentions that the data would be archived for 10+2 years, thus CAR can be closed.					Verified Document Reference: Revised PDD		

Reasoning for not acceptance or acceptance and close out: The PDD under section B.7.2 mentions that the data would be archived for 10+2 years, thus CAR is closed.

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: Jimmy Sah SGS Affiliate: India

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: 23-05-2007