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VALIDATION REPORT

"Wind Power Project by M/s Chhotabhai Jethabhai Patel & Co. (CJP) at Sinnar, Maharashtra" in India

REPORT NO. 2009 IQ ME 51

REVISION NO. 02

RINA

VALIDATION REPORT

Project Name: "Wind Power Project by M/s Chhotabhai Jethabhai Patel & Co. (CJP) at Sinnar, Maharashtra"	**Country:** India		**Estimated CERs** (tCO_2e)**:** 29,760 over the 10 years crediting period
Client: M/s Chhotabhai Jethabhai Patel & Co.(CJP)	**Client contact:** Mr. Shah .D. T, (0268) 2562633/34/35		
Report title: "Wind Power Project by M/s Chhotabhai Jethabhai Patel & Co. (CJP) at Sinnar, Maharashtra" in India	**Report No.:** 2009 IQ ME 51	**Rev. No.** 02	**Date of this report:** 25 March 2010
Approved by: *(Final Report – DCI Director approval)* Roberto Cavanna	**Organizational Unit:** DCI		**Date:** 26 March 2010

Methodology

Reference:	**Version:**	**Title:**	**Sectoral Scope:**
AMS-I.D	13, EB 36 of 14 December 2007	"Grid connected renewable electricity generation"	1 - Energy Industries

RINA has performed the validation of the CDM project activity "Wind Power Project by M/s Chhotabhai Jethabhai Patel & Co. (CJP) at Sinnar, Maharashtra"

on the basis of UNFCCC criteria for the CDM, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the CDM modalities and procedures, the simplified modalities and procedures for small-scale CDM project activities, the subsequent decisions by the CDM Executive Board and the Host country criteria.

The validation consisted of the following three phases: i) a desk review of the project design documents, ii) follow-up interviews with project stakeholders and iii) the resolution of outstanding issues and the issuance of the final validation report and opinion.

Seventeen Corrective Action Requests (CAR's) and Nineteen Clarification (CL's) have been identified. Upon the satisfactory resolution of these CAR's and CL's presented in the report, it is the validation team's opinion that the project meets the relevant UNFCCC requirements for CDM and RINA thus recommend the project for registration as CDM project activity.

Work carried out by: Adriana Del Borghi, Ashok Kumar, Dhanya M. Nambiar	☒ No distribution without permission from the Client or responsible organizational unit ☐ Strictly confidential ☐ Unrestricted distribution
Work verified by: *(CRT Responsible approval)* Paolo Teramo	**Keywords:** Climate change, Kyoto Protocol, Validation, Certified Emission Reduction, Clean Development Mechanism

Abbreviations

BM	Build Margin
CAR	Corrective Action Request
CAPM	Capital Asset Pricing Model
CDM	Clean Development Mechanism
CEA	Central Electricity Authority
CER(s)	Certified Emission Reduction(s)
CJP	Chhotabhai Jethabhai Patel & Co.
CL	Clarification Request
CM	Combined Margin
CMS	Central Monitoring Station
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
DNA	Designated National Authority
DOE	Designated Operational Entity
EIA	Environmental Impact Assessment
FAR	Forward Action Request
GHG	Greenhouse Gas(es)
IRR	Internal Rate of Return
IPCC	Intergovernmental Panel on Climate Change
JMR	Joint Meter Reading
MoEF	Ministry of Environment and Forest
MSEDCL	Maharashtra State Electricity Distribution Company Limited
MERC	Maharashtra Electricity Regulatory Commission
MEDA	Maharashtra Energy Development Agency
MoV	Means of Validation
NEWNE	Northern, Eastern, Western and North Eastern Grids
OM	Operating Margin
PDD	Project Design Document
PP	Project Proponent
PLF	Plant Load Factor
PPA	Power Purchase Agreement
RINA	RINA SpA
UNFCCC	United Nation Framework Convention on Climate Change
WTG	Wind Turbine Generator
WEG	Wind Electric Generator

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1 INTRODUCTION

The Client "Chhotabhai Jethabhai Patel & Co." has commissioned RINA to perform a validation of the "Wind Power Project by M/s Chhotabhai Jethabhai Patel & Co. (CJP) at Sinnar, Maharashtra" (hereafter called "the project"). As required under Annex 48 of EB 50, the RINA confirms that Chhotabhai Jethabhai Patel & Co. (CJP) is the only project participant for this project activity and has direct contractual relationship with RINA for the validation of this project activity. This report summarizes the findings of the validation of the project, performed on the basis of UNFCCC criteria for the CDM, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the CDM modalities and procedures, the simplified modalities and procedures for small-scale CDM project activities and the subsequent decisions by the CDM Executive Board.

The following team/technical reviewer personnel have performed this validation:

Role/Qualification	Last Name	First Name	Country
Team Leader, CDM Validator	Del Borghi	Adriana	Italy
Team Member, CDM Technician	Kumar	Ashok	India
Team Member, CDM Technician	Nambiar M.	Dhanya	India
Technical Reviewer	Teramo	Paolo	Italy
Technical Reviewer	Valoroso	Rita	Italy

The validation report, including the initial validation findings, underwent a technical review before being submitted to the project participants. The technical review was performed by a technical reviewer qualified in accordance with RINA's qualification scheme for CDM validation and verification.

1.1 Objective

The purpose of a validation is to have an independent third party assessment of the project design. In particular, the project's baseline, monitoring plan, and the project's compliance with relevant UNFCCC and host Party criteria are validated in order to confirm that the project design, as documented, is appropriate and reasonable and meets the identified criteria. Validation is a requirement for all CDM projects and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of certified emission reductions (CERs).

1.2 Scope

The validation scope is defined as an independent and objective review of the project design document (PDD). The PDD is reviewed against the criteria stated in Article 12 of the Kyoto Protocol, the CDM modalities and procedures as agreed in the Marrakech Accords, the simplified modalities and procedures for small-scale CDM project activities and the relevant decisions by the CDM Executive Board, including the approved baseline and monitoring methodology (AMS-I.D – "Grid connected renewable electricity generation", Version 13 of 14 December 2007) /5/ The validation team, based on the recommendations in the CDM Validation and Verification Manual version 1.1, dated 4 December, 2009 /6/ (Hereinafter referred as the VVM) employed a

risk-based approach, 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 project participants. However, the stated requests for clarifications and/or corrective actions may have provided input for improvement of the project design.

1.3 GHG Project Description

The project activity is an initiative of Chhotabhai Jethabhai Patel & Co. (CJP) and implemented at Adwadi Village of Sinnar Taluka of Nashik district of Maharastra, India. The title of the project is "Wind Power Project by M/s Chhotabhai Jethabhai Patel & Co. (CJP) at Sinnar, Maharashtra"

The project activity is a grid connected wind power generation with one turbine of capacity 1.5 MW and supplying the electricity generated to the NEWNE Grid of India /1/. This was checked during site visit by verifying the evacuation point at the Khaprale substation. The wind turbine generator (WTG) is supplied by Suzlon Energy Limited and the model is S-82 /19/. The project is expected to generate 3,285 MWh of electricity per year. The project will result in an estimated reduction of 29,760 tCO_2e (2,976 tCO_2e / year average) over the fixed 10 years crediting period. The expected operational lifetime of the project is 20 years as verified from the manufacturer's technical specification /17/ /18/ /19/ /20/.

2 METHODOLOGY

The validation consists of the following three phases:

I. a desk review of the project design documentation

II. follow-up interviews with project stakeholders

III. the resolution of outstanding issues and the issuance of the final validation report and opinion.

In order to ensure transparency, a validation protocol was customized for the project, according to the CDM Validation and Verification Manual /6/. The protocol shows, in a transparent manner, criteria (requirements), means of verification and the results from validating the identified criteria. The validation protocol serves the following purposes:

- It organizes, details and clarifies the requirements a CDM project is expected to meet;
- It ensures a transparent validation process where the validator will document how a particular requirement has been validated and the result of the validation.

The validation protocol consists of two tables. The different columns in these tables are described in Figure 1.

The completed validation protocol is enclosed in Appendix A to this report.

Findings established during the validation can either be seen as a non-fulfillment of validation protocol criteria or where a risk to the fulfillment of project objectives is identified.

Corrective Action Request (CAR) was raised if one of the following occurs:

(a) The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions;

(b) The CDM requirements have not been met;

(c) There is a risk that emission reductions cannot be monitored or calculated.

The validation team raised a Clarification Request (CL) if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met.

A Forward Action Request (FAR) was raised during validation to highlight issues related to project implementation that require review during the first verification of the project activity. FARs shall not relate to the CDM requirements for registration.

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Validation Protocol Table 1: Mandatory Requirements			
Requirement	***Reference***	***Conclusion***	***Cross reference***
The requirements the project must meet.	*Gives reference to the legislation or agreement where the requirement is found.*	*This is either acceptable based on evidence provided* ***(OK),*** *or a* ***Corrective Action Request (CAR)*** *of risk or non-compliance with stated requirements. The corrective action requests are numbered and presented to the client in the Validation report.*	*Used to refer to the relevant checklist questions in Table 2 to3 show how the specific requirement is validated. This is to ensure a transparent Validation process.*

Validation Protocol Table 2: Requirement checklist				
Checklist Question	***Reference***	***Means of verification (MoV)***	***Comment***	***Draft and/or Final Conclusion***
The various requirements in Table 1 are linked to checklist questions the project should meet. The checklist is organized in seven different sections. Each section is then further sub-divided. The lowest level constitutes a checklist question.	*Gives reference to documents where the answer to the checklist question or item is found.*	*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 (****OK),*** *or a* ***Corrective Action Request (CAR)*** *due to non-compliance with the checklist question (See below).* ***ClarificationRequest*** *is used when the validation team has identified a need for further clarification.* *A Forward Action Request (FAR) shall be raised during validation to highlight issues related to project implementation that require review during the first verification of the project activity.*

Validation Protocol Table 3: Resolution of Corrective Action and Clarification Requests			
Draft report clarifications and corrective action requests	***Ref. to checklist question in table 2***	***Summary of project owner response***	***Validation conclusion***
If the conclusions from the draft Validation are either a Corrective Action Request or a Clarification Request, these should be listed in this section.	*Reference to the checklist question number in Table 2 where the Corrective Action Request or Clarification Request is explained.*	*The responses given by the Client or other project participants during the communications with the validation team should be summarized in this section.*	*This section should summaries the validation team's responses and final conclusions. The conclusions should also be included in Table 2, under "Final Conclusion".*

Figure 1 Validation protocol tables

2.1 Review of Documents

The Project Design Document (PDD) /1/ Version 01 of 18 March 2009 and additional background documents /2/ to /44/ related to the project design, emission reductions accounting and baseline, submitted by Chhotabhai Jethabhai Patel & CO., were assessed by RINA. After initial validation findings were identified and communicated to the client, a revised PDD (version 03 of 06 February, 2010) /1A/ was submitted and assessed by RINA. This latest version of the PDD is as per the template and complies with the latest guidelines for completing the simplified project design document.

2.2 Follow-up Interviews

On 26 June 2009, RINA performed site visit of the WTG location at Adwadi village, Sinnar Taluk and conducted interviews with project stakeholders /45/ to /50/ to confirm selected information and to resolve issues identified in the document review. Representatives of Chhotabhai Jethabhai Patel & CO., Suzlon Energy Limited, MITCON Consultancy Services Ltd., Pune (Consultant) and local villagers were interviewed. The main topics of interview are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
Chhotabhai Jethabhai Patel & CO. , Suzlon Energy Limited and MITCON Consultancy Services Ltd., Pune Ltd (Consultant)	➢ Clarifications on establishment of baseline, monitoring plan and emission reduction calculations ➢ Resources, training needs and procedures for operation and maintenance ➢ Monitoring Plan / Records (backups) ➢ Maintenance program (calibration) ➢ Project boundaries ➢ Additionality issues ➢ Baseline and project emissions ➢ Emissions reductions calculations

2.3 Resolution of Clarification and Corrective Action Requests

The objective of this phase of validation was to resolve any outstanding issues, which need to be clarified RINA's positive conclusion on the project design.

The Corrective Action Requests and Clarification Requests raised by RINA were resolved during communications between client and RINA. To guarantee the transparency of the validation process, the concerns raised and responses given are summarized in chapter 3 below and documented in more detail in the validation protocol in Appendix-A to this report. Since modifications to the project design were necessary to resolve RINAs concerns, the client decided to revise the documentation and resubmitted the project design document (CDM-SSC-PDD, Version 03 Dated 06 February, 2010) /1A/. After reviewing the revised and resubmitted project documentation, RINA issues this final validation report and opinion.

3 VALIDATION FINDINGS

In the following sections the findings of the validation are stated. The validation findings for each validation subject are presented as follows:

1. The findings from the desk review of the original project design documents and the findings from interviews during the follow up visit are summarized. A more detailed record of these findings can be found in the Validation Protocol in Appendix A.
2. Where RINA identified issues that needed clarification or that represented a risk to the fulfillment of project objectives, a Clarification and Corrective Action Request, respectively, have been issued. The Clarification and Corrective Action Request are stated, where applicable, in the following sections and are further documented in Validation Protocol in Appendix-A.

The initial validation findings in the protocol in Appendix A relate to the project design as documented and described in the PDD for the "Wind Power Project by M/s Chhotabhai Jethabhai Patel & Co. (CJP) at Sinnar, Maharashtra", Version 01 dated 18 March 2009 /1/. However, this final validation report is based on the updated PDD Version 03 dated 06 February, 2010 /1A/ submitted by the PP.

The conclusions of the validation finding as required by the CDM Validation and Verification Manual, version 1.1 /6/ are presented as below.

3.1 Project Design

The project activity is a grid connected wind power project having one WTG with total capacity of 1.5 MW, located at Adwadi (Sinnar), Maharashtra, India. The project is estimated to generate 3,285 MWh and to feed into the NEWNE Grid of India, which is dominated by carbon intensive fossil fuels /1/. The geographical co-ordinates of the WTG are 19º 43' 22.8" N; 73º 55' 22.2" E.

The longitude and the latitude of this project were verified with Google Earth and found them to be correct and appropriate.

The technology used in the project activity is environmentally safe and sound, since no GHG emissions are associated with the electricity generation using windmill. The technical design given in the PDD is consistent with the actual planning and implementation of the project activity. RINA confirmed the installation, make and capacities through personal inspection of the WTGs during the site visit and cross verifying with the purchase orders, commissioning certificates, land allotment letters, power purchase agreement with the state utility and interview with the relevant stakeholders /8/ /10/ /12/ /18/ /19/ /20/.

Approvals *(para 44-50- and para 124-126, VVM version 1.1)*

The project is unilateral project developed by M/s Chhotabhai Jethabhai Patel & Co. and the host Party is India. The host country has issued the Letter of Approval (LoA) on 29 June 2009 (reference No. 4/9/2009-CCC) /4/ authorizing M/s Chhotabhai Jethabhai Patel & Co. as project participant. M/s Chhotabhai Jethabhai Patel & Co. is the only project participant and is consistent in the LoA and PDD. RINA confirmed the authenticity of the approval from the website /43/ of the DNA of India. The website confirms the approval of this project by DNA under project ID No. 1473-08. RINA team also confirmed that the letter of approval refers to the proposed CDM project activity and the title is in line with the title mentioned in the PDD "Wind Power Project by M/s Chhotabhai Jethabhai Patel & Co. (CJP) at Sinnar, Maharashtra" /4/, as well RINA is able

to confirm that the letter of approval is in accordance with paragraphs 45 – 48 of VVM, version 1.1 and corresponding references included to LoA, PDD and validation report are consistent. The LoA does not refer to a specific version of the PDD or validation report. The DNA of India approved the project confirming the voluntary participation of M/s Chhotabhai Jethabhai Patel & Co. (CJP), as well that the project will contribute to sustainable development for the host country. The DNA of India has not imposed any specific condition in the LoA for the project participant. The proposed project activity does not involve any public funding from an Annex I Party, and the validation did not reveal any information that indicated that the project can be seen as a diversion of official development assistance (ODA) funding towards India. The PP has submitted undertaking which mentioned that no ODA used and the project was fully financed by equity contributions of partners/promoters of CJP. RINA also confirmed that the undertaking letter is cross checked with the financials submitted and found acceptable /40/.

