



VALIDATION REPORT

Gopani Iron and Power (India) Pvt. Ltd.

**GIPPL WASTE HEAT BASED 11.5
MW CAPTIVE POWER PROJECT**

SGS Climate Change Programme
SGS United Kingdom Ltd
SGS House
217-221 London Road
Camberley Surrey
GU15 3EY
United Kingdom

Date of issue:	Project No.:
09/10/2007	CDM.VAL0934
Project title	Organisational unit:
GIPPL Waste Heat Based 11.5 MW Captive Power Project	SGS Climate Change Programme
Revision number	Client:
2	Gopani Iron and Power (India) Pvt. Ltd.

Summary

SGS India Pvt. Ltd., an affiliate of SGS United Kingdom Ltd. has made a validation of the CDM project activity "GIPPL Waste Heat Based 11.5 Mw Captive Power Project", 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 rules and modalities and the subsequent decisions by the CDM Executive Board, as well as the host country criteria. The project falls under **large** scale category and scope 4. Manufacturing Industries.

The scope of validation is the independent and objective review of the project design document, baseline study and monitoring plan and other relevant document of the project. The information in this document is reviewed against the criteria defined in the Marrakech Accords (Decision 17) and the Kyoto Protocol (Article 12) and subsequent guidance from the CDM Executive Board.

The overall validation process, from Contract Review to Validation Report & Opinion, was conducted using internal procedures (UK.PP.12 issue 3 dated 19/01/2007).

The first output of the validation process is a list of Corrective Actions Requests and New Information Requests (CAR and NIR), presented in Annex 3 of this document. Taking into account this output, the project proponent revised its project design document.

In summary, it is SGS's opinion that the proposed CDM project activity correctly applies the baseline and monitoring methodology as mentioned in approved methodology adopted for the proposed project activity and meets the relevant UNFCCC requirements for the CDM and the relevant host country criteria.

Subject:		
CDM validation		Indexing terms
Work carried out by		
Mr. Sanjeev Kumar - Team Leader Mr. Pankaj Mohan - Assessor Mr. Vikrant Badve - Local Assessor		
Technical review		
Ms. – Irma Lubrecht	☒	No distribution without permission from the Client or responsible organisational unit
Authorized signatory		
Siddharth Yadav	☐	Limited distribution
Date of final decision:	Number of pages:	
10.10.2007	59	☐ Unrestricted distribution



Abbreviations

CA	Chartered Accountant
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CEA	Central Electricity Authority
CER	Certified Emission Reductions
CERC	Central Electricity Regulatory Commission
CFE	Consent for Establishment
CFO	Consent for Operation
CO ₂	Carbon Dioxide
COP/MOP	Conference of parties serving as the meeting of parties to Kyoto Protocol
DNA	Designated National Authority
DOE	Designated Operational Entity
DR	Document Review
EIA	Environment Impact Assessment
FI	Financial Institution
GIPPL	Gopani Iron and Power Pvt. Ltd.
GHG	Green House Gas(es)
GWh	Giga watt hour
I	Interview
IPCC	Intergovernmental Panel on Climate Change
ISHC	International Stakeholder Consultation
kWh	Kilo watt hour
MLA	Member of Legislative Assembly
MNES	Ministry of Non Conventional Energy Sources
MoEF	Ministry of Environment and Forest
MoV	Means of Verification
MP	Monitoring Plan
MPCB	Maharashtra Pollution Control Board
MW	Mega watt
MT	Metric Tonne
NIR	New Information Request
NGO	Non Government Organisation
NOC	No Objection Certificate
NTPI	National Thermal Power Institute
PDD	Project Design Document
PLF	Plant Load Factor
ODA	Official Development Assistance
UNFCCC	United Nations Framework Convention for Climate Change
WHR	Waste Heat Recovery



Table of content

Table of content	4
1 Introduction.....	5
1.1 Objective	5
1.2 Scope	5
1.3 GHG Project Description	5
1.4 The names and roles of the validation team members.....	6
2 Methodology.....	7
2.1 Review of CDM-PDD and additional documentation.....	7
2.2 Use of the validation protocol	7
2.3 Findings.....	7
2.4 Internal quality control	8
3 Determination Findings	9
3.1 Participation requirements.....	9
3.2 Baseline selection and additionality	9
3.3 Application of Baseline methodology and calculation of emission factors	11
3.4 Application of Monitoring methodology and Monitoring Plan.....	11
3.5 Project design.....	12
3.6 Environmental Impacts	12
3.7 Local stakeholder comments.....	13
4 Comments by Parties, Stakeholders and NGOs	14
4.1 Description of how and when the PDD was made publicly available	14
4.2 Compilation of all comments received.....	14
4.3 Explanation of how comments have been taken into account.....	17
5 Validation opinion	20
6 List of persons interviewed	21
7 Document references	22

Annex 1: Local assessment

Annex 2: Validation Protocol

Annex 3: Overview of findings

Annex 4: Statement of Competence of Validation Team

1 Introduction

1.1 Objective

Gopani Iron and Power (India) Pvt. Ltd. has commissioned SGS to perform the validation of the project: "GIPPL Waste Heat Based 11.5 MW Captive Power Project" with regard to the relevant requirements for CDM project activities. The purpose of a validation is to have an independent third party assess the project design. In particular, the project's baseline, the monitoring plan (MP) and the project's compliance with relevant UNFCCC and host country criteria are validated in order to confirm that the project design as documented is sound and reasonable and meets the stated requirements and identified criteria. Validation is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of Certified Emission Reduction (CER). UNFCCC criteria refer to the Kyoto Protocol criteria and the CDM rules and modalities and related decisions by the COP/MOP and the CDM Executive Board.

1.2 Scope

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

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

1.3 GHG Project Description

The purpose of the project activity is to achieve efficient use of waste heat to generate 11.5MW electricity. The electricity generated by the project activity shall be used to meet the captive power requirement of GIPPL sponge iron Plant located at plot # A-22 MIDC Chandrapur – Hingna Road in Chandrapur district of Maharashtra state in India. The project activity by producing electricity from waste heat will replace same amount of electricity from a coal based captive power plant. The WHR power plant is in construction stage will start operation from 15/03/2008 as per the discussion with the project proponent during site visit.

Baseline Scenario:

Under the baseline scenario, there would have been more direct on-site emissions through burning of fossil fuel in the Power generation by installing coal based power generation plant for meeting electrical energy requirements in manufacturing of sponge iron.

With Project Scenario:

The project activity uses waste heat for generation of power. The project activity will use waste heat generated by the kiln to generate power which in turn contributes to conservation of coal, a non-renewable natural resource and also thus reduced GHG emissions.

Leakage:

As per the methodology ACM0004 version 2; applicable for the project activity, leakage is not considered for present project activity.

Environmental & Social Impacts:



There is no negative environmental and social impact expected due to the present project activity. The project activity will turn to save the fossil fuel like coal and reduce the GHG emissions thus as mentioned in the PDD the project activity will not have any negative impact on the surrounding and have positive impact on the socio-economic environment of the project activity area. The same was cross-checked during review of local stakeholder consultation meeting.

1.4 The names and roles of the validation team members

Name	Supplier	Role
Mr. Sanjeev Kumar	SGS India	Team Leader / Lead Auditor
Mr. Pankaj Mohan	SGS India	Assessor
Mr. Vikrant Badve	SGS India	Local Assessor

Statement of Competence of team members are attached at Annex IV.

2 Methodology

2.1 Review of CDM-PDD and additional documentation

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

A site visit is usually required to verify assumptions in the baseline. Additional information can be required to complete the validation, which may be obtained from public sources or through telephone and face-to-face interviews with key stakeholders (including the project developers and Government and NGO representatives in the host country). These may be undertaken by the local SGS affiliate. The results of this local assessment are summarized in Annex 1 to this report.

2.2 Use of the validation protocol

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

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

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

Checklist Question	Means of verification (MoV)	Comment	Draft and/or Final Conclusion
<i>The various requirements are linked to checklist questions the project should meet.</i>	<i>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.</i>	<i>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.</i>	<i>This is either acceptable based on evidence provided (Y), or a Corrective Action Request (CAR) due to non-compliance with the checklist question (See below). New Information Request (NIR) is used when the validation team has identified a need for further clarification.</i>

The completed validation protocol for this project is attached as Annex 2 to this report

2.3 Findings

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

In general, where insufficient or inaccurate information is available and clarification or new information is required the Assessor shall raise a **New Information Request (NIR)** specifying what additional information is required.

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

- I. mistakes have been made with a direct influence on project results;
- II. validation protocol requirements have not been met; or

- III. There is a risk that the project would not be accepted as a CDM project or that emission reductions will not be verified.

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

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

Corrective Action Requests and New Information Requests are raised in the draft validation protocol and detailed in a separate form (Annex 3). In this form, the Project Developer is given the opportunity to "close" outstanding CARs and respond to NIRs and Observations.

2.4 Internal quality control

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

3 Determination Findings

3.1 Participation requirements

The host Party for this project is India. India has ratified the Kyoto protocol on 26th August 2002. A Letter of Approval from host country was not provided by project proponent so CAR (01) was raised. The project proponent provided a copy of Letter of approval from Indian DNA dated 12th March 2007; (reference number 4/23/2006-CCC) which was verified for the name of project participants and project activity in the PDD and it was found correct and acceptable. There were two project participants for this project activity, the first one is Gopani Iron and Power Pvt. Ltd. and the other one is Lloyds Steel Industries Ltd. Both names are indicated in the LoA from the host country. Hence CAR (01) was closed out.

