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# Verification Report

Godawri Power & Ispat Limited

2<sup>nd</sup> Periodic Verification

of the

“Waste Heat Based 7 MW Captive Power Project”

UNFCCC 00000264

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**Second Periodic Verification of the “Waste Heat Based 7MW  
Captive Power Project”**

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<b>Number of pages</b>		1746 (excluding cover page and annexes)		
<b>Summary:</b> <p>TÜV SÜD Industrie Service GmbH has performed a verification of the registered CDM project: “Waste Heat based 7 MW Captive Power Project”. The verification is based on the currently valid documentation of the UN Framework Convention on Climate Change (UNFCCC). In this context, the relevant documents are the "Marrakech Accords".</p> <p>The management of Godawari Power and Ispat Limited is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions of the “Waste Heat based 7MW Captive Power Project” on the basis set out within the project Monitoring and Verification Plan indicated in the final PDD version dated 16 January 2006. The development and maintenance of records and reporting procedures in accordance with that plan, including the calculation and determination of GHG emission reductions from the project is the responsibility of the management of the project.</p> <p>The verifier confirms that the project activity is implemented as planned and described in validated and registered project design documents. Installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately. The monitoring system is in place and the project generates GHG emission reductions.</p> <p>The verifier can confirm that the GHG emission reduction is calculated without material misstatements. Our opinion relates to the project’s GHG emissions and resulting GHG emissions reductions reported and related to the valid and registered project baseline and monitoring, and its associated documents. Based on the information we have seen and evaluated we confirm the following statement:</p> <p><u>Reporting period:</u> From 01-01-2006 to 31-12-2006</p> <p><u>Verified emission in the above reporting period:</u></p> <p>Baseline emissions: 18,607 <del>48,793</del> t CO<sub>2</sub> equivalents</p> <p>Project emissions: 0 t CO<sub>2</sub> equivalents</p> <p>Emission reductions: 18,607 <del>48,793</del> t CO<sub>2</sub> equivalents</p>				
<b>Work carried out by:</b> <ul style="list-style-type: none"><li>• Dr. Ayse Frey (Project Manager, GHG Lead Auditor)</li><li>• Sunil Kathuria (GHG Lead Auditor, Local Expert)</li><li>• Abhishek Goyal (Project Manager, GHG Auditor-Trainee)</li><li>• Supratik Dutta (GHG Auditor - Trainee)</li></ul>			<b>Internal Quality Control by:</b> Javier Castro	



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## **Abbreviations**

<b>CAR</b>	Corrective Action Request
<b>CDM</b>	Clean Development Mechanism
<b>CER</b>	Certified Emission Reduction
<b>CR</b>	Clarification Request
<b>DNA</b>	Designated National Authority
<b>DOE</b>	Designated Operational Entity
<b>EB</b>	Executive Board
<b>ER</b>	Emission reduction
<b>FAR</b>	Forward Action Request
<b>GHG</b>	Greenhouse Gas(es)
<b>GPIL</b>	Godawri Power and Ispat Limited
<b>JI</b>	Joint Implementation
<b>KP</b>	Kyoto Protocol
<b>MP</b>	Monitoring Plan
<b>NGO</b>	Non Governmental Organization
<b>PDD</b>	Project Design Document
<b>TÜV SÜD</b>	TÜV SÜD Industrie Service GmbH
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>VVM</b>	Validation and Verification Manual



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Annex 1: Verification Protocol

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## 1 INTRODUCTION

### 1.1 Objective

Godawri Power and Ispat Limited (GPIL) has commissioned an independent verification by TÜV SÜD Industrie Service GmbH (TÜV SÜD) of its CDM project: “Waste Heat based 7MW Captive Power Project”. Verification is the periodic independent review and ex post determination by the Designated Operational Entity / Independent Entity of the monitored reductions in GHG emissions during the defined verification period.

In general the objective of verification can be divided in Initial Verification and Periodic Verification:

- **Initial Verification:** The objective of an initial verification is to verify that the project is implemented as planned, to confirm that the monitoring system is in place and fully functional, and to assure that the project will generate verifiable emission reductions. A separate initial verification prior to the project entering into regular operations is not a mandatory requirement.
- **Periodic Verification:** The objective of the periodic verification is to verify that actual monitoring systems and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan; further more the periodic verification evaluates the GHG emission reduction data and express a conclusion with a high, but not absolute, level of assurance about whether the reported GHG emission reduction data is “free” of material misstatements; and verifies that the reported GHG emission data is sufficiently supported by evidence, i.e. monitoring records. If no prior initial verification has been carried out, the objective of the first periodic verification also includes the objectives of the initial verification.