Participation requirement *(para 51-54, VVM version 1.1)*

M/s Chhotabhai Jethabhai Patel & Co. (CJP) from India is the only project participant and is consistent with the LoA and the PDD. India is the only Party involved in the project activity at this stage and is the host Party and the relevant DNA. India fulfills the participation requirements, having ratified the Kyoto Protocol on the 26 August 2002 and having established the National Clean Development Mechanism Authority, Ministry of Environment and Forest (MoEF) as its DNA. India issued the Letter of Approval (LoA) on 29 June 2009 (reference No. 4/9/2009-CCC) authorizing M/s Chhotabhai Jethabhai Patel & Co. (CPJ) as project participant. The validation team cross-checked the information provided about the Party and PP involved by referring to PDD and LoA and confirms that the information is consistent with the section A.3, Annex 1of the PDD.

Project Design Document *(para 55-57, VVM Version 1.1)*

PDD version 03 of 6 February 2010 submitted by the Project Participant is cross-checked with the guidelines for completing the Simplified Project Design Document (CDM-SSC-PDD) version 5 (http://cdm.unfccc.int/Reference/Guidclarif/pdd/index.html) . RINA is able to confirm that the PP used the latest CDM-SSC-PDD template, version 03 and the latest version of the guidance document.

Project Description *(para 58-64 VVM Version 1.1)*

The project activity is a power generation by using wind energy through 1.5 MW wind turbine generator (WTGs). This project is expected to supply 3,285 MWh of electricity per year to NEWNE grid and estimated GHG reduction of 29,760 tCO_2e for ten years of crediting period. The validation team confirmed the installation, make and capacities through personal inspection of the WTG during site visit and cross verifying with the purchase orders, commissioning certificate, land allotment letter, power purchase agreement with the state utility and interview with the relevant stakeholders /8/10/12/18/19/20/. The PP has submitted the PLF study based on the C-WET Wind mast data installed at Sinnar /35/. This report has been verified and accepted as the evaluation was conducted by a third Pary, qualified chartered engineer /39/. The range suggested in the report was between 23% and 25%. The PP has chosen to use the conservative figure of 25%. We have also cross verified the same against MERC tariff order dated 24 November 2003 /37/ and Actual generation report from WTG from March 2009 to January 2010

/27/. It is confirmed from the generation reports that the average annual PLF over the last 10 months was 25.36% which is very much close to the PLF observed in the technical report. Hence, RINA confirmed again the PLF study submitted by the PP is as per the annex 11 of EB 48.

Based on the purchase order /19/ /20/ and technical specification /18/ of the WTG purchased from the Suzlon Energy Limited submitted by the PP, it is confimed by the RINA team that there was no technology transfer by PP for puchasing the WTG from Suzlon Energy Limited.

The PP has submitted an undertaking letter indicating that the project activity is not a de-bundled component of a large scale project /14/. The same was physically verified during the site visit and discussed with the PP, thus it is confirmed by the RINA team that the project activity is not a debundled component of a large scale activity.

The 1.5 MW WTG was commissioned on 30 March 2009 and started electricity generation from the same day. The location number is AD-24 provided by Suzlon Infrastructure Services Limited and land survey number Gut No. 389 provided by the office of the sub registrar, Sinnar, Nashik, Maharastra, India. RINA team cross verified the above information during the site visit and it is further cross checked with the commissioning certificate /12/. Thus RINA confirms that the project description as per the latest version of the PDD /1A/ is accurate, complete and as at site.

Project start date

The start date of this project activity is 26 November 2008, which is the date of purchase order release to Suzlon Energy Limited and Suzlon Infrastructure Services Limited /19//20/. It has been verified by RINA representing the earliest date at which either the implementation or construction or real action of the project activity begins. RINA confirms that the starting date of the proposed project activity is in line with the CDM Glossary Terms. The operational life time of the project is expected to be 20 years as the same was evidenced in the purchase order and fatigue analysis of design of WTG provided by Suzlon /17//18/19/. The project is expected to reduce CO_2 emissions to the extent of 2,976 tCO_2e / year over the 10 years crediting period. A fixed crediting period of 10 years has been chosen and starting date of the crediting is mentioned as 1 June 2010 or on the date of registration of the CDM project activity whichever is later.

3.2 Baseline

General requirements *(para 65-67 VVM Version 1.1)*

The project activity has applied the small scale methodology AMS-I.D "Grid connected renewable electricity generation" Version 13 EB36 dated 14 December 2007 /5/ as per Appendix B of the simplified modalities and procedure for small scale project activity 'Indicative simplified baseline and monitoring methodologies for selected small scale CDM project activity categories' (Version 12 Annex 20, EB41).

Applicability of selected methodology *(para 68-76 VVM Version 1.1)*

The applicability of the selected and applied methodology AMS-I.D version 13 is justified as follows:

1. The project is renewable energy generation project using wind resource that supplies electricity to the national grid. The Purchase order /19//20/ for the WTG and the physical

verification at site indicates that the project activity involves power generation from wind energy; the Grid connectivity was verified through grid connectivity permission /11/ to Suzlon Energy Limited from MSETCL, PPA /30/.

2. Physical verification at site indicate that the project is not an add up of a renewable and non-renewable component and only windmill is involved in the project activity with the capacity of 1.5 MW, which not exceed the limit of 15 MW for small scale project.
3. The project activity does not involve any combined heat and power systems.
4. The project activity does not involve addition of renewable energy generation units at an existing renewable power generation facility. During the site visit, it was noted and known through operation and maintenance contractor interviews that the project participant has not any planning capacity addition no other activity at the site except of this 1.5 MW windmills and this has also been confirmed by the project participant.
5. The project activity does not seek to retrofit or modify an existing facility for renewable energy generation. The purchase order for the windmill confirms that the windmills are new and therefore no retrofication and modification is done in the existing windmill.

The project capacity is 1.5 MW, well below the limit of 15 MW and falls under the small scale category I.D as per the Appendix B. RINA is able to confirm the capacity by verifying the commissioning certificate /12/, Power Purchase agreement /30/ and on-site visit.
As this is only a windmill project, there are no likely emission sources, which are not addressed by the applied methodology, and are expected to contribute more than 1% of the overall expected average annual emission reductions.
Through the on-site visit and the above assumptions, RINA is able to confirm that the proposed project activity meets criteria expected in the simplified baseline methodology AMS-I.D.

Project Boundary *(para 77-79 VVM Version 1.1)*
The project is located in the state of Maharashtra, which is a part of NEWNE grid. Hence the baseline determination is appropriately done considering the NEWNE grid. The project boundary encompasses the physical, geographical site of renewable generation source; the boundary for the proposed project activity includes wind turbine installation, Maharashtra State Electricity Distribution Company Ltd. (MSEDCL) sub-stations at Khaprale and NEWNE regional grid. The project activity evacuates the power to the NEWNE Grid. Site visit observations, commissioning certificate/12/ and land deed agreement /8/ are verified to confirm the project boundary. RINA confirms that the identified boundary, as documented in the revised PDD is justified and appropriate for the project activity.

Baseline Identification *(para 80-87VVM version 1.1)*
According to the selected methodology AMS-I.D version 13, the project participant considered the baseline defined as the kWh produced by the renewable generating unit multiplied by an emission coefficient (measured in kg CO_2e/kWh) calculated in a transparent and conservative manner.
The baseline emission coefficient (measured in kg CO2e/kWh) is calculated as a combined margin (CM), consisting of the combination of operating margin (OM) and build margin (BM). In line with the methodology, the combined margin emission factor for NEWNE of India has been calculated to be 0.90618 tCO_2/MWh, the emission factor has been sourced from Central Electricity Authority Database "CO_2 baseline data base for the Indian Power sector User guide –

Version 4.0 Data base, October 2008" /33/ using combined margin approach consisting of 75% operating margin and 25% build margin approach. This was accepted by RINA as the CEA data base, version 4 was the latest available to the project participant at the time of PDD submission for validation dated 27 March 2009. As per CEA data base, the operating margin has been determined to be 1.009 tCO_2/MWh and the build margin to be 0.59771 tCO_2/MWh. The combined margin emission factor for the NEWNE grid of India has been determined to be 0.90618 tCO_2/MWh. RINA confirms that the CEA database is an official publication of the Government of India for the purpose of CDM baselines and the OM in the CEA database is calculated using the simple OM approach based on the generation weighted average emissions per electricity unit of all fossil fuelled generating sources serving the system over a three year period of 2005-2006, 2006-2007 and 2007-2008. BM is calculated ex- ante based on the 20% most recent capacity additions in the grid based on net generation for the year 2007-2008.

Additionality *(para 93-120, VVM version 1.1)*
Prior consideration of CDM *(para 97-103 VVM, version 1.1)*

The starting date of the project activity is 26 November 2008, which is the date of purchase order release to Suzlon Energy Limited and Suzlon Infrastructure Services Limited /19/ /20/. It has been verified by RINA representing the earliest date at which either the implementation or construction or real action of the project activity begins. RINA confirms that the starting date of the proposed project activity is in line with the CDM Glossary Terms.

Since the starting date of the project activity is 26 November 2008, which is after 2 August 2008 and before the global stakeholder's comments, project participant has informed to UNFCCC and DNA on the commencement of the project activity and their intention to seek CDM status. RINA verified the same from UNFCCC website (http://cdm.unfccc.int/Projects/PriorCDM/notifications/index_html?s=140), and letter to DNA, dated 8 December 2008 /15/. It is evident that the project participant has infomed UNFCCC secretariat and DNA on the commencement of the project activity just after the project activity start date and within six months of the project activity start date, as prescribed by EB requirement. From the partners note /32/ and the latest version of the IRR sheet /3/, it has been demonstrated that the benefits of CDM were a decisive factor and was seriously considered in the decision to proceed with the project activity. The project was commissioned on 30 March 2009 and started operation on the same day.

The proponent has provided chronology of events in the latest PDD from conceptualization of the project activity till getting LoA from DNA. The validation team verified the evidences for all the events listed in the chronology. It is seen that the proponent has initiated real action in parallel to the implementation of the project activity. Appoinment of CDM consultant dated 21/11/2008 /29/, release of purchase order for wind turbine dated 26/11/2008 /19/20/, stakeholders consultation dated 21/02/2009 /25/26/, appointment of the DOE dated 14/03/2009 and LoA from DNA dated 29/06/2009 /4/ were completed within a year after the start date of project activity. It is also evident that the project participant requested validation within 6 months of the decision and even before the obtaining of the host country approval. This is a reasonable time within which the validation was requested subsequent to the decision and there has been real action to secure CDM status in parallel to the implementation of the project activity. All the events discussed in the chronology establish that real actions were taken by the PP to secure CDM status for the project in parallel with its implementation.

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Identification of alternatives (*para 104-106, VVM, Verion 1.1)*

As per para 9 of the selected methodology AMS-I.D, version 13, the baseline is defined as the kWh produced by the renewable generating unit multiplied by an emission coefficient (measured in kg CO_2e/kWh) calculated in a transparent and conservative manner. The project participant has also considered the baseline is in line with what is prescribed by the methodology. Since the approved methodology applied prescribes the baseline scenario, according to paragraph 104 of the VVM version 01.1 no further analysis is required.

Investment barrier

Based on the Attachment A to Appendix B, the investment barrier has been adopted to prove the additionality of the project. An investment analysis is applied to demonstrate that the project is not financially attractive and thus faces an investment barrier.

Investment analysis: choice of approach. *(para 107-113, VVM, Version 1.1)*

The project participant in doing the investment analysis adopted the Methodological Tool **"**Tool for the demonstration and assessment of additionality", (Version- 05.2, Annex 10, EB39) /23/.
Since, the project will generate revenue from the sale of electricity to the Maharastra State Electricity Distribution Company Ltd., the simple cost analysis cannot be used; further the baseline scenario does not require investment by the project proponent and is outside the control of the project proponent, therefore investment comparison analysis is not suitable. Hence benchmark analysis is considered appropriate for the project activity.

Investment analysis: benchmark selection

The project proponent has chosen to apply the benchmark analysis method and has identified project IRR as the most suitable financial indicator. Additionality tool (Ver. 05.2) recommends a financial/economic indicator such as IRR, for demonstrating the additionality using benchmark analysis. Since the project developer is demonstrating the financial unattractiveness of the project, project IRR is appropriate as it is often used by the project developers to make a decision on investing in the project. The benchmark opted by PP for the project activity is Prime Lending Rate (PLR) published by Reserve Bank of India for five major nationalised banks. PLR for the period April 2008 to November 2008 was in the range of 12.25% to 14%. The PP has conservatively chosen the lower end of range ie 12.25% as the benchmark. Since the start date of the project activity is on 26 November 2008, RINA is therefore able to confirm that the benchmark selected was valid when the investment decision was made on November 2008.

Investment analysis: input parameters

The investment analysis has been performed for 20 years considering costs and revenue from power generation. RINA assessed the assumptions in the investment analysis as follows:

Parameter and value	***Source***	***Validation justification***
Project Cost		
Total cost Rs 1000 lakhs	Offer letter from Suzlon Energy dated 29 August 2008 /36/ /19/ /20/.	The cost is verified against offer letter. The total costs have been also cross-checked against the purchase orders issued to Suzlon Energy on 26 November 2008 /19/ /20/. The actual project cost was Rs 910.01 lakhs. As the actual cost of the project is lower than the original estimation by about 9%, project cost is identified as one of the parameters for sensitivity analysis.
Capacity of machine 1500 KW	Offer letter from Suzlon Energy dated 29 August 2008 /36/.	Cross verified against Purchase orders/19/20/, commissioning certificate /12/ and Site visit.
Number of machines 1	Offer letter from Suzlon Energy dated 29 August 2008 /36/.	Cross verified against Purchase orders/19/ /20/, commissioning certificate /12/ and Site visit.
Plant Load Factor 25%	Technical Evaluation report by Madhav Consultants- Chartered Engineers and Govt registered valuers for all Assets and Vehicles and Techno-economic-viability studies consultants. Report of October 2008 /35/ /39/.	The report has been verified and accepted as the evaluation was conducted by a third Pary, qualified chartered engineers. The range suggested in the report has been between 23% and 25%. The PP has chosen to use the conservative figure of 25%. We have also cross verified the same against 1. MERC tariff order dated 24 November 2003 /37/. 2. Generation reports from the site /27/ /31/. The generation reports and invoices suggest that the average annual PLF over the last 12 months was 25.36%. The impact of this variation is considered in the sensitivity analysis below.
Estimates of profits and incomes		
Sale of Electricity	The revenues are calculated on the basis of annual generation from project activity and net electricity exported to NEWNE grid.	
Derating after 10^{th} year 5%	MERC tariff order 2003, page no. 33, Para 2.2.3 /37/.	Verified against MERC tariff order dated 24 November 2003 /37/
Annual Generation 32.85 lakhs kwh/year	Calculated using the capacity of the machine and the plant load factor	Verified the calculation and found it to be correct.