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

3.2 Baseline selection and additionality

The present project activity "GIPPL Waste Heat Based 11.5 MW Captive Power Project" has applied baseline as mentioned in the large scale methodology ACM0004 version 02 dated 3rd March 2006 for "Consolidated Baseline methodology for waste gas and/or heat and/or pressure for power generation". The project activity generates electricity using the heat available in the waste stream generated by the kiln and thus replaces electricity from a coal based captive power plant and thus contributes to conservation of fossil fuel. The project activity is producing the electricity for captive use and will fall under the category ACM0004.

The project proponent in the absence of the project activity would chose an option of setting up of own coal based power plant as coal is easily and cheaply available in the project activity region. Also the cost of per unit generation with coal based FBC power plant (Captive Power Plant) is low when compared the same with the fuels like Natural Gas, Diesel oil and also with the purchase cost with power from regional grid thus indicating that coal based power plant is the economically attractive option to the project proponent in absence of the WHR CDM project activity. Also Section B.4 of the PDD discusses the various alternatives available to the project activity. The various alternatives to the project activity were checked and validated during the site visit and also discussed with the project proponent. Hence the coal based FBC power plant was considered as baseline scenario for the present project activity.

The project proponent has used tool for the demonstration and assessment of additionality version 2 to show the additionality of the project activity. This was accepted since the PDD uploaded on UNFCCC website for public comments uses the same version of tool and as per UNFCCC decision in Annex 2 of EB30 the project can be submitted for request for registration using the same version of the additionality tool within 8 months from the date when version 3 of the tool was made public. Thus use of version 2 of additionality tool was accepted by the DOE.

The project has adopted the Investment barrier as main barrier and also mentioned some supporting barriers like technological barrier and barrier due to prevailing practice to justify additionality of the project. In order to get all the related documents on basis of which the project was shown additional, CAR (05) was raised.

The additionality of the project was assessed as per the tool of additionality version 02 dated 28th November 2005. The funds for the project activity were made available partly from the bank loan and partly from equity. In response to CAR (05) project proponent has submitted spreadsheet giving calculations for Internal rate of return (IRR) with the assumptions used for calculation of IRR. The assumption used for IRR calculation was discussed with project proponent and same was also verified from the bank loan documents. A certificate from CA who has prepared the IRR excel spreadsheet was submitted by the project proponent. The financial figures mentioned in the PDD were found correct when checked against the IRR excel spreadsheet. The benchmark for equity project IRR of 20%, IRR of 16% and investment IRR of 11.5% was considered as a benchmark IRR for the project activity. Evidence for the benchmark consideration for equity IRR, project IRR and investment IRR were checked and found correct. The project proponent has calculated project IRR, equity IRR and Investment IRR for the project activity. The project IRR for the project activity without considering CDM benefit was 9.7% and IRR with considering the CDM benefits for the project activity was 13.9% while equity IRR and investment IRR without CDM benefit works out to 6.4% and 8.5% respectively; these improves to 9.6% and 10% when CDM benefit was considered for the project activity. Hence it was observed that the CDM benefit improves IRR for the project activity nearer to the benchmark value and hence CDM benefit was a driving force in going ahead with the project activity which lowers the financial risk associated with the project activity.

All IRRs show rise due to CDM benefits consideration but still lower than benchmarks showing project activity as not financially attractive. Investment IRR shows an increase up to 10% from 8.5% when CDM benefits were considered and thus bringing closer to benchmark of 11.5% which made the project activity viable to lenders as interest liability could be met. Hence Investment IRR was considered as more appropriate for additionality proof. However, the option II as per tool is also used to compare the IRR with other option available to the project activity. With coal, all IRRs were higher than WHRB option and project IRR of this options crosses the benchmark

Project proponent submitted financial refusal letter from a Financial Institutions. The loan was refused mentioning that the WHR project is not a viable project and also it does not fall under essential services. This was checked against the refusal letter and found acceptable.

Project proponent also submitted a sensitivity analysis for the project activity considering the 5 and 10% variation in the Plant Load Factor (PLF). Sensitivity analysis sheet was incorporated with financial analysis excel sheet and same was found correct and acceptable.

Project proponent has also mentioned few technological barriers like unavailability of skilled manpower for operation and maintenance of the project activity, lack of infrastructure for project installation, raw material i.e. flue gas variation which may lead to variation in the project output, boiler related constraints. All these barriers were discussed with the project participants during validation site visit. Evidence for all these barriers has been provided by the project proponent; which were checked for their content and found acceptable. A copy of these documents is attached in audit trail folder.

Project proponent has also mentioned barriers due to prevailing practice and regulatory barriers faced during the early stage of project execution. The evidence for same is submitted by the project proponent and same was cross-checked with its content and found acceptable.

It was concluded from the above discussion that the project activity without CDM funds was a risk for the project proponent and CDM funds will help project activity to become a more viable alternative. Thus project activity passes the additionality test and project activity is additional to the baseline.

Project proponent was asked to provide evidence for the starting date of the project activity. CAR (17) was raised for the same. Project proponent submitted board resolution dated 15th October 2005 in

which benefits due to CDM funds were considered for making the project activity more viable. The copy of board resolution was cross-checked for its content and same was found acceptable after having a discussion with the project proponent. Thus 15/10/2005 was accepted as a starting date of project activity. CAR (17) was closed.

3.3 Application of Baseline methodology and calculation of emission factors

The proposed CDM project activity is a power generation using waste gases and uses baseline methodology as described under ACM0004 version 02 dated 3rd March 2006 for “Consolidated Baseline methodology for waste gas and / or heat and / or pressure for power generation” as per large scale CDM project activities.

The emission reduction calculation sheet was not provided with the PDD version 01 and hence NIR (03) was raised. Responding to NIR (03) project proponent provided the calculations for emission reduction. The calculations were checked and it was found that the emission reductions are calculated in accordance with the methodology ACM0004. Background information used for arriving at the value selected as benchmark for baseline emissions has been checked during the site visit. The emission factor for coal has been calculated as per the IPCC guidelines and the calculations were provided in the excel spreadsheet for emission reduction calculation which was checked and found correct.. The baseline emission calculations and emission reductions were found to be in order during the desk review and during the local assessments at the site.. NIR (03) is closed.

NIR (04) was raised to provide evidence for the claim of the emission reductions due to project activity. In response to NIR (04) project proponent mentioned that the purchase order of the project activity as evidence for the assumptions considered in the calculation of the PLF and power generation from the project activity. Purchase order for the project activity was cross-checked and the assumptions consider in the calculation of the power generation from the project activity was found correct. NIR (04) was closed.

3.4 Application of Monitoring methodology and Monitoring Plan

The present CDM project activity uses monitoring methodology as described in ACM0004 version 02 dated 3rd March 2006 for “Consolidated Baseline methodology for waste gas and / or heat and / or pressure for power generation” as per large scale CDM project activities.

The monitoring plan given in the PDD does not include monitoring of parameters like: amount of steam generated and coal consumption in the plant. CAR (06) was raised for same. In response to CAR (06) project proponent made necessary changes in the monitoring plan. The same was checked with the rephrased version of the PDD and found acceptable. Hence CAR (06) was closed.

Project proponent has mentioned purpose and responsibility for the monitoring plan. Project proponent has not mentioned the specific procedure for the internal audits of GHG project compliance with operational requirements and no specific procedure is identified for project performance reviews before data is submitted for verification, internally or externally. Thus NIR (08) and NIR (09) were raised. In response to NIRs (08) and (09) project proponent included the specific requirements for internal audits and data verification which was checked with the rephrased version of the PDD and found correct. NIRs (08) and (09) were closed.

CAR (07) was raised and project proponent was asked to provide either QA/QC or ISO certificate in order to check whether monitoring plan follows the quality assurance and quality control system. Since the plant was not an ISO certified plant till now the project proponent has submitted detailed information on monitoring plan in Annex 4 of PDD version 02 which includes details like scope of monitoring plan, calibration requirement, in-house metering system at the site, uncertainties and adjustments emergency preparedness plan for the project activity. Project proponent also provided a

sample template for the monitoring report indicating how parameters will be monitored once the project gets commissioned. This was found acceptable and CAR (07) was closed.

3.5 Project design

The Project Design Document (PDD) was designed as per version 3.0 of guidelines and version 3.1 of the CDM-PDD for large scale CDM project activity hence the format of the present PDD was checked against it and it was found that PDD has used version 3.0 of the guidelines and version 3.1 of the template correctly.

The project boundary given in the PDD version 01 was clear and Waste heat recovery boiler, Captive power generating equipment, Auxiliary equipment, Power synchronizing system, steam flow pipes and flue gas ducts were included in the project boundary. This was checked during the discussion with the project proponent.

CAR (15) was raised to know whether the technology will be changed during the crediting period or not. In response to CAR (15) project proponent mentioned that the present project activity is the only way to utilize the waste heat. Hence it is clear that the project proponent will continue using this technology in the future and will not replace the same. This was found accepted and thus CAR (15) was closed.

In Annex 4 of the PDD version 01 project proponent mentioned that training will be provided to the staff regarding the project activity. CAR (16) was raised to get evidence for the same. In response to CAR (16) project proponent mentioned that company has plans to send some of the technical people for training to NTPI (National Thermal Power Inst.) once project start operation. This was accepted as the commissioning was in progress and evidence for training will be checked during verification of the project activity.

CAR (14) was raised to check the technical specification of the project activity. In response to the same project proponent provided a copy of purchase order for the project activity which mentions the technical specifications for the project activity. Rephrased PDD was checked for the technical specifications and same were matched with the Purchase order copy; thus CAR (14) was closed.