	and grid availability /3/.	
Selling price/ Tariff • Selling rate Rs 3.50 /unit. • Annual escalation up to 13th year Rs.0.15/kwh per year • From the 14th year the PP has assumed that the rates revert back to Rs3.50/unit	Based on MERC order dated 24 November, 2003 /37/.	The MERC order was available to the project proponent at the time of project conception and hence is acceptable for determining the tariff rate. The rates also agree to the tariff mentioned in the Power Purchase Agreement between Chhotabhai Jethabhai Patel and Co and Maharashtra state Electricity Distribution Company Limited.
Operating and management expenses • Rs 19 lakhs per year • Annual escalation 5% per annum. Expenses applicable from year 2 onwards	Offer letter from Suzlon Energy dated 29 August 2008 /36/.	Verified against Offer letters and the O&M confirmation letter from Suzlon Infrastructure Services Ltd. The Offer letter was available to the project proponent at the time of decision making hence it is acceptable to use this for the financial analysis. Follwing negotiations with the supplier, the actual maintenance cost for the base year was set at Rs 15.5 lakhs with an escalation rate of 5%. The impact of this reduction is considered in the sensitivity analysis.
Insurance Charges ***Rs. 1.8 lakhs per annum***	Offer letter from Suzlon Energy Limited dated 29 August 2008 /36/.	Verified against the offer letter from Suzlon Energy Limited. The actual insurance premium is Rs 50,000 per year and burglary of Rs 12,000 per year. The insurance premium contained in the offer letter covered all risks such fire and special perils, burglary, breakdown, public liability etc. At the time of preparing the investment analysis, the PP did not have any other source of information with regard to the insurance premium and has therefore assumed that they would take the comprehensive policy. However since then the PP decided to take an insurance policy only for fire, special perils and burglary. The operating and management contract with Suzlon will ensure proper cover during breakdown etc. This is an acceptable situation.
Depreciation	Straight line method and Income tax Act	The generally accepted accounting practice in India is to adopt the straightline method for computing book profit and the WDV for computing taxable profits. The Income tax Act stipulates the depreciation rates to be adopted for calculating the taxable profits. Accordingly, the project developer has adopted straight line depreciation for computing book profit and

		Income Tax Act stipulated WDV depreciation for income tax calculation, which are accepted accounting tools for the demonstration and assessment of additionality. The block of assets has been computed for depreciation purpose as per the accepted accounting principles.
Residual value 5%	Estimate	The project proponent has estimated the following residual values 1. Plant and Machinery of 5% of initial costs which is an acceptable industrial standard. 2. Land 100% of the original value.
Income tax liability 33.99%.	Income tax Act	Tax liability has been calculated as per the income tax rules. In computing the income tax liability, the project developer has taken into account the accelerated depreciation , which the wind turbines are eligible for and the Tax shelter (under the Income Tax Act, 1961), which the infrastructure projects (under which the project activity falls) are entitled to. The tax rate assumed corresponds to the tax rate prevailing at the time of taking decision. The project proponent has assumed a notional cash inflow which is equivalent to the tax saved on account of the accelerated depreciation and also a notional cash outflow which is the tax paid in the years of profit. In the absence of this notional cash outflow, it would appear that the tax saved would be accounted for twice. Firstly by setting of the current year profits against losses brought forward from previous years in so far as this carried forward loss would arise on account of the accelerated depreciation. Secondly as a notional cash inflow in the years of accelerated depreciation. In accordance with the provisions of Section 80IA of the Income tax Act, the project proponent has estimated that no tax is due on profits from year 10 to year 15. The treatment of section 80IA has been supported by an opinion from Sharad Shah and Co- Chartered Accountants.

RINA confirms that the input values used in the financial analysis are reasonable and adequately represent the economic situation of the project activity at the time of the invesment decision. The financial expert verified the IRR calculations and observed them to be in order. The annual report of CJP for year 2007-08 is verified by the financial expert and confirms that most of the funding is by way of share capital or advances from family members and business associates. There is only one secured loan from the Bank of Baroda for working capital purposes. Therefore the PP's assumptions with regard to the financing of the project appear to be justified.

Investment analysis: calculation and conclusion

RINA confirms that the input values taken from quotation/documents, adoption of correct accounting principle and arithmetical calculations accurate. Validation team checked the quotation/documents and ensured that right input has been taken in the project cost and projections. The accounting principles adopted with respect computation of interest during construction, block of assets, pro rata expenses and tax computation are found to be in order. The arithmetical accuracy is also found to be correct. The principle adopted by the project developer for computing project IRR is in conformity with the "Guidance on the Assessment of Investment Analysis ". IRR has been computed for 20 years. The residual value is the total of 5% of equipment cost and 100% of the land cost, which appears reasonable. The cost of land has been included in the original offer of Rs 1000 lakhs.

The project IRR for the project activity without the CDM revenue is 8.99%, which confirms that the propsoed project activity in absence of CDM benefits and compared to the the benchmark IRR of 12.25% is not financially attractive. The validation team further confirms that the project IRR for the project activity without CDM is 8.99% and is less than the benchmark of 12.25%. The IRR for the project activity with CDM benefit is 12.26% and just crossing the identified benchmark. This IRR is based on a rate of Euro 20 per CER /38/.

Investment analysis: sensitivity analysis.

A sensitivity analysis has been carried out for parameters contributing more than 20% to revenue costs to demonostrated the robustness of the financial analysis. Reasonable variations of the Plant Load Factor, operational costs, project costs and electricity tariff were checked by calculating the variation necessary to reach the benchmark and then discussing the likelihood for that happen.

Sensitivity Analysis based on PLF					
Variation	10%	5%	0	-5%	-10%
Chhotabhai Jethabhai Patel & Company	10.59%	9.81%	8.99%	8.13%	7.23%

It can be seen from the above analysis that the benchmark of 12.25% is not crossed when the PLF is increased by 10%. The PLF used by the project proponent is 25%. Increasing the PLF by 10% would take the PLF to over 27.50%. The generation report for 2009-10 provided to us by the client shows that the PLF achieved has been in the range of 25.36%. The benchmark is not met even at these levels. Our own analysis reveals that the PLF will have to be in the range of 33% consistently for the benchmark levels to be achieved- an unlikely scenario given that even the PLF achieved has been around 25.36%.

Sensitivity Analysis based on Operation and Maintenance Expenses					
Variation	10.00%	5.00%	0.00%	-5.00%	-10.00%
Chhotabhai Jethabhai Patel & Company	8.68%	8.84%	8.99%	9.13%	9.28%

The benchmark is not crossed even when the operations and management expenses are reduced by 10%. The validation team analysis reveals that operating and management expenses will need to be eliminated completely i.e a reduction of 100% to exceed the benchmark. This is not a likely scenario as some amount of expenses will be incurred in the operation of the plant.

Sensitivity Analysis based on Project Cost					
Variation	10.00%	5.00%	0.00%	-5.00%	-10.00%
Chhotabhai Jethabhai Patel & Company	7.47%	8.20%	8.99%	9.85%	10.79%

The benchmark of 12.25% is not exceeded when the project cost is reduced by 10%. The validation team analysis reveals that a reduction of approximately 17% i.e the project cost needs to in the region of Rs 832 lakhs, for the IRR to cross the benchmark of 12.25% given at the time of validation. The project cost has already been incurred and is about Rs. 912 lakhs, this scenario cannot happen. We have received and cross verified actual cost of Rs 912 lakhs against purchase orders.

Sensitivity Analysis based on tariff change from 14th year					
Variation	10.00%	5.00%	0.00%	-5.00%	-10.00%
Chhotabhai Jethabhai Patel & Company	9.23%	9.11%	8.99%	8.86%	8.73%

The Project proponent has already entered into Power Purchase Agreement with the MSEDCL for 13 years at the rates mentioned in the financial analysis. Therefore a variation in the tariff before year 13 is impossible. The Project proponent has therefore carried out the sensitivity analysis after the 13th year by increasing and decreasing. The benchmark is not crossed even when the tariff is increased by 10%. The validation team analysis reveals that the tariff from the 14^{th} year will have to increase by 181.5% ie a rate of Rs9.85 per unit. Given that the current rate is Rs 3.50 increasing to only Rs 5.30 in year 13, the rate of 9.85 will be impossible to achieve.

In conclusion, based on the above discussion the project activity without CDM revenues is not a financially attractive as the financial return from the project is less than the referred benchmark IRR. Hence, the emissions reductions occurring from the project are deemed additional to those that would occur in the absence of the project activity.

Barrier analysis *(para 114-117, VVM, Version 1.1)*

Project participants earlier adopted the barrier analysis to demonstrate the additionality of the proposed project activity, but since both in the investment barrier, in barriers due to prevailling practices and other barriers the main argument was that the project is not financially attractive, the project participant decided to apply the investment analysis as conservative approach. As discussed in the previous section of this report the investment analysis has been adopted and all

the assumptions as well the IRR calculation were checked by the validation team and it has been demonstrated that the proposed project activity without the CDM revenues is not a financially attractive.

3.3 Monitoring Plan (*para 121-123, VVM version 1.1)*

The project activity correctly applies the approved monitoring methodology AMS-I.D, version-13, EB- 36 for "Grid connected Renewable Electricity generation" /5/.

Parameters determined ex-ante:

Baseline emission factor of NEWNE grid is established ex-ante based on the approved methodology AMS-I.D version 13 paragraph 9, using a combined approach consisting 75% operating margin and 25% build margin. The combined margin of NEWNE grid has been determined to be 0.90618 tCO_2/MWh. The operating margin has been estimated to be 1.0090 t CO_2/MWh and build margin to be 0.59771t CO2 / MWh. The emission coefficients are determined from official data published in Central Electricity Authority (CEA) CO_2 Baseline Database version 4, available to the project participant at the time of submission of the PDD for validation. CEA, which is an official source of Ministry of Power, Government of India, have worked out baseline emission factor for various grids in India and made them publicly available as CO_2 Baseline database – Version 4.0 Database /33/. The calculations and assumptions were verified by the validation team and found to be correct and appropriate.

Parameters determined ex-post:

The parameters monitored ex-post involves net electricity supplied to the NEWNE grid by the project activity and the same is used in emission reduction calculations. The net export values from the credit subdivision of energy as recorded at main/bulk HT meter of MSEDCL signed by Suzlon representative is used in raising the invoice to MSEDCL.

During the site visit and interaction with representatives of O&M service provider M/s Suzlon Infrastructure Service Limited, it is noted that JMR (Joint Meter Reading) is taken at a common evacuation /injection system, comprising the net energy exported from all the WTGs that are connected to Khaprale substation. The power exported and imported from the grid is hourly monitored and recorded on a monthly basis by the O&M personnel and both parties will sign on the recorded readings on a monthly basis, evidenced from the Joint Meter Reading submitted by the proponent /27/. This JMR forms the basis for apportioning, which is done by MSEDCL to calculate the net energy exported to the grid from 1.5 MW WTGs of M/s Chhotabhai Jethabhai Patel & Co. As per the MERC tariff order dated 24 November, 2003 which stated that transmission losses should not be more than 5%. The same was also cross verified during the site visit with O & M contractor. The transmission losses further cross checked with the help of JMR. The deduction of net electricity supplied to grid and reading at controller gives the value of transmission losses. The average transmission losses calculated by the validation team based on the JMR submitted by PP for 9 months was 3.8% which is below then the 5% mentioned in the MERC tariff order dated 24 November, 2003. Therefore, it is confirmed by the RINA team that the transmission losses is in line as per the MERC order.

Management system and quality assurance.

Electricity import to the grid and export from the grid at Khaprale substation is metered by main and check meter which is tri-vector meters of accuracy class 0.2%. The main meter reading is taken jointly on the 1st day of every month for the preceding month at the delivery point and signed by the representatives of state utility and O&M personnel as discussed in PPA /30/. In the event of failure of main meter the check meter will be used in monitoring the electricity data. The WTG is equipped with an integrated electronic meter. This meter is connected to the Central Monitoring Station (CMS) of the entire wind farm through a wireless Radio Frequency (RF) network (SCADA). The generation data of WTG can be monitored as a real-time entity at CMS by the O&M contractor Suzlon /16/. The validation team also interacted with the O&M service provider; M/s Suzlon Infrastructure services Ltd, who is the windmill supplier itself. The agency is experienced in the monitoring system and is managing O&M of numerous other wind farm CDM projects.

The validation team therefore is of the opinion that the project participant through the O&M agency is capable of implementing the monitoring plan in the context of the project activity /41/.

Calibration of all the meters is done by MSEDCL officials as per the industry standards at regular intervals (annually) with 0.2 % accuracy class meters /21/. The energy meter recording the export and import from the grid at substation is under the control and supervision of MSEDCL. Similarly Suzlon is responsible for monitoring of the generation data at CMS. It is reported that the data will be kept for 2 years following the end of the fixed crediting period.

The responsibilities and authorities of project management, data handling and recording, measurement methods and QA/QC procedure have been systematically established and formalized and the same was verified during the site visit.

RINA confirms that the monitoring plan mentioned in the latest PDD is in accordance with the requirements mentioned in the monitoring methodology and the local regulatory requirements. The monitoring plan will give opportunity for real measurement of achieved emission reductions.

3.4 Calculation of GHG Emissions *(para 88-92, VVM version 1.1)*

The calculation and formulae as addressed in the approved baseline and monitoring methodology AMS-I.D, version 13 have been applied.

The baseline emissions for the project activity have been calculated as the product of the net electricity imported to NEWNE grid by the project activity and combined margin emission factor of the NEWNE grid. The combined margin (CM), consisting of the combination of operating margin (OM) and build margin (BM) has calculated to be 0.90618 tCO_2/MWh which has been sourced from the Central Electricity Authority (CEA) CO_2 Baseline database CEA, according with the "Tool to calculate the emission factor for an electricity system",version 2, annex 14, EB 50 /41/.

Consideration about EF_{OM}: The simple OM emission factor calculation method is selected due to low-cost/must run projects are low than 50% (respectively 18.0% in 2005-2006, 18.5% in 2006-2007, 19.0% in 2007-2008). The ex-ante vintage data will be employed for the OM calculation of the project. The PDD was web-hosted on 27 March 2009 and the latest available data vintage is from 2005 to 2008 /15/. EF_{OM} for 2006, 2007 and 2008 are calculated as the most recent three

years full generation weighted average of the emission factors, consequently the Operating Margin Emission Factor is determined to be 1.0090 tCO_2/MWh. The EF_{OM} is calculated is fixed ex-ante and will not be reviewed in the crediting period of the project activity.
Consideration about EF_{BM}: BM is calculated ex- ante based on the 20% most recent capacity additions in the grid based on net generation for the year 2005-2008. Consequently the Build Margin emission factor is determined to be 0.59771 tCO_2/MWh.
The baseline emission factor is calculated as the average of the operating margin emission factor and the build margin emission factor where the weights W_{OM} and W_{BM}, by default, are 75% W_{OM} and 25% W_{BM}. The combined margin emission factor for NEWNE of India has been calculated to be 0.90618 tCO_2/MWh, which is fixed ex-ante for the entire crediting period.
The PP is used official data for OM and BM published by Central Electricity Authority (CEA) CO_2 Baseline database version 4, October 2008. CEA, (which is an official source of Ministry of Power, Government of India) have worked out baseline emission factor for various grids in India and made them publicly available CO_2 Baseline database – Version 4.0 Database /33/. The validation team accepted the same as this is the latest version of the database available to the project participant at the time of submission of PDD for validation dated 27 March 2009.
As per the methodology AMS-I.D, the project activity involves grid connected energy generation from renewable power plant. Therefore, it doesn't need to consider the project emissions. Also, it was verified that the wind turbine is brand new and there is no transfer of equipment from other project activity. Hence, no leakage has been considered for this project activity.
The validation team concludes that the project emissions, baseline emissions, leakage and emission reductions stated in the latest PDD are appropriate and as per the methodology.

Algorithm and formulae used to determine emission reductions (*Para 88-92, VVM, Version 1.1)*
Based on the above consideration the emissions reductions from the project activity have been determined to be 2,976 tCO_2e per year over the 10 years crediting period, based on ex-ante fixed baseline emission factor of 0.90618 tCO_2/MWh.
The validation team also confirms that the estimates provided in the PDD are reasonable and the project participant has correctly applied the methodology. In summary RINA confirms that the emission reductions are correct, reasonable and conservative.