Neither section A.4.5 nor Annex 2 of PDD version 01 was giving information on the ODA utilization for the project activity. CAR (02) was raised and project proponent was asked to provide the information regarding the ODA utilization for the project activity. In response to CAR (02) project proponent mentioned in the section A.4.5 and Annex 2 of rephrased PDD that no ODA funds were available for the project activity. This was accepted as the funds for the project activity were arranged through a bank loan and hence CAR (02) was closed.

3.6 Environmental Impacts

The compliance with local environmental regulations in that EIA requirement for the project activity was checked and also project proponent submitted consent to establish for the project activity and consent to operate for the factory from MPCB, a local authority responsible for giving Environmental clearance. NIR (10) was raised to check the EIA requirement for the project activity. In response to NIR (10) project proponent provided a copy of EIA which was checked for the impact assessment due to project activity. Also project proponent in section D of the PDD mentioned in detail regarding the Environmental Impacts on various parameters like Air quality, Water, Land, Noise generation and ecology and benefits to these parameters due to project activity. This was also checked from the copy of EIA which was given by the project proponent to the local assessor. These were in compliance and even during local stakeholder consultation carried out by local assessor no negative comment was reported.

3.7 Local stakeholder comments

The project proponent in the PDD has mentioned that they have placed an advertisement in local news paper inviting the comments from the local stakeholders. CAR (11) was raised and project proponent was requested to provide evidence for the same. In response to CAR (11) project proponent provided a copy of advertisement published in local news paper which was verified with the original during site visit and found acceptable. Hence CAR (11) was closed.

The project proponent carried out the local stakeholder consultation as mentioned in the PDD as a requirement for CDM. CAR (12) was raised and project proponent was asked to provide evidence for the local stakeholder consultation. In response to CAR (12) project proponent provided a minutes of meeting of local stakeholder consultation and same was verified during a review of local stakeholder consultation during site visit by the local assessor. This was accepted and hence CAR (12) was closed.

The project proponent in the PDD version 01 has provided the summary of the comments received from local stakeholders. CAR (13) was raised in order to get an evidence for the summary which was provided in the PDD. In response to CAR (13) project proponent has provided the copy of minute of meeting of local stakeholder consultation and NOC from local authorities for no objection about the project activity to the validator. This clarified the transparency in the local stakeholder consultation process and hence CAR (13) was closed.

In the PDD version 01 project proponent mentioned that the company has already employed local villagers and management of company is actively involved in local area development programs by giving the donation to the local panchayat for constructive work. This was checked during validation site visit and same was found acceptable. The local assessor also verified all the documents during consultation with few people whom he met during the site visit. They praised the project activity and told that it has resulted in positive effects to the people of local community.

4 Comments by Parties, Stakeholders and NGOs

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

4.1 Description of how and when the PDD was made publicly available

The PDD for this project was made available on the SGS website <http://www.sgsqualitynetwork.com/tradeassurance/ccp/projects/project.php?id=190> from 3rd January 2007 to 1st February 2007 and Comments were invited through the UNFCCC CDM homepage.

4.2 Compilation of all comments received

The project was up loaded for International stakeholder consultation (ISHC) for a period of 30 days and received one comment.

No adverse comment received during local stakeholder consultation. This was cross-checked during review of local stakeholder consultation at site during validation site visit by local assessor.



<i>Com ment num ber</i>	<i>Date received</i>	<i>Submitter</i>	<i>Comment</i>
-------------------------------------	--------------------------	------------------	----------------

1	31-01-2007	Name : N. R. Rao Email: nnr_rao@rediffmail.com Organization: Individual Organisation Type: Stakeholder City : Coimbatore	1) In Normal Indian condition the 100 TPD kiln claim to generate 2 MW power with 4 kilns how 15 MW can be generated. This needs to be verified. How can the project proponent confirm that there is extra fuel energy burnt in these kilns, than the normal consumption? 2) Is the monitoring of coal consumption in normal baseline condition without the CDM project is envisaged without this the above quantity of power generation. can this be attributed only to the waste heat. Similarly the monitoring of coal consumption at FBCB boiler looks to be important, as the boiler is designed with higher steam generation than required. 3) Fuel switch: the project has the steam source from FBCB boiler. thus how can this be ensured that there will be no fuel switch after the crediting period in the total life of the project 4) The barriers narrated in the PDD do not appear to be barrier in the sense when only part of steam is being replaced., which gives the better financial choice to the promoter to generate steam from free heat as and when available. on comparing the replacement cost of fuel alone it may give better financial choice to generate steam from waste Heat. 5) The IRR considered for Mumbai stock exchange is mainly equity base, thus the project IRR needs to be analysed instead of the total investment on the project. it would be appropriate to compare the IRR of the company with past years performance. 6) . The monitoring parameters do not consider the steam generation, pressure, temperature at coal fired boiler. also it does not consider the coal consumption in coal boiler and the sponge iron plant. this gives lack of transparency in monitoring. 7) In place of comparison of coal based power generation cost with Maharashtra electricity board, it will be better to compare the power generation costs with company's own coal based boiler
---	------------	---	--

4.3 Explanation of how comments have been taken into account

Date: 31st January 2007

Raised by: N.R.Rao

Comment	Issue	Ref
1	1) In Normal Indian condition the 100 TPD kiln claim to generate 2 MW power with 4 kiln how 15 MW can be generated. This needs to be verified. How can the project proponent confirm that there is extra fuel energy burnt in these kilns, than the normal consumption? 2) Is the monitoring of coal consumption in normal baseline condition without the CDM project is envisaged without this the above quantity of power generation. can this be attributed only to the waste heat. Similarly the monitoring of coal consumption at FBCB boiler looks to be important, as the boiler is designed with higher steam generation than required. 3) Fuel switch: the project has the steam source from FBCB boiler. thus how can this be ensured that there will be no fuel switch after the crediting period in the total life of the project 4) The barriers narrated in the PDD do not appear to be barrier in the sense when only part of steam is being replaced., which gives the better financial choice to the promoter to generate steam from free heat as and when available. on comparing the replacement cost of fuel alone it may give better financial choice to generate steam from waste Heat. 5) The IRR considered for Mumbai stock exchange is mainly equity base, thus the project IRR needs to be analysed instead of the total investment on the project. it would be appropriate to compare the IRR of the company with past years performance. 6) The monitoring parameters do not consider the steam generation, pressure, temperature at coal fired boiler. also it does not consider the coal consumption in coal boiler and the sponge iron plant. this gives lack of transparency in monitoring. 7) In place of comparison of coal based power generation cost with Maharashtra electricity board, it will be better to compare the power generation costs with company's own coal based boiler	International Stakeholder consultation

Date: 20th February 2007 [Comments from project developer]

1) The project activity is for 11.5 MW electricity generation and not for 15 MW as commented.

A.4.3 of PDD clearly states 12 tonnes/h of steam is generated at best operating levels. This is as per the design of ERK Ekrohkessel GMBH Germany. Thermal calculations of ERK can be provided to DOE as evidence. IBR approval has been received on WHRB drawings.

A.2 of PDD explains that PDD has been developed taking into consideration 12 tonnes/h of steam from each WHRB.

Steam consumed in STG = 60.3 tonnes/h
WHRB steam used at optimum condition = 48 tonnes/h

WHRB steam contribution = $48/60.3 \times 15$
= 11.95 MW

PDD clearly states these and also that PDD has been developed for 11.5 MW for best conditions, while balance of 3.5 MW power will be generated from the FBC.

B 6.3 of PDD clearly brings out that flue gas temp and quantity vary and influence the electricity generation. GIPPL have considered only 60 % PLF taking into consideration this variation.

Hence actual electricity generated from 4 kilns = 11.5×0.6
= 6.9 MW.

Hence the electricity generated from each WHRB = $6.9/4$
= 1.725 MW

This is less than 2 MW as commented by commentator.

The sponge iron kiln is manufacturing process and has to be operated within their operating parameters. The project activity has no control on this process. There is no additional fossil fuel burnt in ABC from which WHRB receives the flue gases and there is no additional fuel burnt in WHRB also.

2) GIPPL PDD has been developed considering approved methodology ACM0004 version 02 and sectoral scope 01 dated 3rd March 2006 "Consolidated Baseline methodology for waste gas and/or heat and/or pressure for power generation"

In line with methodology option 1 "if the baseline is captive power generation", GIPPL have selected option B where assumed boiler efficiency is 100% on the net calorific values as a conservative approach.

Hence methodology does not call for coal monitoring in FBCB.

The project activity is only considering WHRB power for CDM benefits. GIPPL has transparent monitoring of steam generated and used in STG as explained in Annexure 4 of PDD.

Steam fed from WHRBS = F1
Steam fed to STG = F2
Multiplication factor for calculating
WHRB Electricity M = $F1/F2$
WHRB Electricity = M X electricity Generated in STG.

WHRB electricity is very transparently calculated as above.

SGS United Kingdom Ltd (SGS House, 217-221 London Road, Camberley, Surrey GU15 3EY Tel +44 (0)1276 697810 Fax +44 (0)1276 697888
Registered in England No. 1193985, Rosemore Business Park, Ellesmere Port, Cheshire, CH65 3EN www.sgs.com

Schematic provided in PDD shows the monitoring of steam generated by FBCB and is outside the project boundary. The steam generated by FBCB can be calculated by monitored readings F1 and F2 by calculating

Date: 22nd February 2007 [Vikrant Badve] [Comment from Assessor]

- 1) The explanation given by the project proponent in reply to the comment and the same provided in section A.4.3, A.2 and B.6.3 of the PDD is sufficient and found acceptable. Thus the WHRB capacity will be 11.5 MW and rest 3.5 MW will be generated by FBC which is not included in the project boundary. This was accepted and comment can be closed.
- 2) Project proponent is measuring steam generated by WHRB at the outlet of WHRB steam header and same has been mentioned in the PDD.
Explanation given by the project proponent regarding the coal consumption monitoring in FBCB was accepted and same was cross-checked with the ACM0004 version 02 dated 3rd March 2006 and found satisfactory. Comment can be closed.
- 3) Explanation given by the project proponent was accepted and same was also reflected in IRR sheet. Comment can be closed.
- 4) The explanation given by the project proponent is sufficient and acceptable. Comment can be closed.
- 5) The investment analysis undertaken by the project proponent is as per the tool for the demonstration and assessment of additionality version 02 dated 28th November 2005. The IRR is calculated with and without CDM benefits and excel spreadsheet of the same has been provided to the validator which is acceptable. Comment can be closed.
- 6) Since project proponent has considered option B as per methodology ACM0004 version 2 dated 3rd March 2006 and as per this the monitoring of the parameters like coal consumption, pressure and temperature of steam generated is not required to measure. Project proponent is measuring amount of steam generated. This is acceptable and the comment can be closed.
- 7) Explanation given by the project proponent was accepted.
Thus the comment can be closed.

[Acceptance and close out] OK ,Sanjeev Kumar (22nd February 2007)



5 Validation opinion

SGS has performed a validation of the project: "GIPPL Waste Heat Based 11.5 Mw Captive Power Project". The Validation was performed on the basis of the UNFCCC criteria and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

Using a risk based approach, the review of the project design documentation and the subsequent follow-up interviews have provided SGS with sufficient evidence to determine the fulfilment of the stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the CDM and all relevant host country criteria. The project will hence be recommended by SGS for registration with the UNFCCC.

SGS has received confirmation by the host Party that the project activity assists it in achieving sustainable development.

By installing 11.5MW WHR power plant the project will lead to displacement of carbon-intensive electricity by the electricity generated from waste heat and thus the project results in reductions of greenhouse gas emissions that are real, measurable and give long-term benefits to the mitigation of climate change. A review of the barrier analysis involving investment barrier and barriers due to prevailing practice associated with project activity demonstrates that the proposed project activity was not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. The project is in construction stage and will start operations from 15th March 2008 as per the discussion with the project participant during site visit. The project will likely achieve the estimated amount of emission reductions.

The validation is based on the information made available to SGS and the engagement conditions detailed in the report. The validation has been performed using a risk based approach as described above. The only purpose of this report is its use during the registration process as part of the CDM project cycle. Hence SGS can not be held liable by any party for decisions made or not made based on the validation opinion, which will go beyond that purpose.



6 List of persons interviewed

Date	Name	Position	Short description of subject discussed
07/03/2007	Mr. Jignesh Gopani	Manging Director	Project Activity Description, Finance availability for project activity
07/03/2007	Mr. R. M. Alegavi	Project Consultant	Baseline and additionality for the project activity
07/03/2007	Mr. Harpreet Singh	General Manager (Works)	Project activity commissioning and work schedule
07/03/2007	Mr. Prashant Puri	Asst. General Manager (Projects)	Local Stakeholder consultaton
07/03/2007	Mr. Prakash Trivedi	Local Stakeholder	Local Stakeholder Consultation
07/03/2007	Mr. Laxmanbhai	Local Stakeholder	Local Stakeholder Consultation
07/03/2007	Mr. Ibrahim	Local Stakeholder	Local Stakeholder Consultation



7 Document references

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

- /1/ Letter of Approval from Host Country
- /2/ Modalities of communication
- /3/ PDD version 1 dated 12th December 2006
- /4/ PDD version 2 dated 12th March 2007
- /5/ Excel spreadsheet for Financial Analysis
- /6/ Excel spreadsheet for Emission reduction calculations



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

- /1/ Bank Loan Document
- /2/ CA certificate regarding assumption in Financial Analysis
- /3/ Purchase Order for Project Activity
- /4/ Consent to operate for Steel Plant and Consent to establish for Power Plant
- /5/ Advertisement for Local stakeholder consultation
- /6/ Board Resolution
- /7/ Comments from Local stakeholder
- /8/ GIPPL's social and welfare program
- /9/ Finance refusal letter
- /10/ Lack of infrastructure for 132kV line
- /11/ CEA report on CPP
- /12/ CEA electricity average rate
- /13/ CEA report on CPP Annex -1
- /14/ CERC order
- /15/ IIM Study on CPP
- /16/ JPC survey
- /17/ MERC – Generation rates
- /18/ MSERC Order on load shedding and Diesel Power Cost
- /19/ Overview on steel sector
- /20/ Tariff policy 2006 for CPP
- /21/ TATA sustainability report
- /22/ Average Generation cost for Coal
- /23/ Draft policy on Sponge Iron
- /24/ GIPPL Audit Document
- /25/ Format for Monitoring Report for GIPPL
- /26/ Training procedure



Annex 1: Local Assessment

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
12.1 To get copy Host Country Approval (HCA) letter from Project Proponent.	PDD	DR	The LoA from host country (reference number 4/23/2006-CCC) has been obtained and verified for its content like name of the project activity and name of the project proponent and same was found acceptable.	Y	Y
12.2 No ODA has been used for this project and to be confirmed during site visit.	PDD Annex 2	DR/I	Project proponent has mentioned that no ODA is utilized for the project activity and funds for the project activity was arranged through a bank loan. Bank loan documents were obtained and loan amount for project activity was checked and found accepted.	Y	Y
12.3 Invitation for LSC meeting was sent to participate and communicate suggestions regarding the project activity. Documents are required to verify the same.	PDD	DR/I	A copy of advertisement published in local newspaper was submitted by the project proponent which was found acceptable after reviewing the original copy.	Y	Y
12.4 The regulatory approval (consent to establish and operate the project) from the Pollution Control Board is required to to verify that local/legal requirements have been met.	PDD	DR	The consent to operate for the steel plant and consent to establish for the power plant was obtained from MPCB have been obtained, verified for the validity period and same were found acceptable.	Y	Y

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
12.5 Local stakeholders' comments are required to be verified for any adverse comment. Due account of stakeholder comments received required to be verified.	PDD	DR/I	Project proponent has submitted the NOC from local panchayat, appreciation letter from local MLA and MoM of local stakeholder consultation meeting. These were found acceptable during the review of local stakeholder consultation during site visit. There were no adverse comments found during review of local stakeholder consultation during site visit.	Y	Y
12.6 Project design engineering documents from the technology supplier are required to be checked. Copy of offer made/ specifications given by technology supplier.	PDD	DR	Purchase order for Project activity was obtained and verified for the project capacity and project activity specifications. This was found accepted when same was checked with the project activity specifications in the PDD.	Y	Y
12.7 EIA report for the project activity.	PDD	Web site	A copy of EIA for the present project activity was provided by the project proponent and same was used to check the information provided in the section D of the PDD. This was found acceptable.	Y	Y
12.8 The monitoring plan required to be checked.	PDD	DR/ SV	A copy of monitoring plan for the project activity was provided by the project proponent during site visit and same was found satisfactory when compared with the methodology requirement for the project activity.	Y	Y

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
12.10 All the calibration certificates are required to be checked.	PDD	DR	The calibration certificates for the project activity will be made available once project will start operation.	Y	Y
12.11 MoM of board meeting in which CDM was considered for the project activity.	PDD	DR	Project proponent has submitted the MoM of board meeting which took held on 15th October 2005 in which CDM was considered for project activity. A copy of same has been given to the validator and same was cross-checked during discussion with the project proponent. The project is in construction stage and commissioning date of project activity was 15th March 2008 as discussed with the project proponent. The commissioning letter will be provided once project starts operation. This was verified during discussion with the project proponent.	Y	Y
12.12 Quality Assurance (QA) and Quality Control (QC) procedures for data monitoring.	PDD	DR/ SV	Procedures for data monitoring for the project activity were verified during site visit. The same will be also verified during the verification of the project activity.	Y	Y

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
12.13 Financial analysis for the project activity.	PDD	DR	The financial analysis spreadsheet for the project activity was submitted by project proponent and verified for IRR calculations. Also documentary evidence for Finance refusal by FI was submitted by the project proponent which was found acceptable when discussed with project proponent.	Y	Y
12.14 Calculation spreadsheet for baseline and project emission reductions during project crediting period.	PDD	DR	The excel spreadsheet for emission reduction calculation was obtained and the calculations and assumptions made were verified and found satisfactory.	Y	Y
12.15 Documentary evidence for the training of plant employees	PDD	DR	The project proponent during validation site visit mentioned that the plant employees will be send for training to NTPI once the project gets commissioned. This was accepted and same will be checked during verification of the project activity.	Y	Y
12.16 Modalities of communication			The document was submitted by the project proponent and same was found acceptable to the validator.	Y	Y



Annex 2: Validation Protocol

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

REQUIREMENT	Ref	MoV	Comment	Draft finding	Concl
1.1 The project shall assist Parties included in Annex I in achieving compliance with part of their emission reduction commitment under Art. 3 and be entered into voluntarily.	PDD	DR	Project will assist Parties included in Annex I in achieving compliance with part of their emission reduction commitment under Art. 3. However, no Annex-1 participant has been identified so far.	Y	Y
1.2 The project shall assist non-Annex I Parties in achieving sustainable development and shall have obtained confirmation by the host country thereof, and be entered into voluntarily	PDD	DR	The project activity is likely to contribute to sustainable development. Letter of approval from Host Country (India) Designated National Authority (DNA) to be submitted by the project proponent.	CAR1	Y CAR1 closed LoA from Host Country was given to Project Activity
1.3 All Parties (listed in Section A3 of the PDD) have ratified the Kyoto protocol and are allowed to participate in CDM projects	PDD	DR	Project is unilateral and India has ratified the protocol on 26 th August 2002 and is allowed to participate. The web link is http://unfccc.int/parties_and_observers/parties/items/2109.php	Y	Y
1.4 The project results in reductions of GHG emissions or increases in sequestration when compared to the baseline; and the project can be reasonably shown to be different from the baseline scenario	PDD	DR	The purpose of the project activity is to achieve efficient use of waste heat to generate 11.5MW electricity. The electricity so	Y	Y