3.5 Environmental Impacts *(para 130-132, VVM version 1.1)*
The project activity is expected to have positive impacts and no significant adverse environmental impacts are forseen. Since, the project activity is a power generation from renewable source (i.e wind energy) therefore no negative impact are envisaged. . There is no mandatory legal requirement for carrying out EIA for wind power projects in India, which was verified by means of EIA notification dated 14/09/2006, of MoEF /34/. However, RINA has verified all the clearances like statutory clearances, commissioning certificate and Power Purchase Agreement for the WTG /9/ /11/ /12/ /13/ /30/. RINA confirms that all the clearances obtained are in accordance with the procedures required by the host party.

3.6 Comments by Local Stakeholders *(para 127-129 vvm 1.1)*

As per the CDM requirements, it is necessary to invite the relevant stakeholders, before the validation process starts. Stakeholder's consultation meeting to discuss stakeholders concerns on the proposed CDM project- "Wind Power Project by M/s Chhotabhai Jethabhai & Co. (CJP) at Sinnar, Maharastra", was held on 21 February 2009 at Village – Adwadi, Taluka – Sinnar of District Nashik, Maharastra. The stakeholders meeting was conducted prior to the publication of PDD on the UNFCCC website, that was on 27 March 2009. Stakeholders were invited by means of public notice displayed on notice board of primary school in Adwadi village and through personal invitation dated 6 February 2009 /25/. The same has been verified by the local villagers and O & M contractors during the onsite visit. The stakeholders were given a reasonable time of 15 days gap from the day of public notice for submission of comments.

The stakeholders identified by the project participant were Villagers, Employee of Suzlon and Local communities. The validation team verified the list of participants who attended the stakeholder meeting and feedback questionnaire /26/ and confirms the stakeholders identified are relevant. The validation team also verified the minutes of meeting /26/ to note that no negative comments were received and the same was cross checked with the information obtained during follow up interviews with the stakeholder's /40/ /41/ /42/ /43/ /44/ /45/. The PP keeps the photographs and the video evidences, taken during the stakeholder consultation. The validation team is of the opinion that the local stakeholder's process was adequate giving fair opportunity for the participation by local stakeholders.

4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGO$_S$

According to the modalities for Validation of CDM projects, the DOE shall make publicly available the PDD and receive, within 30 days, comments from parties, stakeholders and UNFCCC accredited non-governmental organizations and make them publicly available.

The PDD of 18 March 2009, version 01 was made publicly available on UNFCCC website (https://cdm.unfccc.int/Projects/Validation/DB/SZE3ZKTX8SZHF8C45PW8N3F73LVZEM/view.html). Parties, stakeholders and UNFCCC accredited non-governmental organizations were invited through the CDM website to provide comments during the 30 days period from 27 March 2009 to 25 April 2009. No comments were received from any parties, stakeholders and NGO's during that period.

5 VALIDATION OPINION

RINA has performed a validation of the "Wind Power Project by M/s Chhotabhai Jethabhai Patel & Co. (CJP) at Sinnar, Maharashtra", in India on the basis of UNFCCC criteria and host Party criteria as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article of the Kyoto Protocol, the CDM modalities and procedures and the subsequent decision by the CDM Executive Board. The review of the Project Design and the subsequent follow up interviews has provided RINA with sufficient evidence to determine the fulfillment of stated criteria.

The project participant is M/s Chhotabhai Jethabhai Patel & Co (CPJ) from India. Party meet all the participation requirements and has approved the project activity. The DNA of India has confirmed that the project assists in achiving sustainable development and has accorded the approval of the project on 29 June 2009.

The validation has confirmed that the project is eligible as category I.D small-scale CDM project activity and correctly applies the simplified baseline and monitoring methodology AMS-I.D version 13. The determination of baseline was elaborated, transparently and sufficiently supported with facts. The selected baseline scenario is reasonable for the selected 10 years crediting period. Moreover, an analysis of investment demonstrates the proposed project activity is not a likely baseline scenario.

By generating renewable energy from wind power plant, the project results in reduction of GHG emissions that are real, measurable and give long term benefits and that are additional to what would have occurred in the absence of the project. The annual emission reductions from the project are estimated to be on the average 2,976 tCO_2e per year during over the selected 10 years fixed crediting period. The emission reduction forecast has been checked and is deemed likely that the stated amount is achieved given that the underlying assumptions do not change.

The monitoring plan makes sufficient provisions for monitoring relevant to project and baseline emission indicators. Responsibilities and authorities for project management, monitoring and QA/QC procedures have also been addressed.

In summary, it is RINA's opinion that the project" Wind Power Project by M/s Chhotabhai Jethabhai Patel & Co. (CJP) at Sinnar, Maharashtra", as described in the PDD version 03 dated 06/02/2010 meets all relevant UNFCCC requirements for the CDM and all relevant host Party criteria and correctly applies the approved simplified baseline and monitoring methodology AMS–I.D version 13.

RINA, thus requests the registration of the project "Wind Power Project by M/s Chhotabhai Jethabhai Patel & Co. (CJP) at Sinnar, Maharashtra" in India, as a CDM project activity.

6 REFERENCES

Category 1 Documents:

List documents provided by the Client that relate directly to the GHG components of the project,

/1/	PDD (prepared by Mitcon Consultancy Services. Ltd.) for Wind Power Project by M/s Chhotabhai Jethabhai Patel & Co. (CJP) at Sinnar, Maharashtra, Version 01 dated 18 March 2009.
/1A/	PDD (prepared by Mitcon Consultancy Services. Ltd.) for Wind Power Project by M/s Chhotabhai Jethabhai Patel & Co. (CJP) at Sinnar, Maharashtra, Version: 03, Dated: 6 February 2010
/2/	Emission reduction calculation sheet, Version 2, dated 12 February 2010
/3/	IRR calculation sheet for the project, Version 2, dated 7 February 2010
/4/	Approval Letter issued by the DNA of India dated 29 June, 2009 reference No. 4/9/2009-CCC

Category 2 Documents:

List background documents related to the design and/or methodologies employed in the design or other reference documents.

/5/	CDM Executive Board – Simplified baseline and monitoring methodology AMS-I.D. – Grid connected renewable electricity generation Version 13 EB-36, dated 14 December 2007.
/6/	CDM Executive Board - Clean Development Mechanism Validation and Verification Manual, Version 1.1, dated 4 December 2009, Annex 3, EB-51. http://cdm.unfccc.int/EB/051/eb51_repan03.pdf
/7/	CDM Executive Board - Guidance on the demonstration and assessment of prior consideration of the CDM , version 03 Annex 22 of EB 49 http://cdm.unfccc.int/EB/049/eb49_repan22.pdf
/8/	The land deed agreement document number 9030/2009 dated 2 March 2009 issued by Sub-registrar office, Taluka Sinnar, District – Nashik, Maharastra, India.
/9/	The infrastructure clearance ref. no. PGN-1/IC/C J Patel/1.50 MW.08-09/1560 from MEDA dated 25 March 2009.
/10/	The commissioning clearance letter from MEDA ref. no. PGN-1/CC/C J Patel/1.50 MW/08-09/1588 dated 30 March 2009
/11/	The grid connectivity permission from MSEDCL/CO/STU/Grid Connectivity/16228 dated 4 December 2008
/12/	The Commissioning certificate from MSEDCL ref. no. SE/NSKR/T-2/WTG-S/02134 dated 30 March 2009

/13/	The no objection certificate from Earth Science and Mining department, Government of Maharastra, Nagpurref. no. 70/2006/3487 dated 12 November 2008
/14/	The undertaking letter dated 31 March 2009 submitted by CJP indicating that the project activity is not a debundled component of a larger project activity.
/15/	A copy of prior intimation to the UNFCCC dated 8 December 2008 and DNA on the commencement of the project activity and their intention to seek CDM status and acknoledgement email from UNFCCC dated 11 December 2008 for the same.
/16/	A copy of operation and maintenance Contract between Suzlon Infrastructure Services Limited and CJP dated 8 April 2009.
/17/	A note on Fatigue analysis of design of turbine for 20 years issued by Suzlon Energy Limited, Pune, Maharastra.
/18/	Technical specifications for S-82 1.5 MW 50 Hz Standard Temperature Version Hub Height 78.5 m Tubular tower WTG issued by Suzlon Energy Limited, Pune, Maharastra (India)
/19/	A copy of purchase order issued by CJP to Suzlon Energy Limited dated 26 November 2008 for supplying 1 No. of S-82 Suzlon 1500 KW Wind Turbine Generator (WTG), 1 No. sets of transformer, 1 No. Tubular tower,
/20/	A copy of work order issued by CJP to Suzlon Infrastructure Services Limited for civil work including Foundation & Allied Works, Erection, Installation and Commissioning of 1 No. WTG at Sinnar.
/21/	A copy of calibration certificate for 132/33 KV meter at Khaparale substation issued by Executive Engineer, Testing division, MSEDCL, Nashik dated 19 August 2008.
/22/	A copy of Insurance letter for property at AD-24, Gut No. 389, Village- Adwadi, Tal.- Sinnar, Dist.- Nasik dated 8 April 2009 issued by IFFCO-TOKIO GENERAL INSURANCE CO. LTD, Ahmedabad.
/23/	"Tool for the demonstration and assessment of additionality", version 05.2
/24/	A list of employees attended Internal Training dated 8 May 2009 conducted by Satara Learning Centre, Suzlon Energy Limited for learning and development of staff working in project, power evacuation, land, O & M and other support function of Maharastra.
/25/	A copy of Invitation letters issued by CJP for conducting a stakeholders meeting on 21 February 2009 at Suzlon site office, Sinnar dated 6 February 2009.
/26/	A copy of attendance sheet for stakeholder meeting conducted by dated, document containing minutes of the meetings, a copy of feedback questionnaire/form provided to stakeholders.
/27/	A copy of joint meter reading (JMR) for importing electricity to the MSEDCL from March to December 2009.
/28/	CDM Executive Board: Guidelines for completing the simplified Project Design

	Document (CDM-SSC-PDD) and the form for proposed new small scale methodologies (CDM-SSC-PDD) (version 05), dated 14 September 2007.
/29/	A copy of appointment letter for MITCON Consultancy Services Ltd., Pune, for CDM services dated 21 November 2008.
/30/	Power Purchase Agreement between CJP and MSEDCL dated 6 April 2009
/31/	A Invoices issued by CJP from march 2009 to December 2009
/32/	A Certified true copy of the decision for investing in the project activity taken by the partners of M/s Chhotabhai Jethabhai Patel & Co. dated 19 November 2009.
/33/	CO_2 Baseline Database for the Indian Power Sector User Guide, Version 4.0, October 2008 issued by Central Electricity Authority (CEA), Ministry of Power, New Delhi, India.
/34/	The MoEF EIA Notification dated 14 September, 2006
/35/	Technical Evaluation Report , October 2008 of Wind Turbine Generator at Adwadi, Nashik conducted by M/s Madhav Consultants, Pune
/36/	Offer Letter issued by Suzlon Energy Limited to CJP dated 29 August 2008 for supplying Wind Turbine Generator, Tubular tower, Erection, Installation & Commissioing of WTG, Civil work including foundation & allied work, Power Evacuation facility, Electrical items, Installation of DP Yard and Electrical line Items, Sub lease right of land etc.
/37/	MERC Tariff order dated 24 November 2003
/38/	CDM Highlights 61, monthly news letter of the GTZ Climate Protection Programme (CaPP) for July 2008 indicated on page 2 about the CER rate i.e 20.9 Euro/CER. **Error! Hyperlink reference not valid.**
/39/	Membership certificate from Institution of Engineers dated 10 December 1997 (Government of India) of Mr. K. S. Karandikar (Technical Consultant prepared PLF report)
/40/	An undertaking letter from CJP dated 15 February 2010 indicating that no ODA is used in the project activity.
/41/	A copy of ISO 9001 certificate dated 27 August 2009 issued to Suzlon Infrastructure Services Limited issued by DNV.
/42/	List of interviewed person during the site visit of CJP dated 26 June 2009
/43/	(www.cdmindia.nic.in/cdmindia/projectList.jsp) This is an official website of Indian DNA the language of website was in English and this website was checked by validation team in December, 2009.
/44/	(http://cdm.unfccc.int/Reference/Guidclarif/pdd/index.html). This is official website of UNFCCC and the language was in English.The guidelines for completing CDM-SSC-PDD version 5 was refered to cross-checked the format and information provided in the PDD in August, 2009.

Persons interviewed:

	List of interviewed person on 26 June 2009 at Adwadi, Sinnar, Nasik, Maharstra, India.
/45/	Mr. D.T. Shah- GM Finance, Chhotabhai Jethabhai Patel & CO.
/46/	Mr. Kamlesh Upadhyaya-CS , Chhotabhai Jethabhai Patel & CO.
/47/	Mr. Kishor Deshmukh – Senior Consultant (MITCON)
/48/	Mr. Sanjay Thorat – Section In-charge, (SUZLON Energy limited)
/49/	Ms. Ganjedra – HT Incharge, O & M (SUZLON Energy limited)
/50/	Mr. Sanjay D. Thorat –Engineer (SUZLON Energy limited)

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APPENDIX A

CDM VALIDATION PROTOCOL

This document contains a generic Validation Protocol for CDM projects, which must be seen in conjunction with the CDM Validation and Verification Manual and the Validation Report Template. The entries in the protocol should be adjusted and amended as appropriate to prepare for the validation of a particular project.

This validation protocol serves the following purposes:

- *It organizes, details and clarifies the requirements a CDM project is expected to meet; and*
- *It ensures a transparent validation process by inducing the Validator to document how a particular requirement has been validated and which conclusions have been reached;*

This protocol contains two tables with generic requirements for validation projects. Table 1 shows the requirements that the GHG emission reduction project will be validated against. Table 2 consists of a checklist with validation questions related to one or more of the requirements in Table 1. The checklist questions may not be applicable for all investors, and should not be viewed as mandatory for all projects. Where a finding is issued, a corrective action request or clarification request are stated. The resolution and final conclusions of these requests should be described in Table 3 of this protocol.

Before this generic validation protocol can be applied to validate a specific project, the Validator must review and adjust/amend the protocol to make it applicable to individual project characteristics and circumstances as well as individual investor criteria. The application of the Validator's professional judgment and technical expertise should ensure that checklist amendments cover all necessary specific project requirements that have impact on project performance and acceptance of the project. Given the above, the checklist part of the protocol is neither exhaustive nor prescriptive.

Table 1 Mandatory Requirement for Clean Development Mechanism (CDM) Project Activities

Requirement	Reference	Conclusion	Cross Reference / Comment
1. The project shall assist Parties included in Annex I in achieving compliance with part of their emission reductions commitment under Art. 3.	Kyoto Protocol Art.12.2	~~CL 11~~ OK	Table 2 section B.6.3.1 ~~CL 11~~ Please clarifiy why equation 11 of 'Tool to calculate the emission factor for an electricity system' (Annex- 12, Version-01.1, EB- 35) is used for calculating emission reduction (ERy).
2. The project shall assist non Annex I Parties in achieving sustainable development and shall have obtained confirmation by the host country thereof.	Kyoto Protocol Art. 12.2, Marrakesh Accords, CDM Modalities §40a	OK	Table 2 Section A.3.1
3. The project shall assist non Annex I Parties in contributing to the ultimate objective of the UNFCCC.	Kyoto Protocol Art.12.2.12	~~CAR 3~~, ~~CL 11~~ OK	Table 2 section A.3.1, B.6.3.1 ~~CAR 3~~ According to the PDD Guide, the first column should include only the reference year (2009, 2010, etc) and the unit (tCO2 e) of "Annual (Not Total) average of the estimated…." is missing. Please complete the sentence. ~~CL 11~~ Please clarifiy why equation 11 of 'Tool to calculate the emission factor for an

Requirement	Reference	Conclusion	Cross Reference / Comment
			electricity system' (Annex- 12, Version-01.1, EB- 35) is used for calculating emission reduction (ERy).
4. The project shall have the written approval of voluntary participation from the designated national authorities of each party involved.	Kyoto Protocol Art.12.5a, Marrakesh Accords, CDM Modalities §40a, § 28	OK	The host country approval letter for the present project activity dated 29th June, 2009 issued by the Indian DNA reference No. 4/9/2009-CCC. This letter was checked for ministry logo, format of LoA and as per paragraphs 45-48 of VVM. The project title of proposed project activity on LoA was also found same as indicated in section A.1 of the PDD. This letter was also in accordance to the paragraphs 45-48 of VVM.
5. The emission reductions shall be real, measurable and give long-term benefits related to the mitigation of climate change.	Kyoto Protocol Art. 12.5b	~~CL 10~~, ~~CL 11~~ OK	Table 2 section B.6.1.1, B.6.3.1 ~~CL 10~~ The values of simple operating margin for NEWNE grid in section B.6.1. of the PDD are 1.02, 1.01 and 1.00 for the year 2005-06, 2006-07 and

Requirement	Reference	Conclusion	Cross Reference / Comment
			2007-08 respectively, While the values of simple operating margin in annex 3 attached with PDD are 1.02, 1.02 and 1.01 for the year of 2005-06, 2006-07 and 2007-08 respectively. Please clarify why these values are different from each other. ~~CL 11~~ Please clarifiy why equation 11 of 'Tool to calculate the emission factor for an electricity system' (Annex- 12, Version-01.1, EB- 35) is used for calculating emission reduction (ERy).
6. Reductions in GHG emissions shall be additional to any that would occur in absence of the project activity, i.e. a CDM project activity is additional if anthropogenic emissions of greenhouse gases by sources are reduced below those that would have occurred in the absence of the registered CDM project activity.	Kyoto Protocol Art. 12.5c, Marrakesh Accords, CDM Modalities §43 and § 44	~~CL 8, CL 9, CAR 7~~ OK	~~CL 8~~ Please provide the sources of the following documents: 1. Comparison table for investment for various power plants. 2. Emission of CO2 from conventional coal fired power plant would be

Requirement	Reference	Conclusion	Cross Reference / Comment
			5.52 kg as compare to zero emission from a wind power plant. 3. The Beta (β) value used in investment analysis is 1.12 which is very high. Therefore, the proper justification is required on this. ~~CL 9~~ Please provide clarification and supportive documents for the following: 1. The PP has taken 20% PLF as per MERC Guideline (page no. 32, Para 2.2.2.B). This would not be accepted by the validation team. Therefore, proper document or justification is required on this as per annex 11 of EB 48. 2. 20% PLF has been taken by the PP in investment analysis where as 26% PLF is

Requirement	Reference	Conclusion	Cross Reference / Comment
			indicated in offer letter. This needs to be confirmed which one is suitable for the project activity with proper justification. 3. The equity IRR shown is 5.16% without CDM and 6.75% with CDM which is very low to invest in any projects. It seems strange that the PP decided to invest in the project even with such a low IRR. Therefore, the PP is requested to provide proper justification on this. ~~CAR 7~~ The corrective action request is required on the following: 1. Please incorporate the alternative for the proposed project activity as per Tool for the demonstration and assessment of

Requirement	Reference	Conclusion	Cross Reference / Comment
			additionality (Version-05.2). 2. The PP has carried out investment analysis based on Purchase Order which is post decision document and would not be acceptable by validation team. It is requested to the PP that all input values and investment analysis should be based on offer letter provided by the technology provider initially to invest in the project activity. 3. The financial analysis should be supported by the genuine offer letter from suzlon. 4. The residual value must be increased by the value of land.
7. In case public funding from Parties included in	Decision 17/CP.7, CDM	OK	Table 2 Section A.4.4

Requirement	Reference	Conclusion	Cross Reference / Comment
Annex I is used for the project activity, these Parties shall provide an affirmation that such funding does not result in a diversion of official development assistance (ODA) and is separate from and is not counted towards the financial obligations of these Parties.	Modalities and Procedures Appendix B, § 2		
8. Parties participating in the CDM shall designate a national authority for the CDM.	Marrakech Accords, CDM Modalities §29	OK	The Designated National Authority (DNA) of India is National Clean Development Mechanism Authority.
9. The host country and the participating Annex I Party shall be a Party to the Kyoto Protocol.	Marrakech Accords, CDM Modalities §30	OK	Yes, India has ratified the protocol on 26th August 2002 and is allowed to participate. http://maindb.unfccc.int/public/country.pl?country=IN
10. The participating Annex I Party's assigned amount shall have been calculated and recorded.	CDM Modalities and Procedures §31b		
11. The participating Annex I Party shall have in place a national system for estimating GHG emissions and a national registry in accordance with Kyoto Protocol Article 5 and 7.	CDM Modalities and Procedures §31b		
12. Comments by local stakeholders shall be invited, a summary of these provided and how due account was taken of any comments received.	Marrakech Accords, CDM Modalities §37b	~~CAR 17~~, ~~CL 18~~ OK	~~CAR 17~~ Please include details of stakeholders who raised comments and the reply from PP in the PDD. ~~CL 18~~

Requirement	Reference	Conclusion	Cross Reference / Comment
			Please provide the summary of the stakeholder's comments received during the meeting
13. Documentation on the analysis of the environmental impacts of the project activity, including transboundary impacts, shall be submitted, and, if those impacts are considered significant by the project participants or the Host Party, an environmental impact assessment in accordance with procedures as required by the Host Party shall be carried out.	Marrakech Accords, CDM Modalities §37c	~~CL 15~~ OK	~~CL 15~~ Please clarify why trans boundary impacts are not considered in the proposed activity.
14. Baseline and monitoring methodology shall be previously approved by the CDM Methodology Panel.	Marrakech Accords, CDM Modalities §37e	OK	Table 2 Section B.1.1
15. Provisions for monitoring, verification and reporting shall be in accordance with the modalities described in the Marrakech Accords and relevant decisions of the COP/MOP.	Marrakech Accords, CDM Modalities §37f	OK	Table 2, Section B.7.2.1
16. 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	OK	The PDD of 18th March, 2009, version 01 was made publicly available on UNFCCC website (https://cdm.unfccc.int/Projects/Validation/DB/SZE3ZKTX8SZHF8C45PW8N3F73LVZEM/view.html). Parties, stakeholders and UNFCCC accredited non-governmental organizations were invited through the CDM website to

Requirement	Reference	Conclusion	Cross Reference / Comment
			provide comments during a 30 days period from 27 March 2009 to 25 April 2009. No comments were received during the web-hosting of PDD for global stakeholder's comments.
17. The project design document shall be in conformance with the UNFCCC CDM-PDD format.	Marrakech Accords, CDM Modalities, Appendix B, EB Decisions	OK	PDD is in accordance with CDM-SSC-PDD (version 03 of 22 December 2006).

Table 2 Requirements Checklist

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
A. General Description of Project Activity. The project design is assessed.					
A.1. Title of the small-scale project activity.					
A.1.1. Title of the project activity, version number and date of document (PDD).	/1/	DR	The title of the project activity is "Wind Power Project by M/s Chhotabhai Jethabhai Patel & Co. (CJP) at Sinnar, Maharashtra". The PDD also indicate correct version no. 01 and date of document completion is March 18, 2009. The PDD of the proposed project activity is in line with relevant Project Design Document form (CDM-SSC_PDD) Version 03 dated 22 December, 2006.	**OK**	**OK**
A.2. Description of the small-scale project activity.					
A.2.1. Is the purpose of the project activity included?	/1/	DR	The main purpose of this wind project activity is to generate electricity by using a renewable technology like wind electric generators and will be feeding it into the NEWNE Grid. Why project boundaries, project emissions and leakage are discussed in this section. It should be moved to the dedicated sections.	~~**CL 1**~~ ~~**CAR 1**~~	**OK** **OK**

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
			According the paragraph B.6.1 of the PDD, the project will generate 2628 MWh/year, not 2268 GWh/year. Please correct it.		
A.2.2. Is it explained how the project activity reduces greenhouse gas emissions, i.e. technology, measures?	/1/	DR	The power will be generated by utilizing the kinetic energy of the wind. This generated power will be fed to the grid. This power will displace the power generated by the fossil fuel fired power plant in the region; ultimately avoid emission of CO2 in to the atmosphere.	**OK**	**OK**
A.2.3. Contribution to Sustainable Development.					
A.2.3.1. Is the project in line with relevant legislation and plans in the host country?	/1/9/10/ 11/12/13	DR	The commissioning clearance letter (10) from MEDA ref. no. PGN-1/CC/C J Patel/1.50 MW/08-09/1588 dated 30/03/2009; The infrastructure letter (9) from MEDA ref. no. PGN-/CC/C J Patel/1.50 MW/08-09/1560 dated 26/03/2009; The grid connectivity permission from MSETCL/CO/STU/Grid Connectivity/16228 dated 4/12/2008; The Commissioning permission (12) from MSETCL ref. no. SE/NSKR/T-2/WTG-S/02134 dated 30/03/2009;	**OK**	**OK**

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
			The no objection certificates from department of mines (13) ref. no. 70/2006/3487 dated 12/11/2008 were provided by group for verification. These NOCs and clearances were checked and found relevant by RINA to the project activity.		
A.2.3.2. Is the project in line with host-country specific CDM requirements?	/1/4/	DR	The host country approval letter for the project activity dated 29th June, 2009 issued by the Indian DNA reference No. 4/9/2009-CCC. This letter was cross checked as per paragraphs 45-48 of VVM. The title of project activity on LoA was also found same as indicated in section A.1 of the PDD.	**OK**	**OK**
A.2.3.3. Is the project in line with sustainable development policies of the host country?	/1/	DR	Yes. All the Sustainable indicators has discussed in the PDD.	**OK**	**OK**
A.2.3.4. Will the project create other environmental or social benefits than GHG emission reductions?	/1/	DR	Please include other environmental and social benefits through the proposed activity besides GHGs emissions reductions.	**~~CAR 2~~**	**OK**
A.3. Project participants.					
A.3.1. Are Party (ies) and private and / or public entities involved in the project activity listed?	/1/	DR	As per the section A.3. of the PDD M/s Chhotabhai Jethabhai Patel & Co. (CJP) is involved in the project activity as a project participant. CJP is a private entity. The host party involved in the project activity is India.	**OK**	**OK**
A.3.2. Is the contact information provided in Annex 1 of the PDD, using the (proper	/1/	DR	Yes. The contact information is provided in Annex-1 of the PDD and used the correct	**OK**	**OK**

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
table) tabular format?			tabular format.		
A.4. Technical description of the small-scale project activity.					
A.4.1. Is the location of the project activity clearly defined, including details of the physical location and information allowing the unique identification of this small-scale project activity (ies)?	/1/8/9/30/	DR	Yes. The unique identification and characteristics of the location has provided in the document. The land deed agreement document No. 9030/2009 dated 2/3/2009; Infrastructure clearance ref. no. PGN-1/IC/C J Patel/1.50 MW.08-09/1560 from MEDA dated 25/03/2009; Power Purchase Agreement between and MSEDCL has been provided by PP which are cross verified and found acceptable to the validation team. Please designate the project location in the neat and clean map for more clarity.	**OK** **OK** **~~CL 2~~**	**OK** **OK** **OK**
A.4.2. Is (are) the type(s) and category(ies) and technology/measure of the proposed small-scale project activity specified?	/1/	DR	Yes. The project activity belongs to TYPE I-Renewable Energy Projects and I.D. category Grid connected renewable electricity generation applied. The S-82-1.5 MW wind turbine is specially	**OK** **OK**	**OK** **OK**

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
			designed to deliver high-performance in the low-to-medium wind regime prevalent across most of India. Technology developed by M/s Suzlon Energy Limited.		
A.4.3. Estimated amount of emission reductions over the chosen crediting period.					
A.4.3.1. Is the chosen crediting period, total and annual estimated reductions defined and presented in a (proper table) tabular format? (*check these figures against item B.6.4 figures*)	/1/	DR	All the estimated emission reductions are presented in tabular format. According to the PDD Guide, the first column should include only the reference year (2009, 2010, etc) and the unit (tCO2 e) of "Annual (Not Total) average of the estimated…." is missing. Please complete the sentence.	~~**CAR 3**~~	**OK**
A.4.4. Public funding of the project activity.					
A.4.4.1. Is it indicated whether public funding from Parties included in Annex 1 is involved in the proposed project activity?	/1/	DR	The project activity is not availing any public funding.	**OK**	**OK**
A.4.4.2. If public funding is involved, is information on sources of public funding for the project activity is provided in Annex 2, including an affirmation that such funding does not result on a diversion of official development assistance and is separate from and is not counted towards the financial obligations of those Parties?	/1/	DR	Please refer to section A.4.4.1	**OK**	**OK**

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
A.4.5. Confirmation that the SSC project is not a de-bundled component of a large scale project activity. *(Appendix C to the simplified modalities and procedures for the small-scale CDM project activities)*					
A.4.5.1 The small scale project activity is not a de-bundled component of a larger project activity?	/1/14/	DR	According to section A.4.5. of PDD The proposed small scale project activity is not a de-bundled component of a larger project activity. The undertaking letter indicating that the project activity is not a de-bundled component of a larger project activity dated 25/03/2009 has been provided to validation team which found appropriate.	**OK** **OK**	**OK** **OK**

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
B. Application of a baseline and monitoring methodology. *The validation of the project baseline establishes whether the selected baseline methodology is appropriate and whether the selected baseline represents a likely baseline scenario.*					
B.1. Baseline and Monitoring Methodology. *It is assessed whether the project applies an appropriate baseline & monitoring methodology (numbe, title and version).“Appendix B of the Simplified Modalities and Procedures for Small-Scale CDM project activities”.*					
B.1.1. Is the selected baseline and monitoring methodology previously approved by the CDM Methodology Panel and in line with the relevant project category? *(correctly quoted and interpreted?)*	/1/	DR	Yes, The project activity correctly applied the approved baseline and monitoring methodology AMS I.D. *(Version- 13, EB- 36) as per Appendix B* of simplified modalities and procedures for small scale CDM projects. Please also include web link for the applied methodology in the same section.	~~**CAR 4**~~	**OK**
B.1.2. Is the baseline and monitoring methodology applicable to the project being considered?	/1/	DR	The project uses AMS I.D.; the total capacity of the project is 1.5 MW which is less than the specified limit of 15 MW, the same has been cross-checked during the site visit. The project activity is a wind power generation activity and connected to the	**OK**	**OK**

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
			NEWNE Grid. The Methodology selected is AMS I.D. and the same is applicable.		
B.1.3. Are other methodologies or tools drawn up by the approved methodology mentioned? *(correctly quoted and interpreted?)*	/1/	DR	Please also mention other tools and methodologies used for Baseline and Additionality calculation in the PDD.	~~**CAR 5**~~	**OK**
B.2. Justification of the choice of the project category					
B.2.1. Does the project qualify as a small scale CDM project activity as defined in Decision 1/CMP.2, paragraph 28 – "*Further guidance relating to the CDM*" (revision of paragraph 6 (c) of decision 17/CP.7 on the modalities and procedures for the CDM)?	/1/	DR	According to AMS.I.D. Ver. 13 EB 36 there are five Technology/measure for justify the applied project activity as per methodology requirement. Please clarify why all the paragraphs of Technology/measures of AMS.I.D. did not discuss in section B.2. of the PDD for proper justification.	~~**CL 3**~~	**OK**
B.2.2. Does proposed project activity confirm to one of the project categories defined for small scale CDM project activities?	/1/	DR	Yes. The proposed project activity comes under type I of small scale.	**OK**	**OK**
B.3. Description of the project boundary *(physical delineation of the proposed CDM project activity)***.**					
B.3.1. Are the project's spatial (geographical) boundaries clearly defined?	/1/	DR	The project boundary is described as the wind turbine installation, metering system, sub-stations and NEWNE grid in to the project		

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
			boundary. The same has been cross-checked during the site visit and discussion with project proponent. Please justify why the NEWNE grid has included in the project boundary? Please also justify why the word ***START*** and Suzlon CMS are indicated in project boundary.	~~**CL 4**~~	**OK**
B.3.2. Are the project's system (components and facilities used to mitigate GHGs) boundaries clearly defined and do they sufficiently cover sources for baseline emissions?	/1/	DR	The project boundary has been clearly described in the document.	**OK**	**OK**
B.4. Description of how baseline scenario is identified. Baseline Determination. *The choice of baseline will be validated with focus on whether the baseline is a likely scenario, whether the project itself is not a likely baseline scenario, and whether the baseline is complete and transparent.*					
B.4.1. Is the application of the methodology and the discussion and determination of the chosen baseline scenario transparent?	/1/	DR	The PP has identified the baseline scenario as the continuation of the current situation of NWENE grid i.e. without project activity. The same has been discussed and checked during the site visit.		