28/59



REQUIREMENT	Ref	MoV	Comment	Draft finding	Concl
			generated shall mainly be used to meet the captive power requirement of GIPPL sponge iron Plant itself. Thus it will replace the power from a coal based captive power plant which would have been used to meet the electricity requirement of the plant.		
1.5 Parties, stakeholders and UNFCCC accredited NGOs shall have been invited to comment on the validation requirements for minimum 30 days (45 days for AR projects), and the project design document and comments have been made publicly available	PDD	DR/ UNFCCC Web-site	Yes, the project is listed on UNFCCC website from 3 rd January 2007 to 1 st February 2007 and was linked to SGS climate change website http://www.sgsqualitynetwork.com/tradeassurance/ccp/projects/project.php?id=190 from 3 rd January 2007 to 1 st February 2007 Number of comments received - 1	Pending closure of International stakeholder comment	Y International Stakeholder comment was answered satisfactorily; see section 4 of this report for details
1.6 The project has correctly completed a Project Design Document, using the current version and exactly following the guidance	PDD	DR	Project has used version 03.1 of PDD and followed the guidelines, except pending closure of some CARs/ NIRs.	Pending	Y All CAR/ NIR were closed
1.7 The project shall not make use of Official Development Assistance (ODA), nor result in the diversion of such ODA	PDD	DR	Section A.4.5 and Annex 2 of PDD does not give any clear information on ODA. Records to be checked during Site visit.	CAR2	Y CAR2 closed
1.8 For AR projects, the host country shall have issued a communication	PDD	DR	Not relevant as the project is not an AR project.	Not Applicable	Not Applicable



REQUIREMENT	Ref	MoV	Comment	Draft finding	Concl
providing a single definition of minimum tree cover, minimum land area value and minimum tree height. Has such a letter been issued and are the definitions consistently applied throughout the PDD?				ble	able
1.9 Does the project meet the additional requirements detailed in: Table 9 for SSC projects Table 10 for AR projects Table 11 for AR SSC projects	PDD	DR	Not applicable	Not applicable	Not applicable
1.10 Is the current version of the PDD complete and does it clearly reflect all the information presented during the validation assessment?	PDD	DR	The version of PDD used by project proponent present all the information, except pending closure of some CARs/ NIRs.	Pending	Y All CAR/ NIR were closed
1.11 Does the PDD use accurate and reliable information that can be verified in an objective manner?	PDD	DR	The PDD uses reliable information and can be verified in an objective manner.	Pending Site visit clarification	Y



Table 2 Baseline methodology(ies) (Ref: PDD Section B and Annex 3 and AM)

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
2.1 Does the project meet all the applicability criteria listed in the methodology?	PDD	DR	Project meets all applicability criteria as per the approved consolidated baseline methodology ACM0004 version 2.0 dated 3 rd March 2006.	Y	Y
2.2 Is the project boundary consistent with the approved methodology?	PDD	DR	Project boundary is consistent with the approved consolidated monitoring methodology.	Y	Y
2.3 Are the baseline emissions determined in accordance with the methodology described?	PDD	DR	Excel spreadsheet for the calculation of baseline emissions to be provided by the Project Proponent.	NIR3	Y NIR3 closed Excel spreadsheet was provided
2.4 Are the project emissions determined in accordance with the methodology described?	PDD	DR	The project emissions are taken as zero same needs to check during site visit.	Site visit	Y No source of project emission identified during site visit
2.5 Is the leakage of the project activity determined in accordance with the methodology described?	PDD	DR	It is mentioned in PDD that there is no leakage due to present project activity and it is in line with the ACM 0004 version 2.0 dated 3 rd March 2006. Needs to be checked during site visit.	Site visit	Y No source of leakage was identified during



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
					site visit
2.6 Are the emission reductions determined in accordance with the methodology described?	PDD	DR	Evidence needs to be provided for the Emission reduction claimed by the project proponent for the present project activity	NIR4	Y NIR4 close d

Table 3 Additionality (Ref: PDD Section B and AM)

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
3.1 Does the PDD follow all the steps required in the methodology to determine the additionality?	PDD	DR	All steps are followed according to the Tools for the demonstration and assessment of additionality (version 2) 28 th November 2005 for determining the additionality of the present project activity.	Y	Y
3.2 Is the discussion on the additionality clear and have all assumptions been supported by transparent and documented evidence?	PDD	DR	The discussion on additionality is needs to be supported with proper evidences like; IRR sheet for the project activity Project consideration date Problems faced by the industries A copy of joint parliamentary committee report Barriers due to prevailing practise Common practise	CAR5	Y CAR5 closed
3.3 Does the selected baseline represent the most likely scenario among other possible and/or discussed scenarios?	PDD	DR	The baseline may be the most likely scenario for the project activity	Site visit	Y Baseline for project activity was checked and found correct
3.4 Is it demonstrated/justified that the project activity itself is not a likely baseline scenario?	PDD	DR	It is demonstrated in the PDD the project activity is not a likely baseline scenario. Same needs to	Pending	Y All CAR/



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			be checked with the replies for CARs and NIRs		NIR were close d

Table 4 Monitoring methodology (PDD Section B and AM)

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
4.1 Does the project meet all the applicability criteria listed in the monitoring methodology	PDD	DR	Project meet all the applicability criteria listed in the monitoring methodology ACM0004 version 2.0 dated 3 rd March 2006.	Y	Y
4.2 Does the PDD provide for the monitoring of the baseline emissions as required in the monitoring methodology?	PDD	DR	The monitoring plan given in the PDD does not include monitoring of the parameters like; Amount of steam generated Coal consumption in the plant Please explain.	CAR6	Y CAR6 closed
4.3 Does the PDD provide for the monitoring of the project emissions as required in the monitoring methodology?	PDD	DR	As per PDD Project Emission for the present project activity is zero. Same needs to be checked during site visit.	Site visit	Y No source of project emission identified during site visit
4.4 Does the PDD provide for the monitoring of the leakage as required in the monitoring methodology?	PDD	DR	As per ACM0004 version 2.0 dated 3 rd March 2006 no leakage is to be considered for the present project activity. Evidence needs to be checked during site visit that whether present project activity has any leakage or not.	Site visit	Y No source of leakage was identified during site visit
4.5 Does the PDD provide for Quality	PDD	DR	PDD provide relevant	CAR7	Y



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
Control (QC) and Quality Assurance (QA) Procedures as required in the monitoring methodology?			information on Quality Control (QC) and Quality Assurance (QA) Procedures as required in the monitoring methodology in the Annex 4. Documents like calibration certificate and QA/QC procedure or ISO certificate needs to be provided.		CAR7 closed

Table 5 Monitoring plan (PDD Section B and Annex 4)

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
5.1 Monitoring of Sustainable Development Indicators/ Environmental Impacts	PDD	DR	Pending CAR1	Pending	Y CAR1 closed
5.1.1 Does the monitoring plan provide the collection and archiving of relevant data concerning environmental, social and economic impacts?	PDD	DR	Not Applicable	Not Applicable	Not Applicable
5.1.2 Is the choice of indicators for sustainability development (social, environmental, economic) reasonable?	PDD	DR	Not Applicable	Not Applicable	Not Applicable
5.1.3 Will it be possible to monitor the specified sustainable development indicators?	PDD	DR	Not Applicable	Not Applicable	Not Applicable
5.1.4 Are the sustainable development indicators in line with stated national priorities in the Host Country?	PDD	DR	Pending CAR1	Pending	Y CAR1 closed
5.2 Project Management Planning			The project management planning was described in Annex 4 of the PDD.	Y	Y
5.2.1 Is the authority and responsibility of project management clearly described?	PDD	DR	The authority and responsibility of project management is described in Annex 4 of the PDD.	Y	Y
5.2.2 Is the authority and responsibility for registration, monitoring, measurement and reporting clearly described?	PDD	DR	The authority and responsibility for registration, monitoring, measurement and reporting is described in Annex 4 of the PDD.	Y	Y
5.2.3 Are procedures identified for training of monitoring personnel?	PDD	DR	Procedure identified for training of monitoring personnel is mentioned in Annex 4 of the PDD.	Y	Y

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
5.2.4 Are procedures identified for emergency preparedness for cases where emergencies can cause unintended emissions?	PDD	DR	Emergency preparedness is identified in the monitoring plan and given in Annex 4 of the PDD.	Y	Y
5.2.5 Are procedures identified for calibration of monitoring equipment?	PDD	DR	Plan for Calibration of monitoring equipment in the monitoring plan is given in Annex 4 of the PDD.	Y	Y
5.2.6 Are procedures identified for maintenance of monitoring equipment and installations?	PDD	DR	Procedure for maintenance of monitoring equipment and installations in the monitoring plan is given in Annex 4 of the PDD.	Y	Y
5.2.7 Are procedures identified for monitoring, measurements and reporting?	PDD	DR	Procedure for monitoring, measurements and reporting in the monitoring plan is given in Annex 4 of the PDD.	Y	Y
5.2.8 Are procedures identified for day-to-day records handling (including what records to keep, storage area of records and how to process performance documentation)	PDD	DR	Performance evaluation procedure is identified in the monitoring plan and given in Annex 4 of the PDD.	Y	Y
5.2.9 Are procedures identified for dealing with possible monitoring data adjustments and uncertainties?	PDD	DR	Procedure is identified for dealing with possible monitoring data adjustments and uncertainties in the monitoring plan and given in Annex 4 of the PDD.	Y	Y
5.2.10 Are procedures identified for review of reported results/data?	PDD	DR	Procedure is identified to review reported results/data in the monitoring plan and given in Annex 4 of the PDD.	Y	Y
5.2.11 Are procedures identified for internal audits of GHG project	PDD	DR	No specific procedure is identified for internal audits of GHG project	NIR8	Y NIR8 close



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
compliance with operational requirements where applicable?			compliance with operational requirements where applicable.		d
5.2.12 Are procedures identified for project performance reviews before data is submitted for verification, internally or externally?	PDD	DR	No specific procedure is identified for project performance reviews before data is submitted for verification, internally or externally in the monitoring plan given in the PDD.	NIR9	Y NIR9 close d
5.2.13 Are procedures identified for corrective actions in order to provide for more accurate future monitoring and reporting?	PDD	DR	Specific procedure is identified in the monitoring plan given in the PDD.	Y	Y



Table 6 Environmental Impacts (Ref PDD Section D and relevant local legislation)

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
6.1 Has an analysis of the environmental impacts of the project activity been sufficiently described?	PDD	DR	Yes, PDD contain sufficient information.	Y	Y
6.2 Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, is an EIA approved?	PDD	DR	EIA requirement for the project activity needs to be checked. Evidence is required to be submitted by the project proponent.	NIR10	Y NIR10 closed A copy of EIA was submitted by Project proponent; same is found satisfactory
6.3 Will the project create any adverse environmental effects?	PDD	DR	Pending NIR9	Pending NIR10	Y NIR10 closed
6.4 Are transboundary environmental impacts considered in the analysis?	PDD	DR	No transboundary environmental impact identified from project activity. To be verified during site visit.	Site visit	Y
6.5 Have identified environmental impacts been addressed in the project design?	PDD	DR	Pending NIR9	Pending NIR10	Y NIR10 closed
6.6 Does the project comply with environmental legislation in the host country?	PDD	DR	The project activity is complied with all environmental legislation in the host country India.	Pending NIR10	Y NIR10 closed

Table 7 Comments by local stakeholders (Ref PDD Section E)

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
7.1 Have relevant stakeholders been consulted?	PDD	DR	Yes, Project proponent has given a list of local stakeholders consulted for the project activity in the PDD.	Y	Y
7.2 Have appropriate media been used to invite comments by local stakeholders?	PDD	DR	According to the PDD the Project Proponent placed advertisement in local news paper for inviting the local stakeholder comments. Supporting document need to be provided by the project proponent.	CAR 11	Y CAR 11 closed Supporting documents were found correct
7.3 If a stakeholder consultation process is required by regulations/laws in the host country, has the stakeholder consultation process been carried out in accordance with such regulations/laws?	PDD	DR	The project participant has consulted the local stakeholders as a requirement for CDM project. Documentary evidence needs to be provided.	CAR 12	Y CAR 12 closed Evidence found satisfactory
7.4 Is a summary of the stakeholder comments received provided?	PDD	DR	The summary of the stakeholder comments is provided in the PDD. Evidence for the same needs to be provided.	CAR 13	Y CAR 13 closed Evidence found satisfactory
7.5 Has due account been taken of any stakeholder comments received?	PDD	DR	Due account taken of stakeholder comments received is mentioned in the PDD	Y	Y





Table 8 Other Requirements

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
8.1 Project Design Document					
8.1.1 Editorial issues: does the project correctly apply the PDD template and has the document been completed without modifying/adding headings or logo, format or font.	PDD	DR	The PDD template for version 03.1 has been applied correctly.	Y	Y
8.1.2 Substantive issues: does the PDD address all the specific requirements under each header. If requirements are not applicable / not relevant, this must be stated and justified	PDD	DR	Pending CARs and NIRs	Pending	Y All CAR/ NIR were closed
8.2 Technology to be employed					
8.2.1 Does the project design engineering reflect current good practices?	PDD	DR	The project reflects current good practice for project design engineering.	Site visit	Y Project activity specification were checked and found satisfactory
8.2.2 Does the project use state of the art technology or would the technology result in a significantly better performance than any commonly used technologies in the host country?	PDD	DR	The project does not use state of the art technology as per technology details given in section A.4.3 of the PDD. Technical specifications of the of the project activity need to be provided.	CAR 14	Y CAR 14 closed Project activity specification



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
					were checked and found satisfactory
8.2.3 Is the project technology likely to be substituted by other or more efficient technologies within the project period?	PDD	DR	Proof for the same has to be submitted by the project proponent.	CAR 15	Y CAR 15 closed Evidence was submitted by project proponent
8.2.4 Does the project require extensive initial training and maintenance efforts in order to work as presumed during the project period?	PDD	DR	Annex 4 of the PDD gives information regarding the training of the plant persons. Evidence needs to be provided.	CAR 16	Y CAR 16 closed Evidence found satisfactory
8.3 Duration of the Project/ Crediting Period					
8.3.1 Are the project's starting date and operational lifetime clearly defined and reasonable?	PDD	DR	Project activity starting date is mentioned as 15-10-2005 in the PDD section C.1.1. Evidence for the same is required to be submitted.	CAR 17	Y CAR 17 closed Evidence regarding projec



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
					t activit y start date was found satisf actory
8.3.2 Is the assumed crediting time clearly defined and reasonable (renewable crediting period of max. two x 7 years or fixed crediting period of max. 10 years)?	PDD	DR	Fixed crediting period of 10 years is selected for the project activity and it is reasonable.	Y	Y
8.2.3 Does the project's operational lifetime exceed the crediting period	PDD	DR	The project's operational life time is expected to be 15 years which exceeds the crediting period of 10 years.	Y	Y

Table 9 Additional requirements for SSC projects

Table 10 Additional requirements for AR projects

Table 11 Additional requirements for SSC AR projects

Table 12 Additional information to be verified by local assessors / site visit

Annex 3: Overview of Findings

Date: 8th February 2007

Raised by: Sanjeev Kumar/ Vikrant Badve

No.	Type	Issue	Ref
1	CAR	Provide Letter of Approval from Host country as a requirement of CDM.	1.2
Date: [Response from project developer] HCA is submitted to DOE for their reference.			
Date: [02-04-2007] [Comments from Local Assessor] Letter of Approval from Host country is submitted by the project proponent. The content of the letter i.e. Name of the project activity, project participants details were cross-checked and found same as mentioned in the rephrased PDD version 2. CAR can be closed.			
[Acceptance and close out] OK, Sanjeev Kumar (02-04-2007)			

Date: 8th February 2007

Raised by: Sanjeev Kumar/ Vikrant Badve

No.	Type	Issue	Ref
2	CAR	Section A.4.5 and Annex 2 of PDD does not give any clear information on ODA for project activity, please explain	1.7
Date: [Response from project developer] It is very clearly mentioned in A.4.5 and Annex 2 in PDD that no public funding from parties in Annex 1 is available for the project activity. We confirm no ODA is available for project activity.			
Date: [26-02-2007] [Vikrant Badve] [Comments from Local Assessor] The rephrased PDD version 2 dated 28-12-2006 consists the relevant information about the ODA finance. This has been checked and found satisfactory. CAR can be closed.			
[Acceptance and close out] OK, Sanjeev Kumar (26-02-2006)			

Date: 8th February 2007

Raised by: Sanjeev Kumar/ Vikrant Badve

No.	Type	Issue	Ref
3	NIR	Excel spreadsheet for the calculation of baseline emissions to be provided by the Project Proponent.	2.3
Date: [Response from project developer] Excel spread sheet has already been provided to you. We are enclosing again.			
Date: [26-02-2007] [Vikrant Badve] [Comments from Local Assessor] The excel spreadsheet provided by the Project proponent was not clear on the auxiliary consumption figure and Plant load factor considered for the calculation. Evidence for these values need to be provided.			
Date: [Response from project developer] Evidence for auxiliary consumption and plant load factor are as follows Auxiliary consumption: Tariff order 2006 for MSEDCL which specifies auxiliary consumption of 9%/Purchase order on turn key contractor which specifies 9% as the auxiliary consumption.			

46/59



Plant Load Factor : ERK process data sheets indicating 12 TPH steam generation at optimum conditions and 10 TPH steam generation due to variation in flue gas temperature and flow rates. Captive power generation of 11.5 MW is based on optimum steam generation and actual generation will come down when steam generation is lower. Hence 60% PLF is considered to arrive at conservative emission reductions.

Date: [02-04-2007] [Vikrant Badve] [Comments from Local Assessor]

It has been verified from the Purchase order that the auxiliary consumption for the project activity is mentioned as 9 %, and project proponent agrees that the actual auxiliary consumption will be metered and monitored regularly. Section B.7 mentions Auxiliary consumption as one of the parameter for data monitoring. This metered auxiliary consumption will be considered further for emission reduction calculations. This was acceptable to the validator.

Explanation given regarding PLF is acceptable to the validator. NIR can be closed.

[Acceptance and close out] OK, Sanjeev Kumar (02/04/2007)

Date: 8th February 2007

Raised by: Sanjeev Kumar/ Vikrant Badve

No.	Type	Issue	Ref
4	NIR	Evidence needs to be provided for the Emission reduction claimed by the project proponent for the present project activity	2.6

Date: [Response from project developer]

The required evidences regarding installation of WHRB boilers in the form of purchase order and IBR letter of approval for WHRB enclosed. This is to provide the evidence of steam produced. The Steam turbine generator specifications to prove steam consumption for electricity generation.