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
			Please also clarify which Tool has adopted to calculate the emission factor for an electricity system. Please clarify why project boundaries are discussed also in this section. It should be moved to the dedicated section.	~~CL 5~~ ~~CL 6~~	**OK** **OK**
B.4.2. Has the baseline been determined using conservative assumptions where possible? *(confirm that any procedure contained in the methodology to identify the most reasonable baseline scenario, has been correctly applied)*	/1/	DR	The PP has identified the baseline scenario as the continuation of the current situation of NWENE grid i.e. with-out-proposed project activity. The same has been discussed and checked during the site visit.	**OK**	**OK**
B.4.3. Has the baseline been established on a project-specific basis?	/1/	DR	The PP has identified the baseline scenario as the continuation of the current situation of NWENE grid i.e. with-out-proposed project activity. The same has been discussed and cross checked during the site visit.	**OK**	**OK**
B.4.4. Does the baseline scenario sufficiently take	/1/	DR	Combined Margin has calculated by using	**OK**	**OK**

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
into account relevant national and / or sectoral policies, macro-economic trends and political aspirations?			Operating Margin and Build Margin of NEWNE grid Which is approved by the Central Electricty Authority.		
B.4.5. Is the baseline determination compatible with the available data?	/1/	DR	The PP has identified the baseline scenario as the continuation of the current situation of NWENE grid i.e. with-out-proposed project activity. The same has been discussed and checked during the site visit.	**OK**	**OK**
B.4.6. Does the selected baseline represent the most likely scenario among other possible and/or discussed scenarios?	/1/	DR	The PP has identified the baseline scenario as the continuation of the current situation of NWENE grid i.e. with-out-proposed project activity. The same has been discussed and checked during the site visit.	**OK**	**OK**
B.4.7. Have the major risks to the baseline been identified? (*Are uncertainties in the GHG emission estimates properly addressed in the documentation?*)	/1/	DR	Please include the major risks identified to the baseline.	**~~CAR 6~~**	**OK**
B.4.8. Is all literature and sources clearly referenced?	/1/	DR	Please provide all the references and sources used in the PDD.	**~~CL 7~~**	**OK**
B.4.9. Background information or documentation, including tables with time series data, documentation of measurement results and data sources are properly addressed? (*check Annex 3*)	/1/33/	DR	Yes. All background information or documentation including tables with time series data, documentation of measurements results and data sources are properly addressed as per CEA CO_2 Baseline Database for the Indian Power Sector User Guide, Version 4.0, October 2008	**OK**	**OK**

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
B.5. Description of how the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of the registered CDM project activity (*Assessment and demonstration of additionality* - *"Attachment A to Appendix B of the simplified modalities and procedures for small-scale CDM project activities"*).					
B.5.1. Does the PDD follow all the steps required in the methodology to determine the additionality? (Is an approved additionality tool required / used? - Note: the guidance in the methodology shall supersede the tool)	/1/	DR	The PP is used 'Attachment A to Appendix B' of the simplified modalities and procedures for small-scale CDM project activity to assess the additionality of the project activity and used investment barrier to prove additionality which says: a financially more viable alternative to the project activity would have led to higher emissions. The investment analysis for this project activity is done as per the Methodological Tool –"Tool for the demonstration and assessment of additionality", (Version- 05.2, Annex- 10, EB- 39 sub-step 2b – option iii). The corrective action request is required on the following: 1. Please incorporate the alternative for the proposed project activity as per Tool for the demonstration and assessment of additionality	~~CAR 7~~	OK

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
			(Version- 05.2). 2. The PP has carried out investment analysis based on Purchase Order which is post decision document and would not be acceptable by validation team. It is requested to the PP that all input values and investment analysis should be based on offer letter provided by the technology provider initially to invest in the project activity. 3. The financial analysis should be supported by the genuine offer letter from suzlon. 4. The residual value must be increased by the value of land.		
B.5.2. Is the discussion on the additionality clear and have all assumptions been conservative, supported by transparent and documented evidence for all steps?	/1/	DR	Please provide the clarification and sources of the following paragraphs: 1. Comparison table for investment for various power plants. 2. Emission of CO_2 from conventional coal fired power	~~CL 8~~	OK

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
			would be 5.52 kg as compare to zero emission from a wind power plant. 3. The Beta (β) value used in investment analysis is 1.12 which is very high. Therefore, the proper justification is required on this.		
B.5.3. Is it demonstrated / justified that the project activity itself is not a likely baseline scenario? (*e.g. through **(a)** a flow-chart or series of questions that lead to a narrowing of potential baseline options, **(b)** a qualitative or quantitative assessment of different potential options and an indication of why the non-project option is more likely, **(c)** a qualitative or quantitative assessment of one or more barriers facing the proposed project activity or **(d)** an indication that the project type is not common practice in the proposed area of implementation, and not required by a Party's legislation/regulations*)	/1/	DR	See section B.5.1.	~~**CAR 7**~~	**OK**
B.5.4. If the starting date of the project activity is before 2 August 2008, for which the start date is prior to the date of publication of the	/1/15/	DR	The project start date is November 21, 2008 (Appointment of CDM consultant MITCON Consultancy Services Ltd., Pune) which is	**OK**	**OK**

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
PDD for global stakeholder consultation, evidence to demonstrate that the CDM was seriously considered in the decision to implement the project activity, was provided, adequate and sufficient to justify it?			after 2 Aug, 2008. The prior intimation letter dated 08/12/2008 which has sent to the UNFCCC & Ministry of Environment & Forest (MoEF), New Delhi (DNA) and aknoledgement letter dated 11/12/2008 from UNFCCC for the same were provided by and verified by RINA.		
B.5.5. Is the above evidence based on official, legal and / or other corporate document that was available at, or prior to, the start of the project activity?	/1/	DR	See section B.5.4. of the PDD	**OK**	**OK**
B.5.6. If investment analysis has been used to demonstrate the additionality of the proposed CDM project activity, evidences that the proposed CDM project activity would not be: (a) The most economically or financially attractive alternative; or (b) Economically or financially feasible, without the revenue from the sale of certified emission reductions (CERs); were provided? (*"Guidance on the Assessment of Investment Analysis")*	/1/	DR	The project participant has chosen to apply Option- III of benchmark analysis of the Methodological Tool "Tool for the demonstration and assessment of additionality", (Version- 05.2, Annex- 10, EB- 39 sub-step 2b). Please provide clarification and supportive documents for the following: 1. The PP has taken 20% PLF as per MERC Guideline (page no. 32, Para 2.2.2.B). This would not be accepted by the validation team. Therefore, proper document or justification is	~~**CL 9**~~	**OK**

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
			required on this as per annex 11 of EB 48. 2. 20% PLF has been taken by the PP in investment analysis where as 26% PLF is indicated in the offer letter. This needs to be confirmed which one is suitable for the project activity with proper justification. 3. The equity IRR shown is 5.16% without CDM and 6.75% with CDM which is very low to invest in any projects. It seems strange that the PP decided to invest in the project even with such a low IRR. Therefore, the PP is requested to provide proper justification on this.		
B.6. Emission Reductions. *Validation of baseline GHG emissions will focus on methodology transparency and completeness in emission estimations.*					
B.6.1. Explanation of methodological choices.					
B.6.1.1. Have the project, baseline and leakage emissions and emission reductions been properly explained and determined using the same appropriate methodology and conservative assumptions?	/1/	DR	The baseline estimation for the proposed project activity is referred from Para. 9 of the *AMS-I.D. (Version- 13, EB- 36)* The project promoters have chosen option (a) — A combined margin (CM), consisting of		

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
			the combination of operating margin (OM) and build margin (BM) —to calculate the grid emission coefficient from '*Tool to calculate the emission factor for an electricity system' (Annex- 12, Version-01.1, EB- 35)* The CEA data and default values are used for calculating CM, BM and OM. The values of simple operating margin for NEWNE grid in section B.6.1. of the PDD are 1.02, 1.01 and 1.00 for the year 2005-06, 2006-07 and 2007-08 respectively, While the values of simple operating margin in annex 3 attached with PDD are 1.02, 1.02 and 1.01 for the year of 2005-06, 2006-07 and 2007-08 respectively. Please clarify why these values are different from each other.	~~**CL 10**~~	**OK**
B.6.1.2. Does the proposed project clearly state which equations for the calculation of emission reductions are used, as given by the approved / applied methodology?	/1/	DR	Yes, the PDD has clearly stated all the equations used for the calculation of emission reductions.	**OK**	**OK**
B.6.1.3. Are the demonstration / justification for the choice of the chosen scenario (for example, in ACM0006) or case, option / method (for example in ACM0002) adequate and sufficient?	/1/	DR	Yes. Please refer to B.6.1.1	**OK**	**OK**

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
B.6.1.4. Are the demonstration / justification for the chosen default values adequate and sufficient?	/1/	DR	Please see section B.6.1.1	~~CL 10~~	OK
B.6.2. Data and parameter those are available at validation. *Data that is calculated with equations provided in the methodology or default values specified in the methodology should not be included in the compilation.*					
B.6.2.1. Is the list of the *ex-ante* data and parameters used by the project -including data from other sources- complete, transparent, documented and available? (*measurements after the implementation of the project activity should not need to be included here but in the tables in section B.7.1*)	/1/	DR	Please include and correct the following parameters: 1. Net electricity supplied to the grid. 2. Symbol for Operating Margin emission factor and Build Margin emission factor in each table of section B.6.2 of the PDD. 3. The value of simple operating margin indicated in section B.6.2. 4. Grid emission factor calculation indicated in section B.6.2.	~~CAR 8~~	OK
B.6.2.2. Is the chosen value or, where relevant, the qualitative information for each supporting data or parameter(s) provided in a (proper table) tabular form and the	/1/	DR	Please see section B.6.2.1	~~CAR 8~~	OK

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
choice for the source of data explained / justified with clear and transparent references or additional documentation? (*check Annex 3*)					
B.6.2.3. If values were measured, a description of measurement methods and procedures (standards), indicating the responsible(s) for carrying out the measurement(s), dates and results of measurement(s) was provided? (*check Annex 3*)	/1/	DR	Please refer to B.6.2.1	**OK**	**OK**
B.6.3. *Ex-ante* calculation of emission reductions. Table 1 - 1, 3, 5					
B.6.3.1. Is the *ex-ante* calculation of the expected project, baseline and leakage emissions transparent, conservative, accurate, and documented and as per the approved / applied methodology (equations) of the project activity?	/1/	DR	Please clarifiy why equation 11 of 'Tool to calculate the emission factor for an electricity system' (Annex- 12, Version-01.1, EB- 35) is used for calculating emission reduction (ERy).	~~**CL 11**~~	**OK**
B.6.3.2. Sufficient background information and / or data to assess the calculation(s) and enable its reproduction, including electronic files (i.e. spreadsheets), was provided? (*check Annex 3*)	/1/	DR	Please refer B.6.3.1	~~**CL 11**~~	**OK**
B.6.4. Summary of *ex-ante* estimation of emission reductions. Table 1 - 1, 3, 5					
B.6.4.1. Is all *ex-ante* estimation of emission	/1/	DR	The values for *ex-ante* estimation of emission	**OK**	**OK**

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
reductions summarized in a (proper table) tabular form for all years of the crediting period? (*Check against A.4.3.1 figures*)			reductions has summarized in a tabular form for all years of the crediting period.		
B.7. Application of monitoring methodology and description of the monitoring plan. *Compliance of the monitoring plan with the approved methodology and Implementation of the plan*					
B.7.1. Data and parameters monitored. *(background documentation in Annex 4)*					
B.7.1.1. Specific information on how the data and parameters that need to be monitored would actually be collected during monitoring for the project activity is provided? (m*easurements after the implementation of the project activity should be included here*)	/1/	DR	The bulk meter at the sub-station will record total export and total import by all the connected WTGs to the sub-station through a particular feeder. The 'Bulk meter', installed at the sub-station, contains a main meter and a check meter. These meters are sealed and are in the custody of MSEDCL. The state utility officials in the presence of representative/s of PP will take the Joint Meter Reading of these meters on a monthly basis.	**OK**	**OK**
B.7.1.2. Are all the parameters and its sources of data reliable, specified and documented in a (proper table) tabular form?	/1/	DR	Yes. All the parameters and its sources are clearly specified and documented in the tabular form.	**OK**	**OK**

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
B.7.1.3. Where data or parameters are supposed to be measured, are measurement methods and procedures, including a specification of which accepted industry standards or national or international standards will be applied, specified?	/1/	DR	See section B.7.1.1.	**OK**	**OK**
B.7.1.4. Are the measuring instruments / equipments, measurement methods, accuracy and interval, measurement responsible(s) and calibration procedures specified?	/1/	DR	The section B.7.1 of the PDD specified the following for monitoring: Data Type: Measured Frequency: Hourly measured Recording: Monthly from Joint meter Archiving policy: Paper & Electronic Energy meter calibration frequency: Annual or as per the UNFCCC guidelines (at least once in three year, paragraph 12.c., EB 41 Report Annex 20,)	**OK**	**OK**
B.7.1.5. Are the QA / QC procedures applied described and complying with existing good practice? (*The parameters related to the performance of the project will be monitored using meters and standard testing equipment, which will be regularly calibrated following standard industry practices*)	/1/	DR	EG_y is referred from the monthly invoice raised by the PP to MSEDCL based on the monthly JMR Report issued by MSEDCL to the PP. The main meter and a check meters at the sub-station are sealed and are in the custody of MSEDCL. The accuracy of main meter can be verified by comparing it with the check meter. The calibration of the meters will be carried out by MSEDCL annually/or at least once in three years, as per UNFCCC	**OK**	**OK**

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
			guidelines. Other than periodic calibration of the meters, the reading of both meters will be matched every month.		
B.7.2. Description of monitoring plan. *The monitoring plan review aims to establish whether all relevant project aspects deemed necessary to monitor and report reliable emission reductions are properly addressed.*					
B.7.2.1. Is the monitoring methodology previously approved by the CDM Methodology Panel?	/1/	DR	The monitoring of proposed project activity will be done as per approved small scale methodology AMS- I.D. (Version- 13, EB-36). As per paragraph 13 of the approved methodology *"Monitoring shall consist of metering the electricity generated by the renewable technology"*.	**OK**	**OK**
B.7.2.2. Is the monitoring methodology the one deemed most applicable for this project and is the appropriateness justified?	/1/	DR	See section B.7.2.1	**OK**	**OK**
B.7.2.3. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for estimation or measuring the greenhouse gas emissions within the project boundary during the crediting period?	/1/	DR	Please include the information on how the relevant data would be collected and archived during the entire crediting period.	**~~CAR 9~~**	**OK**
B.7.2.4. Does the monitoring plan provide for the	/1/	DR	Please clarify the followings:	**~~CL 12~~**	**OK**