In line with methodology option 1 "if the baseline is captive power generation", GIPPL have selected option B where assumed boiler efficiency is 100% on the net calorific values as a conservative approach. IPCC factor considered for Emission factor. Proof for IPCC factor enclosed.

Date: [26-02-2007] [Vikrant Badve] [Comments from Local Assessor]

Purchase order copies for the project activity have not been submitted by the project proponent. IBR letter of approval submitted by the project proponent is for the boiler drawings and this is not a certificate given by the Boiler inspector regarding safe operation of boiler.

Date: [Response from project developer]

Purchase order on turn key contractor is enclosed. Sub order copy of turn key contractor for turbine enclosed.

Date: [02-04-2007] [Vikrant Badve] [Comments from Local Assessor]

Purchase order copies for the project activity to Lloyds Steels Industries have been submitted by the project proponent. IBR letter of approval submitted by the project proponent is for the boiler drawings and this is not a certificate given by the Boiler inspector regarding safe operation of boiler.

Date: [Response from project developer]

As the project activity is to be started in March 2008, Boiler is yet to be supplied by manufacturer. Only when the boiler is supplied then IBR will give clearance for operation. The present IBR



approval is for manufacturing. IBR clearance will be taken once the boiler is received at site.
Date: [05-04-2007] [Vikrant Badve] [Comments from Local Assessor] IBR clearance is to be checked during verification. NIR can be closed.
[Acceptance and close out] OK, Sanjeev Kumar (16-04-2007)

Date: 8th February 2007

Raised by: Sanjeev Kumar/ Vikrant Badve

No.	Type	Issue	Ref
5	CAR	The discussion on additionality is needs to be supported with proper evidences like; • IRR sheet for the project activity • Project consideration date • Problems faced by the industries • A copy of joint parliamentary committee report • Barriers due to prevailing practise • Common practise	3.2

Date: [Response from project developer]

We are enclosing the following documents as required date

- 1 IRR sheet in excel format
- 2 Board resolution for project date
- 3 Joint parliamentary report : used for explaining problems faced by industries and prevailing practice for CPPS in sponge iron industry
4. CEA report on CPPS to prove the waste heat based CPPS is not prevailing/common practice
- 5 MSDCL report on power shortage.

Date: [26-02-2007] [Vikrant Badve] [Comments from Local Assessor]

1. The IRR sheet provided by the project proponent was not clear on the assumptions used while preparing the sheet. Evidence is required for all the assumptions used.
 2. Copy of board resolution has been submitted by the project proponent and the same has been found acceptable after discussion with the project proponent.
 3. A web-link to JPC survey needs to be provided by the project proponent.
 4. An extract from the CEA report has been provided by the project proponent, also web-link for same has been provided by the project proponent. Same has been cross-checked with
 5. MSEDCL's report on the power shortage in the state of Maharashtra has been found satisfactory when cross-checked with the MSEDCL's web-site.
- Project proponent was asked to provide all relevant web-links in the PDD also.

Date: [Response from project developer]

- 1 Letter listing assumptions made in calculating IRR and certifying the IRR calculations is enclosed.
- 2 Excel sheets for IRR explaining assumptions enclosed.
- 3 Web links have been provided in revised PDD

Date: [02-04-2007] [Vikrant Badve] [Comments from Local Assessor]

The IRR calculation sheet mentions project IRR as 13.9%, Equity IRR as 9.6% and total IRR as 10.0% with CDM benefit. If we look CERC order dated 1st April 2004 which was referred in PDD; it

says 16% post tax equity IRR is benchmark for Captive Power Plants (CPP). In such case the present project activity returns does not enhanced much even after the CDM funds. And as per additionality tool; CDM benefit must enhance the IRR such that it crosses benchmark or it works out near to the benchmark. In present case as per PDD it looks that IRR with CDM benefit is much less than benchmark then please explain how CDM funds will make its impact on project activity.

The reference used 'Minimum Debt Financing Requirements for Private Power Projects in India' was a very old document please provide the recent reference for the same.

Provide active links in the reference section of the PDD.

The sensitivity analysis is carried out only for positive impact of PLF but it should also indicate negative impact of PLF. It would be better if per unit price of electricity is also included as a part of sensitivity analysis.

The reference provided 'CEA Electricity average Rate' is not clear; please provide a legible copy of same.

Please provide a copy of sanction letters (Consent to operate, NOC) for project activity from concern governmental organisations.

Please provide evidence for bank PLR. Also it is mentioned in the PDD that project proponent has taken loan from FI for project activity but evidence for the same is not provided.

Please provide evidence for barrier mentioned as Lack of infrastructure for implementation of the technology under step 3 of additionality discussion.

Date: [\[Response from project developer\]](#)

1 Investment IRR is 8.5% without CDM benefits which increases to 10 % with CDM benefits which is close to bench mark of 11.5%. Equity IRR increases from 6.4% to 9.6% and Project IRR increases from 9.7% to 13.9%. As CDM benefits make the investment IRR more attractive which enables the project proponent to meet his interest commitment. Even though the CDM benefits do not enable crossing the Bench mark, the project is being put in view of clean electricity generation and to cross the barrier of power shortage of grid which results in power cuts and production losses.

2 There is no other official study available for project IRR for which minimum debt financing for private projects is referred. However the PDD provides calculation also to arrive at project IRR based on 11% on 70% debt portion and 16% on 30% equity portion which also comes to 20%. This is established practice in Indian project to take 20% as project IRR

3 Web link addresses have been provided in Annexure 3 of PDD Version 2

4 PDD Version 2 incorporates sensitivity analysis for decreased PLF. Sensitivity analysis taking Cost of generation is not suitable to us as the electricity is used in house.

5 CEA electricity average rate is not mentioned in PDD. But grid coal based electricity generation cost of Rs 1.18/unit has been worked out based on MERC tariff order for MSPGCL. The excel sheet of this average cost calculation enclosed. We are also enclosing scanned page



of tariff order for back up.

6 We have already provided scanned copy of consent to establish. As the project activity is to be commissioned in March 2008, the consent to operate will be available after installation and before commissioning only.

7 Loan document has already been provided during validation visit. Kindly find enclosed scanned copy of same. PLR is also mentioned under terms and conditions under interest column.

8 Kindly find enclosed MAHADISCOM dated 17-03-2007 circular regarding power connection as 132 KV/220 KV presently company is connected to 32 KV grid power. The power generation is at 11 KV and hence the same is to be upgraded to 132 KV / 220 KV which will be involving extra cost.

Date: [05-04-2007] [Vikrant Badve] [Comments from Local Assessor]

Investment IRR is 8.5% without CDM benefits which increases to 10 % with CDM benefits which is close to bench mark of 11.5%. Considering the returns to be near the benchmark the project proponent went ahead with the project activity.

PLR is mentioned in the Bank documents as 11%.

CEA average rate is cross checked and found to be ok.

MAHADISCOM circular is found OK.

[Acceptance and close out] OK, Sanjeev Kumar (16/04/2007)

Date: 8th February 2007 Raised by: Sanjeev Kumar/ Vikrant Badve

No.	Type	Issue	Ref
6	CAR	The monitoring plan given in the PDD does not include monitoring of the parameters like; - Amount of steam generated - Coal consumption in the plant Please explain.	4.2

Date: [Response from project developer]

GIPPL PDD has been developed considering approved methodology ACM0004 version 02 and sectoral scope 01 dated 3rd March 2006 "Consolidated Baseline methodology for waste gas and/or heat and/or pressure for power generation

Hence methodology does not call for coal monitoring in FBCB.

The project activity is only considering WHRB power for CDM benefits. GIPPL has transparent monitoring of steam generated and used in STG as explained in B.6.2 and Annexure 4 of PDD.

Steam fed from WHRBS = F1

Steam fed to STG = F2

Multiplication factor for calculating

WHRB Electricity M = F1/F2

WHRB Electricity = M X electricity



Generated in STG.	
WHRB electricity is very transparently calculated as above. Schematic provided in PDD shows the monitoring of steam generated by FBCB and is outside the project boundary. The steam generated by FBCB can be calculated by monitored readings F1 and F2 by calculating (F2-F1) which can be cross verified if required by the reading of flow meter at the outlet of FBCB. As explained in B.2 the steam generated in FBC will be equal to required balance quantity after fully taking into consideration of full quantity of WHRB steam. Higher capacity is provided as WHRB steam generation is not consistent. WHRB steam quantity can be monitored very transparently as explained above and also in PDD.	
Date: [26-02-2007] [Vikrant Badve] [Comments from Local Assessor] Project proponent is measuring steam generated by WHRB at the outlet of WHRB steam header and same has been mentioned in the PDD. Explanation given by the project proponent regarding the coal consumption monitoring in FBCB was accepted and same was cross-checked with the ACM0004 version 02 dated 3rd March 2006 and found satisfactory. CAR can be closed out.	
[Acceptance and close out] OK, Sanjeev Kumar (26/02/2007)	

Date: 8 th February 2007		Raised by: Sanjeev Kumar/ Vikrant Badve	
No.	Type	Issue	Ref
7	CAR	Calibration certificate and QA/QC procedure or ISO certificate needs to be provided.	4.5
Date: [Response from project developer] Proposed Monitoring report document enclosed. Calibration of equipments will be carried out by NABL accredited Laboratory.			
Date: [26-02-2007] [Vikrant Badve] [Comments from Local Assessor] The monitoring report given by the project proponent as a separate document to the validator and the monitoring information provided in Annex 4 of the PDD was clear on the certain issues like data monitoring and responsibility and calibration schedule; which project proponent will adopt for the project activity. The same was cross-checked during the discussion with project proponent. CAR can be closed out.			
[Acceptance and close out] OK, Sanjeev Kumar (26/02/2007)			

Date: 8 th February 2007		Raised by: Sanjeev Kumar/ Vikrant Badve	
No.	Type	Issue	Ref
8	NIR	No specific procedure is identified for internal audits of GHG project compliance with operational requirements where applicable.	5.2.11
Date: [Response from project developer] Proposed Audit report document enclosed.			