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
collection and archiving of all relevant data necessary for determining leakage?			1. What will be another ways to determine leakage. 2. What is the multiplying factor and how the apportioing will be done. 3. Provide the values indicating in table for electricity distribution.		
B.7.2.5. Is the authority and responsibility of project management clearly described?	/1/	DR	Please include the authority responsible for the monitoring plan.	~~CAR 10~~	OK
B.7.2.6. Is the authority and responsibility for registration, monitoring, measurement and reporting clearly described?	/1/	DR	See section B.7.2.5.	~~CAR 10~~	OK
B.7.2.7. Are procedures identified for training of monitoring personnel?	/1/	DR	Please provide the supportive documents for the training procedures identified for monitoring personnel.	~~CL 13~~	OK
B.7.2.8. Are procedures identified for emergency preparedness for cases where emergencies can cause unintended emissions?	/1/	DR	Please include emergency preparedness plan, where emergencies can cause unintended emissions.	~~CAR 11~~	OK
B.7.2.9. Does the monitoring plan reflect good monitoring and reporting practices?	/1/	DR	Please include the action taken during uncertainties like inconsistency/discrepancy of data/parameters.	~~CAR 12~~	OK
B.7.2.10. Is the discussion and selection of all required monitoring parameters and / or data variables (for example, project emissions, project electricity generation, baseline grid / captive power emission factor) of the monitoring plan according to the approved / applied methodology	/1/	DR	See section B.7.1.1	OK	OK

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
transparent?					
B.8. Date of completion of the application of the baseline and monitoring methodology and the name of responsible person(s) / entity(ies).					
B.8.1. Is the date of completion of the application of the methodology to the project activity provided and mentioned in the format *DD / MM / YYYY*?	/1/	DR	18 March 2009 is the date of completion of baseline and monitoring methodology, which is not mentioned in the correct format. Please correct the format to DD/MM/YYYY.	~~**CAR 13**~~	**OK**
B.8.2. Is the contact information of the person(s) / entity(ies) responsible for the baseline and monitoring methodology to the project activity provided? If applicable, are they indicated as project participants in Annex 1?	/1/	DR	CJP and their consultant, MITCON Consultancy Services Ltd. are responsible for the baseline and monitoring methodology completion. Please provide contact information of the persons(s)/entity (ies) responsible for the application of the baseline and monitoring methodology to the project activity and indicate if the person/entity is also a project participant listed in Annex 1. .	~~**CAR 14**~~	**OK**
C. Duration of the Project activity / Crediting Period. *It is assessed whether the temporary boundaries of the project are clearly defined.*					
C.1. Duration of project activity.					
C.1.1. Starting date of project activity.					
C.1.1.1. Is the project's activity starting date (the	/1/	DR	The project's activity starting date is 21		

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
earliest date at which either the implementation or construction or real action of a project activity begins - *project participant has committed to expenditures related to the implementation or related to the construction of the project activity*) clearly defined and reasonable?			November 2008 (Appointment of MITCON Consultancy Services Ltd., Pune, for CDM services) and therefore it is taken as the start date. Please provide appointment letter indicating MITCON appointed as a CDM consultant for present project activity.	~~CL 14~~	OK
C.1.1.2. If the project activity started on or after 2 August 2008, were the Host Party DNA and/or the UNFCCC secretariat informed in writing of the commencement of the project activity and of the intention to seek CDM status? (If starting date is before 2 August 2008, see B.5.4)	/1/15/	DR	The starting date of the project activity is after 2 August 2008 (i.e. 21 November 2008). The communication (e-mail) for the same dated 08/12/2008 from CJP and acknowledged email from UNFCCC date 10/12/2008 was provided by the PP and cross-checked as per guidance on the demonstration and assessment of prior consideration of the CDM annex 46 of EB 41 of UNFCCC.	OK	OK
C.1.2. Expected operational life time of the project.					
C.1.2.1. Is the project's operational lifetime (mentioned in years and months) clearly defined and reasonable? (*check against crediting period and equipment lifetime*)	/1//17/ /18/	DR	As per the section C.1.2 of the PDD, The expected operational life of WTG is 20 years. Technical specifications for the WTG and a note of fatigue analysis of design of wind turbine for operation lifetime were provided by PP which is cross checked by validation team and found acceptable.	OK	OK

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
C.2. Choice of crediting period. *The crediting period may only start after the date of registration of the proposed activity as a CDM project activity.*					
C.2.1. Is the chosen crediting period clearly defined (mentioned in years and months) and its starting date mentioned in the format *DD / MM / YYYY*? (*renewable crediting period of seven years with two possible renewals or fixed crediting period of 10 years with no renewal*)	/1/	DR	A fixed 10 years crediting period adopted, The starting date of the crediting period shall be September 01, 2009 or a date no later than the date of the CDM Registration with CDM EB. Please change the date and format to DD/MM/YYYY for chosen crediting period and state the length of the first crediting period in years and months.	~~CAR 15~~	OK
D. Environmental impacts. ***If required by the host party, d****ocumentation on the analysis of the environmental impacts will be assessed, and if deemed significant, an EIA should be provided to the Validator.*					
D.1. Documents on Environmental impacts, including transboundary impacts.					
D.1.1. Has an analysis of the environmental impacts of the project activity been sufficiently described?	/1/34/	DR	The project proponent has mentioned in the PDD that the wind energy projects are considered environmentally safe, and as per Host party, EIA does not required. The		

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
			project activity does not fall under the purview of Environmental Impact Assessment notification 14th September, 2006 of the Ministry of Environment and Forests (MoEF), Government of India (GOI) and the project activity is exempted from environmental clearances. The web link for the notification is http://envfor.nic.in/legis.eia/so1533.pdf. The PP has submitted the necessary consents and approvals for the project activity. The text of section D should be moved to D.1 and integrated with environmental consideration such as impacts on noise, migratory birds, etc	~~**CAR 16**~~	**OK**
D.1.2. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, is an EIA approved?	/1/	DR	Please see D.1.1	**OK**	**OK**
D.1.3. Will the project create any adverse environmental effects?	/1/	DR	Please see D.1.1	**OK**	**OK**
D.1.4. Are transboundary environmental impacts considered in the analysis?	/1/	DR	Please clarify why trans boundary impacts are not considered in the proposed activity.	~~**CL 15**~~	**OK**
D.1.5. Have identified environmental impacts	/1/	DR	See section D.1.3	**OK**	**OK**

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
been addressed in the project design?					
D.1.6. Does the project comply with the environmental legislation in the host country?	/1//9/12/ /11/13/ /30/	DR	The Project Proponent submitted infrastructure clearances from MEDA dated 25th March, 2009 (ref. no.PGN-I/IC/CJ Patel/1.50 MW/08-09/1560). The commissioning certificate dated 2nd April, 2009 (ref. no.SE/NSKR/T-2/WTG-S/02278) for the project activity was checked and the same was found acceptable	**OK**	**OK**
E. Stakeholders' comments. *The Validator should ensure that stakeholders' comments have been invited and that due account has been taken of any comments received.*					
E.1. Description of how comments by local stakeholders have been invited and compiled. *The local stakeholder process shall be completed before submitting the proposed project activity to a DOE for validation.*					
E.1.1. Have relevant stakeholders been adequately consulted / invited for comments?	/1/25/	DR	The stake holder meeting for the proposed project activity was conducted in Village: Adwadi, Taluka: Sinnar, District: Nashik on 21st February 2009. The meeting was coordinated by Suzlon Energy Limited, Mr. M.K. Bag represented Suzlon. A copy of invitation letters dated 06/02/2009 for the stakeholders meeting have been provided by the CEEJAY group. This	~~**CL 16**~~	**OK**

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
			invitation letter were checked by RINA and found relevant to the project activity. Please also provide the list of stakeholders attended the meeting.		
E.1.2. If a stakeholder consultation process is required by regulations / laws in the host country, has the stakeholders' consultation process been carried out in accordance with such regulations / laws?	/1/	DR	Not required under legislation.	**OK**	**OK**
E.1.3. Was the stakeholders' consultation process conducted, within a reasonable time for comments submission, in an open and transparent manner to facilitate comments and properly described?	/1/	DR	Please furnish minutes of the stakeholders meeting.	~~**CL 17**~~	**OK**
E.2. Summary of comments received.					
E.2.1. Are the stakeholders who made comments identified (addresses provided / available)?	/1/	DR	Please include details of stakeholders who raised comments and the reply from PP in the PDD.	~~**CAR 17**~~	**OK**
E.2.2. The summary of the stakeholders' comments received is provided / available?	/1/	DR	Please provide the summary of the stakeholder's comments received during the meeting.	~~**CL 18**~~	**OK**
E.3. Report on how due account was taken of any comments received.					
E.3.1. Has due account been taken of any stakeholders' comments received?	/1/	DR	See E.1.3	~~**CL 17**~~	**OK**
Annex 1. (*contact information on project participants*)					
• Are the Names of all organization given? (*as listed in*	/1/	DR	Yes the name of organization has given in	**OK**	**OK**

Checklist Question	Ref.	MoV*	Comments	Draft Concl.	Final Concl.
section A.3)			consistent with the one given under section A.3 of the PDD.		
• Name of contact person, Street, City, Post fix / ZIP, Country, Telephone Fax or e-mail mandatory fields are filled?	/1/	DR	Yes. The name of contact person, street, city, post fix/ zip, country, telephone, fax and email s are provided in annex 1 of the PDD.	**OK**	**OK**
Annex 2. (*Information regarding public funding*)					
• Is information from Parties included in Annex I on sources of public funding for the project activity provided?	/1/	DR	There is no public funding involved in the project activity and the same is mentioned in the PDD.	**OK**	**OK**
• Does the information provided above include an affirmation that such funding does not result in a diversion of ODA and is separate from and is not counted towards the financial obligation of those Parties?	/1/	DR	Not applicable	**OK**	**OK**
Annex 3. (*Baseline information*).					
• Is any needed further background information used in the application of the baseline methodology, i.e. tables with time series data, documentation of measurement results and data sources, provided?	/1/	DR	Yes. Additional baseline information has been provided in Annex-3 of the PDD.	**OK**	**OK**
Annex 4. (*Monitoring information*)					
• Is any needed further background information used in the application of the monitoring methodology, i.e. tables with time series data, documentation of measurement results and data sources, provided?	/1/	DR	Please clarify why the monitoring information did not provided in Annex-4 of the PDD.	~~**CL 19**~~	**OK**

Table 3 Resolution of Corrective Action and Clarification Requests

Draft report clarifications and corrective action requests	Ref. to table 2	Summary of project participants' response	Validation team conclusion
CAR 1 Aaccording the paragraph B.6.1 of the PDD, the project will generate 2628 MWh/year, not 2268 GWh/year. Please correct it.	A.2.1	The generated electricity is corrected in the revised PDD.	The appropriate corrections have been done in the revised PDD. Hence, CAR 1 is closed.
CAR 2 Please include other environmental and social benefits through the proposed activity besides GHGs emissions reductions.	A.2.3.4	Environmental and social benefits clause is now revised.	The environmental and social benefits from the project activity have been included in the section A.2 of the revised PDD. Hence, CAR 2 is closed.
CAR 3 According to the PDD Guide, the first column should include only the reference year (2009, 2010, etc) and the unit (tCO2 e) of "Annual (Not Total) average of the estimated…." is missing. Please complete the sentence.	A.4.3.1	The PDD is corrected accordingly.	The corresponding years in the first column is corrected as (2010-2011, 2011-2012, 2012-2013……..) tones of CO_{2e} in the Table of section 4.3 and 6.4. Hence, CAR 3 is closed.
CAR 4 Please also include web link for the applied methodology in the same section.	B.1.1	Web links for the applied methodologies are now incorporated appropriately.	The web links for the applied methodology has provided in section B.1 of the revised PDD. Hence, The CAR 4 is closed.
CAR 5 Please also mention other tools and methodologies used for Baseline and Additionality calculation in the PDD.	B.1.3	Other tools and methodologies used for Baseline and Additionality calculation in the PDD are now incorporated appropriartly. Please refer section B.1.	The other tools, (*Tool to calculate the emission factor for an electricity system (Version -02, EB- 50), Additionality tool for small scale project activities (Attachment A to Appendix B, Version 06: 30/09/ 2005) and methodology AMS I.D. ver. 13* used for baseline and additionality, has been

Draft report clarifications and corrective action requests	Ref. to table 2	Summary of project participants' response	Validation team conclusion
			incorporated in section B.1 of the revised PDD. Hence, CAR 5 is closed.
CAR 6 Please include the major risks identified to the baseline.	B.4.7	As the baseline is designed ex-ante for the entire crediting period no major risk to the baseline. Moreover the baseline is designed based on the current generation mix at the time of the project conception.	The justification is appropriate and conservative and hence accepted by validation team. CAR 6 is closed
CAR 7 The corrective action request is required on the following: 1. Please incorporate the alternative for the proposed project activity as per Tool for the demonstration and assessment of additionality (Version-05.2). 2. The PP has carried out investment analysis based on Purchase Order which is post decision document and would not be acceptable by validation team. It is requested to the PP that all input values and investment analysis should be based on offer letter provided by the technology provider initially to invest in the project activity. 3. The financial analysis should be	B.5.1	1. The project is a small scale project activity. The project additionality is based on ***Attachment A to Appendix B.*** The identification of project alternative by Tool for the demonstration and assessment of additionality (Version- 05.2) is not mandatory to the project activity. 2. Investment analysis is now corrected as per the Suzlon offer letter to the PP. Please refer revised IRR worksheet. 3. Email from Suzlon dated 17/12/2009 confirming the authenticity of offer letter has been submitted to the DoE. 4. Corrected. Land cost is now added in to residual value.	1. Since, it is a small scale project activity; PP has demonstrated additionality through one of the barriers as said in Appendix A to Attachment B and chosen investment barrier to demonstrate additionality. So, there is no need to identify alternatives to the project. 2. The response on point number 2 and 4 are provided and also corrected in financial sheet. 3. The authenticity of offer letter is verified from the clarification provided by windmill provider through email and telephone. 4. Corrected land cost is included in revised PDD.

Draft report clarifications and corrective action requests	Ref. to table 2	Summary of project participants' response	Validation team conclusion
supported by the genuine offer letter from suzlon. 4. The residual value must be increased by the value of land.			Hence, CAR 7 is closed.
CAR 8 Please include and correct the following parameters: 1. Net electricity supplied to the grid 2. Symbol for Operating Margin emission factor and Build Margin emission factor in each table of section B.6.2 of the PDD. 3. The value of simple operating margin indicated in section B.6.2. 4. Grid emission factor calculation indicated in section B.6.2.	B.6.2.1	Following parameters included and corrected: 1. Net electricity supplied to the grid 2. Symbol for Operating Margin emission factor and Build Margin emission factor in each table of section B.6.2 of the PDD. 3. The value of simple operating margin indicated in section B.6.2. 4. Grid emission factor calculation indicated in section B.6.2.	The parameters have been corrected and value of simple operating margin is included in the revised PDD. Hence, CAR 8 is closed.
CAR 9 Please include the information on how the relevant data would be collected and archived during the entire crediting period.	B.7.2.3	The information with regards to collection and the archiving of the data is mentioned under monitoring plan of section B.7.2	The information related to collection and archiving of the data is mentioned in section B.7.2 of revised PDD. Hence, The CAR 9 is closed.
CAR 10 Please include the authority responsible for the monitoring plan.	B.7.2.5	Please refer Project Management and Responsibility Chart under section B.7.2	The structure of the team and respective responsibilities of team members in the Monitoring team is now included in the revised PDD. Hence, CAR 10 is closed.

Draft report clarifications and corrective action requests	Ref. to table 2	Summary of project participants' response	Validation team conclusion
CAR 11 Please include emergency preparedness plan, where emergencies can cause unintended emissions.		The emergency preparedness plan is incorporated under section B.7.2	The emergency preparedness plan during the unintended emission at project site in revised PDD is included now. Hence, CAR 11 is closed.
CAR 12 Please include the action taken during uncertainties like inconsistency/discrepancy of data/parameters.	B.7.2.9	In Maharashtra the JMR is issued for a complete month. In case project is registered at any middle date, example 16th April 2010, and if as the project considers 10 years of fixed crediting period then the crediting period will be 16/04/2010 to 15/04/2020. Balance month in the calendar year 2010 can be monitored from 16/04/2010 to 31/12/2010. Thus, Net electricity export to the grid for the month of April 2010 can be calculated as, {16 × (Net export of April 2010/31)}. The last 3.5 months of the crediting period can be monitored from 01/01/2020 to 15/04/2020. Thus, Net electricity export to the grid for the month of April 2020 can be calculated as,{15 × (Net export of April 2020/31)}. Subsequent vintages can be done on the basis of calendar years. i.e. 01/01/2011 to 31/12/2011, 01/01/2012 to 31/12/2012,…….01/01/2019 to 31/12/2019	The revised PDD is transparent now on uncertainties and inconsistency/discrepancy of data/parameters. Hence, CAR 12 is closed

Draft report clarifications and corrective action requests	Ref. to table 2	Summary of project participants' response	Validation team conclusion
		This will ensure simple calculation for the chosen crediting period of 10 years. This approach will not affect quality of monitoring of emission reductions. Meters are in the custody of State Utility Company, MSEDCL. Points like identify meter faults, data adjustments in case of meter failures etc are in the scope of MSEDCL. They are addressed as per the PPA. The arrangement to monitor the meters can be referred from Article 11, Section 11.01, 11.02, 11.05 of Energy Purchase Agreement dated June 25, 2009 for the above details.	
CAR 13 Please correct the format to DD/MM/YYYY.	B.8.1	The date format is now appropriately corrected	The date format is now corrected in section B.8 of revised PDD as per the PDD guide ver. 5. Hence, CAR 13 is closed.
CAR 14 Please provide contact information of the persons(s)/entity (ies) responsible for the application of the baseline and monitoring methodology to the project activity and indicate if the person/entity is also a project participant listed in Annex 1.	B.8.2	The contact information of the persons(s)/entity (ies) responsible for the application of the baseline and monitoring methodology to the project activity are mentioned under section B.8 and further it is also indicated that M/s Chhotabhai Jethabhai Patel & Co. (), Nadiad, Gujrat, India is the project	The required contact information has been included in the revised PDD. Hence, The CAR 14 is closed.

Draft report clarifications and corrective action requests	Ref. to table 2	Summary of project participants' response	Validation team conclusion
		participant listed in Annex 1.	
CAR 15 Please correct the date format to DD/MM/YYYY for chosen crediting period and state the length of the first crediting period in years and months.	C.2.1	The date format to correct as DD/MM/YYYY for chosen crediting period and further the length of the first crediting period in years and months stated.	The date format is now corrected in section C.2 of revised PDD as per the PDD guide ver. 5. Hence, CAR 15 is closed.
CAR 16 The text of section D should be moved to D.1 and integrated with environmental consideration such as impacts on noise, migratory birds, etc	D.1.1	Schedule I of the Environment Impact Assessment Notification (EIA) 1994 (http://envfor.nic.in/legis/eia/so-60%28e%29.html), gives the list of projects requiring environmental clearance (EC) from Central Government. The list does not include wind power projects. Also, in the EIA Notification 2006 (http://envfor.nic.in/legis/eia/so1533.pdf), projects requiring EC have been given in two categories – Category A projects require to take EC from Central Govt. while Category B projects are under the jurisdiction of State Govt. Wind Power Projects are not included in any of these categories. Hence, it is considered that wind power projects are environmentally benign. Thus as per MoEF, EIA is not applicable for Wind Power Projects. The environmental consideration such as	The required corrections done in the revised PDD. Hence, CAR 16 is closed

Draft report clarifications and corrective action requests	Ref. to table 2	Summary of project participants' response	Validation team conclusion
		impacts on noise, migratory birds, etc is not required.	
CAR 17 Please include details of stakeholders who raised comments and the reply from PP in the PDD.	E.2.1	Sample copy of questionnaire in English is now submitted to the DoE.	The comments from stakeholders were collectively invited through feedback form. These feedback forms are reviewed during the document review. Hence, CAR 17 is closed
CL 1 Why project boundaries, project emissions and leakage are discussed in this section. It should be moved to the dedicated sections.	A.2.1	The project boundaries, project emissions and leakage are now moved to the dedicated sections.	The project boundaries, project emissions and leakage are now deleted from section A.2 of the PDD and moved to the dedicated sections of revised PDD. Hence, The CL 1 is closed.
CL 2 Please designate the project location in the neat and clean map for more clarity.	A.4.1	The project location is designated in the neat and clean map for more clarity.	The project location is designated in the map in section A.4.1.4 of the revised PDD. Hence, the CL 2 is closed.
CL 3 According to AMS.I.D. Ver. 13 EB 36 there are five Technology/measure for justify the applied project activity as per methodology requirement. Please clarify why all the paragraphs of Technology/measures of AMS.I.D. are not discussed in section B.2. of the PDD for proper justification.	B.2.1	All five Technology/measure as per methodology AMS-I.D. are now discussed in section B.2. of the PDD	The all five technology/measure for complying with requisite criteria for AMS-I.D. (Version-13, EB-36) has been discussed in section B.2 of the revised PDD. Hence, CL 3 is closed.
CL 4 Please justify why the NEWNE grid has included in the project boundary? Please also justify why the word ***START*** are	B.3.1	The grid emission factor is calculated based on the data of the power plants in the NEWNE grid region. All the power plants in the NEWNE Grid are the part of	Since, all the power plants in the NEWNE Grid are the part of the project baseline. So the grid is part of the project boundary which is accepted by validation team.

Draft report clarifications and corrective action requests	Ref. to table 2	Summary of project participants' response	Validation team conclusion
indicated in project boundary diagram.		the project baseline. So the grid is part of the project boundary. The word START is now omitted from the diagram. The project boundary diagram is now simplified further.	The word START is now deleted from the diagram mentioned in section B. 3 of the revised PDD. Hence, CL 4 is closed.
CL 5 Please also clarify which Tool has adopted to calculate the emission factor for an electricity system	B.4.1	Tool to calculate the emission factor for an electricity system (Version- 02 EB-50) is used to calculate grid emission factor.	Tool to calculate the emission factor for an electricity system (Version- 02 EB-50) has been mentioned in section B.4 3 of the revised PDD. Hence, CL 5 is closed.
CL 6 Please clarify why project boundaries are discussed also in this section. It should be moved to the dedicated section	B.4.1	The project boundaries are now moved to the dedicated section.	The project boundaries are now deleted from section B.4 of the revised PDD ver. 2. Hence, CL 6 is closed.
CL 7 Please provide all the references and sources used in the PDD.	B.4.8	All the relevant references and sources are provided in the PDD.	All the relevant references and sources now have been provided in section B.4 of the revised PDD. Hence, CL 7 is closed.
CL 8 Please provide the sources of the following documents: 1. Comparison table for investment for various power plants. 2. Emission of CO_2 from conventional coal fired power plant would be 5.52 kg as compare to zero emission from	B.5.2	1. Comparison table for investment to various power plants is now omitted from the PDD as PP has no relevant reference document to support it. 2. The entire paragraph is omitted from the PDD as PP has no relevant reference document to support it.	The justification provided on point number 1, 2 and 3 are acceptable to the validation team. Hence, CL 8 is closed.

Draft report clarifications and corrective action requests	Ref. to table 2	Summary of project participants' response	Validation team conclusion
a wind power plant. **3.** The Beta (β) value used in investment analysis is 1.12 which is very high. Therefore, the proper justification is required on this.		3. In the revised financial sheet PP is used Prime Lending Rate as a benchmark for the project. Therefore beta is not considering by PP in financial calculation.	
CL 9 Please provide clarification and supportive documents for the following: 1. The PP has taken 20% PLF as per MERC Guideline (page no. 32, Para 2.2.2.B). This would not be accepted by the validation team. Therefore, proper document or justification is required on this as per annex 11 of EB 48. 2. 20% PLF has been taken by the PP in investment analysis where as 26% PLF is indicated in offer letter. This needs to be confirmed which one is suitable for the project activity with proper justification. 3. The equity IRR shown is 7.48% without CDM and 9.04% with CDM which is very low to invest in any projects. It seems strange that the PP decided to invest in the project even	B.5.6	1. The investment analysis is revised as per PLF estimated in Technical Evaluation Report, October 2008 prepared by M/s Madhav Consultants prior to the final investment decision for the project activity by & Co. The plant load factor has been defined ex-ante in the CDM-PDD according to § 3 (b) of the Guidelines For The Reporting And Validation Of Plant Load Factors (EB 48 Report, Annex 11, Version 01). Source of plant load factor has been submitted to the DoE. 2. Suzlon has given 26% PLF in the offer letter but this is not used as it is the estimated generation for just one year. The PP has considered PLF of 25% on the basis of Technical Evaluation Report, October 2008, prepared by M/s Madhav Consultants which is in line with the	1. The technical evaluation report on PLF provided by the PP is accepted by the validation team. 2. The justification provided on point number 2 is accepted by the validation team. 3. The justification on revised project IRR with or without CDM provided in revised financials is appropriate and conservative and hence accepted by validation team Therefore, CL 9 is closed.

Draft report clarifications and corrective action requests	Ref. to table 2	Summary of project participants' response	Validation team conclusion
with such a low IRR. Therefore, the PP is requested to provide proper justification on this.		Guidelines For The Reporting And Validation Of Plant Load Factors (EB 48 Report, Annex 11, Version 01). 3. The revised IRR is 8.99% without CDM and 12.26% with CDM. The CDM income for the project will help the project to mitigate some of the financial risks attached with the project.	
CL 10 The values of simple operating margin for NEWNE grid in section B.6.1. of the PDD are 1.02, 1.01 and 1.00 for the year 2005-06, 2006-07 and 2007-08 respectively, While the values of simple operating margin in annex 3 attached with PDD are 1.02, 1.02 and 1.01 for the year of 2005-06, 2006-07 and 2007-08 respectively. Please clarify why these values are different from each other.	B.6.1.1	The values are referred from CEA CO_2 Database Version 4, October 2008. The CEA database is prepared in line with UNFCCC guidelines by Ministry of Power, Government of India in consultation with GTZ & First Climate. Though it not mandatory for small scale project activity, PP has considered effect of import from the CEA Database. Moreover, it was the latest available data with PP prior submission of PDD for validation. Thus the values are both appropriate & conservative.	The justification is appropriate and conservative and hence accepted by validation team. Therefore, CL 10 is closed.
CL 11 Please clarifiy why equation 11 of 'Tool to calculate the emission factor for an electricity system' (Annex- 12, Version-01.1, EB- 35) is used for calculating	B.6.3.1	The PDD is now corrected under section B.6.3. as equation 12 of ACM0002 (Version-9, EB- 45) instead of equation 11 of 'Tool to calculate the emission factor for an electricity system.	The relevant correction has been done in the revised PDD. Hence, CL 11 is closed.

Draft report clarifications and corrective action requests	Ref. to table 2	Summary of project participants' response	Validation team conclusion
emission reduction (ER_y)			
CL 12 Please clarify the following issues: 1. What will be another ways to determine leakage. 2. What is the multiplying factor and how the apportioing will be done. 3. Provide the values indicating in table for electricity distribution.	B.7.2.4	1. The project is a new activity. As no transfer of equipment from other project activity, accordingly the project leakage is zero. 2. The Multiplying factor is the generation ratio of PP's WTG to all other WTGs connected to one single feeder. The multiplying factor is part of the apportioning of electricity. .The state utility, MSEDCL, is responsible for the apportioning of the electricity as per the Power Purchase Agreement (section 11.05, sub-point b & c). The apportioning of electricity will requires PP to compile & process large amount of data for the total wind farm which is under the sole control of MSEDCL. As the apportioning and its data is not in the control of PP or O & M Contractor hence, PP is omitting the details of apportioning from the webhosted PDD. The annual emission reduction calculation during entire crediting period will be based on the monthly JMR Reports (certified by	1. The Clarification of leakage has been accepted by the validation team. 2. The justification provided on multiplying factor and apportioning is acceptable to validation team. 3. The apportioning and multiplying factor are omitted from revised PDD. Therefore the CL 12 is closed.

Draft report clarifications and corrective action requests	Ref. to table 2	Summary of project participants' response	Validation team conclusion
		MSEDCL)/ monthly invoices of sell. Hence, it will not affect the quality emission reduction calculations and overall the monitoring plan of the project activity. 3. The value of electricity supply to the NEWNE Grid is now mentioned in the table 7.2..	
CL 13 Please provide the supportive documents for the training procedures identified for monitoring personnel	B.7.2.7	Since PP is handed over operation and maintenance of WTG to supplier (Suzlon Energy Limited) , no specific training is required. The list of employees who received the training for O & M of WTG and Monitoring is submitted to the DOE.	The list of employees is provided by PP and found acceptable to the validation team. Hence, CL 13 is not closed.
CL 14 Please provide appointment letter indicating MITCON appointed as a CDM consultant for present project activity	C.1.1.1	Appointment letter dated November 21, 2008 indicating MITCON appointed as a CDM consultant for present project activity is now submitted to the DOE.	MITCON Appointment letter dated November 21, 2008 for project activity is now provided by the PP. The appointment letter was reviewed and found acceptable by the validation team. Hence, CL 14 is closed.
CL 15 Please clarify why trans boundary impacts are not considered in the proposed activity	D.1.4	Wind energy projects are considered environmentally safe. As the wind power generation projects are not listed in schedule I of the host country DNA i.e. Ministry of Environment and Forests (MoEF), Government of India (GOI). The Environmental Impact Assessment is	The response provided on the clarification is acceptable to the validation team. Hence, CL 15 is closed.

Draft report clarifications and corrective action requests	Ref. to table 2	Summary of project participants' response	Validation team conclusion
		not mandatory. Thus the transboundary impact assessment is not considered.	
CL 16 Please also provide the list of stakeholders attended the meeting	E.1.1	Stakeholder attendance sheet submitted now.	The list of stakeholders who attended the stakeholders meeting was provided by the PP. This stakeholders list was assessed and found suitable by the validation team. Hence, CL 16 is closed.
CL 17 Please furnish minutes of the stakeholders meeting	E.1.3	The minutes are submitted to the DoE.	A copy of minutes of the meeting, Photographs of meeting and filled questionnaire was provided by the PP. All documents were assessed by validation team and found acceptable. Hence, CL 17 is closed.
CL 18 Please provide the summary of the stakeholder's comments received during the meeting.	E.2.2	The feedback forms filled by the stakeholders during the meeting are submitted to the DoE. Moreover, the summary is included in the PDD under section E.2.	The summary of stakeholders has been provided in section E.2 of the revised PDD and found acceptable. Hence, CL 18 is closed.
CL 19 Please clarify why the monitoring information did not provided in Annex-4 of the PDD.	Annex 4	The monitoring information is detailed under section B.7	The monitoring information is provided in section B.7 of revised PDD and found acceptable. Hence, CL 19 is closed.