Date: [26-02-2007] [Vikrant Badve] [Comments from Local Assessor] The audit document submitted by the project proponent gives information on the internal audits of GHG project compliance with operational requirements. The document was found satisfactory and its implementation will be checked by the party involved in the project verification. NIR can be closed.
[Acceptance and close out] OK, Sanjeev Kumar (26/02/2007)

Date: 8th February 2007 Raised by: Sanjeev Kumar/ Vikrant Badve

No.	Type	Issue	Ref
9	NIR	No specific procedure is identified for project performance reviews before data is submitted for verification, internally or externally in the monitoring plan given in the PDD.	5.2.12
Date: [Response from project developer] Proposed monitoring and audit procedures carry out project review periodically before data is submitted for verification. PDD will be modified.			
Date: [26-02-2007] [Vikrant Badve] [Comments from Local Assessor] Explanation given by the project proponent is sufficient and can be accepted. Project proponent was asked to mention the same in the monitoring plan in the PDD.			
Date: [Response from project developer] PDD is revised to include the project performance review under annexure 4.			
Date: [02-04-2007] [Vikrant Badve] [Comments from Local Assessor] Project proponent has mentioned the same under annexure 4 but data archiving period is not mentioned anywhere in the PDD.			
Date: [Response from project developer] We have now incorporated the archiving period under the remarks column of B.7.1 and in monitoring plan in Annexure 4 under section 1.1.			
Date: [05-04-2007] [Vikrant Badve] [Comments from Local Assessor] Archiving of data is mentioned in column B.7.1 and in monitoring plan in Annexure 4 under section 1.1.			
[Acceptance and close out] OK, Sanjeev Kumar (16/04/2007)			

Date: 8th February 2007 Raised by: Sanjeev Kumar/ Vikrant Badve

No.	Type	Issue	Ref
10	NIR	EIA requirement for the project activity needs to be checked. Evidence is required to be submitted by the project proponent.	6.2
Date: [Response from project developer] EIA report is enclosed.			
Date: [26-02-2007] [Vikrant Badve] [Comments from Local Assessor] A copy of EIA report for the present project activity was not submitted by the project proponent.			



Please submit the same.
Date: [Response from project developer] EIA report is enclosed.
Date: [02-04-2007] [Vikrant Badve] [Comments from Local Assessor] A copy of EIA report has been submitted by the project proponent and same was cross checked against the information provided in the PDD section D. this was found acceptable. NIR can be closed.
[Acceptance and close out] OK, Sanjeev Kumar (02/04/2007)

Date: 8th February 2007

Raised by: Sanjeev Kumar/ Vikrant Badve

No.	Type	Issue	Ref
11	CAR	According to the PDD the Project Proponent placed advertisement in local news paper for inviting the local stakeholder comments. Supporting document need to be provided by the project proponent.	7.2
Date: [Response from project developer] Paper advertisement copy enclosed.			
Date: [26-02-2007] [Vikrant Badve] [Comments from Local Assessor] An original of newspaper (dated 18 th December 2006) page on which advertisement was published asking local community to put their comments on the project activity; the same was provided by the project proponent. This was found acceptable. CAR can be closed.			
[Acceptance and close out] OK, Sanjeev Kumar (26/02/2007)			

Date: 8th February 2007

Raised by: Sanjeev Kumar/ Vikrant Badve

No.	Type	Issue	Ref
12	CAR	The project participant has consulted the local stakeholders as a requirement for CDM project. Documentary evidence needs to be provided.	7.3
Date: [Response from project developer] The following documents are enclosed 1 Letter from Tadali village panchayat. 2 Minutes of meeting with villagers 3 Letter from Member of Legislative Assembly			
Date: [26-02-2007] [Vikrant Badve] [Comments from Local Assessor] The above mentioned documents are submitted by the project proponent and same are verified by the local stakeholder. Document no. 1 and 3 are found ok. But document no. 2 does not have mention name of the local community/ villagers who were present in the meeting. This document is not accepted as a proof for local stakeholder consultation. Please provide correct document.			
Date: [Response from project developer] Minutes of meeting with the names of people attending was handed over to DOE during site visit.			

53/59



Date: [02-04-2007] [Vikrant Badve] [Comments from Local Assessor] The document for Minutes of meeting with villagers was submitted by the project proponent. This was cross-checked during the local stakeholder consultation and found accepted. CAR can be closed.
[Acceptance and close out] OK, Sanjeev Kumar (02/04/2007)

Date: 8 th February 2007		Raised by: Sanjeev Kumar/ Vikrant Badve	
No.	Type	Issue	Ref
13	CAR	The summary of the stakeholder comments is provided in the PDD. Evidence for the same needs to be provided.	7.4
Date: [Response from project developer] Minutes of meeting with Tadali villagers enclosed			
Date: [26-02-2007] [Vikrant Badve] [Comments from Local Assessor] Please refer to the comment from local Assessor for CAR12.			
Date: [Response from project developer] A minute of meeting with the names of people attending the meeting was handed over to DOE.			
Date: [02-04-2007] [Vikrant Badve] [Comments from Local Assessor] The document for Minutes of meeting with villagers does not mention the names of the villagers. CAR can be closed.			
[Acceptance and close out] OK, Sanjeev Kumar (02/04/2007)			

Date: 8 th February 2007		Raised by: Sanjeev Kumar/ Vikrant Badve	
No.	Type	Issue	Ref
14	CAR	The project does not use state of the art technology as per technology details given in section A.4.3 of the PDD. Technical specifications of the project activity need to be provided.	8.2.2
Date: [Response from project developer] The project will use all electronic monitoring instruments and controlling through DCS. Hence the Technology used is the latest. The WHRB boilers are designed under the licence of ERK Ekrohrkessel Germany which is a speciality.			
Date: [26-02-2007] [Vikrant Badve] [Comments from Local Assessor] A copy of purchase order is required to submit by the project proponent.			
Date: [Response from project developer] The technology is proven and hence the control system used is extensively used in CPPS. Purchase order on turn key contractor enclosed which specifies DCS as control system has been submitted.			
Date: [02-04-2007] [Vikrant Badve] [Comments from Local Assessor]			



The purchase order for Lloyds steel industries is submitted. CAR can be closed.
[Acceptance and close out] OK, Sanjeev Kumar (02/04/2007)

Date: 8th February 2007

Raised by: Sanjeev Kumar/ Vikrant Badve

No.	Type	Issue	Ref
15	CAR	Evidence has to be provided for not replacing the project activity by more efficient or any other project activity.	8.2.3
Date: [Response from project developer] GIPPL has no use of waste heat in any manner as explained in B.4 of PDD. Electricity generation from waste heat is the only efficient activity by which the industry can use generated electricity for captive generation. In the absence of project activity the heat is wasted.			
Date: [26-02-2007] [Vikrant Badve] [Comments from Local Assessor] The explanation given by the project proponent is acceptable and found satisfactory. CAR can be closed.			
[Acceptance and close out] OK, Sanjeev Kumar (26/02/2007)			

Date: 8th February 2007

Raised by: Sanjeev Kumar/ Vikrant Badve

No.	Type	Issue	Ref
16	CAR	Annex 4 of the PDD gives information regarding the training of the plant persons. Evidence needs to be provided.	8.2.4
Date: [Response from project developer] We are enclosing the purposed training procedures.			
Date: [26-02-2007] [Vikrant Badve] [Comments from Local Assessor] The training procedure given by the project proponent was found acceptable by the local assessor but no evidence has been provided by project proponent regarding how many of his employees have really got the training. Please provide the required information.			
Date: [Response from project developer] The project activity is in progress and the company plans to send some of their technical people for training in NTPI Nagpur before commissioning of power plant.			
Date: [02-04-2007] [Vikrant Badve] [Comments from Local Assessor] The explanation given by the project proponent was accepted and evidence regarding the same will be checked during verification.			
[Acceptance and close out] OK, Sanjeev Kumar (02/04/2007)			

Date: 8th February 2007

Raised by: Sanjeev Kumar/ Vikrant Badve

No.	Type	Issue	Ref
17	CAR	Project activity starting date is mentioned as 15-10-2005 in the PDD	8.3.1



		section C.1.1. Evidence for the same is required to be submitted.	
Date: [Response from project developer] Extracts of board resolution of 15-10-2005 is enclosed.			
Date: [26-02-2007] [Vikrant Badve] [Comments from Local Assessor] Board resolution on 15-10-2005 has been provided by the project proponent has been accepted and found satisfactory. CAR can be closed.			
[Acceptance and close out] OK, Sanjeev Kumar (26/02/2007)			



Annex 4: Statement of Competence of Validation Team

Statement of Competence

Name: Sanjeev Kumar

SGS Affiliate: SGS India Pvt. Ltd.

Status

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

Validation

Verification

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

Scopes of Expertise

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

Approved Member of Staff by Siddharth Yadav Date: 16th May 2007



Statement of Competence

Name: Pankaj Mohan

SGS Affiliate: SGS India Pvt. Ltd.

Status

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

Validation

Verification

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

Scopes of Expertise

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

Approved Member of Staff by Marco van der Linden Date: 03-04-07



Statement of Competence

Name: Vikrant Badve

SGS Affiliate: SGS India Pvt. Ltd.

Status

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

Validation

Verification

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

Scopes of Expertise

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

Approved Member of Staff by Marco van der Linden Date: 29-12-06