The verification shall consider both quantitative and qualitative information on emission reductions. Quantitative data comprises the monitoring reports submitted to the verifier by the project entity. Qualitative data comprises information on internal management controls, calculation procedures, and procedures for transfer, frequency of emissions reports, review and internal audit of calculations/data transfers.

The verification follows UNFCCC criteria; refer to the Kyoto Protocol criteria and the CDM rules and modalities as agreed in the Bonn Agreement and the Marrakech Accords.

As the project has already been initially verified in July 2006 (Verification Report No. 818736, Version 02), the assessment presented herewith only covers the tasks to be performed in the periodic verification as described above.

### 1.2 Scope

Verification scope is defined as an independent and objective review and ex post determination by the Designated Operational Entity of the monitored reductions in GHG emissions. The verification is based on validated project design document including baseline. These documents are reviewed against Kyoto Protocol requirements, UNFCCC rules and associated interpretations. TÜV SÜD has, based on the recommendations in the Validation and Verification Manual, employed a risk-based approach in the verification, focusing on the identification of significant risks and reliability of project monitoring and generation of CERs.

The verification 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.

The audit team has been provided with the first Monitoring Report in February 2007, covering the period 1 January 2006 – 31 December 2006, which has been made publicly available on the UNFCCC website (see: <http://cdm.unfccc.int/Issuance/MonitoringReports>). Based on this documentation, a document review and a fact finding mission in form of an on-site audit has taken place. Afterwards the client decided to revise the Monitoring Report according to the CAR and CR indicated in the audit process. **Also the monitoring report has been revised following ‘request for review’ by three CDM EB members.** The final Monitoring Report version submitted in **May March** 2007 serves as the basis for the assessment presented herewith.

Studying the existing documentation belonging to this project, it was obvious that the competence and capability of the audit team performing the verification have to cover at least the following aspects:

- Knowledge of Kyoto Protocol and the Marrakech Accords
- Environmental and Social Impact Assessment
- Skills in environmental auditing (ISO 14000, EMAS)
- Quality assurance
- Technical aspects of power generation from waste heat recovery
- Monitoring concepts
- Political, economical and technical random conditions in host country

According to these requirements TÜV SÜD has composed a project team in accordance with the appointment rules of the TÜV certification body “climate and energy”:

**Dr. Ayse Frey** is an auditor and project manager for CDM/JI projects as well as an energy/waste expert at TÜV SÜD Industrie Service GmbH. In her position she is responsible for the implementation of validation, verification and certifications processes for greenhouse gas mitigation projects in the context of the Kyoto Protocol. After her studies in civil and environmental engineering, she completed a PhD in the field of water and waste policy. She has extensive experience with the CDM and JI flexible mechanisms as well as with management systems.

**Sunil Kathuria** is a GHG-Lead Auditor at TÜV SÜD South Asia. He is based in New Delhi, India. In his position he is implementing validation, verification and certifications audits for management systems. He has received extensive training in the CDM validation process, is an appointed Project manager and lead auditor for CDM projects and participated already in many CDM project assessments.

**Abhishek Goyal** is GHG Auditor Trainee and Project Manager for CDM projects at TÜV SÜD Industrie Service GmbH. Before joining the TÜV SÜD Industrie Service GmbH he has worked on development of PDDs and methodologies for several energy efficiency, renewable energy, and waste to energy projects. He has extensive experience in CDM.”

**Supratik Dutta** is GHG-Auditor Trainee at TÜV SÜD South Asia. He is based in Kolkata, India. He has received extensive training in the CDM validation process.

The audit team covers the above mentioned requirements as follows:

- Knowledge of Kyoto Protocol and the Marrakech Accords (All)
- Environmental and Social Impact Assessment (Frey/Kathuria)
- Skills in environmental auditing (All)
- Quality assurance (Frey/Kathuria/Goyal)
- Technical aspects of waste heat recovery power plants (All)

- Monitoring concepts (All)
- Political, economical and technical random conditions in host country (Kathuria/Goyal/Dutta )

In order to have an internal quality control of the project, a team of the following persons has been composed by the certification body “climate and energy”:

- Javier Castro (Deputy Head of the Certification Body “Climate and Energy”)

### **1.3 GHG Project Description**

Godawari Power and Ispat Limited are in the business of sponge iron manufacturing. GPIL has implemented 30 tonnes per hour (TPH) waste heat recovery boiler (WHRB 1) that utilises waste heat from a 350 tonnes per day (TPD) sponge iron kiln, a 70 TPH fluidised bed combustion (FBC) boiler that utilises coal rejects and 2 x 10 MW steam turbo generators (TG 1 and TG 2). The steam is fed to the turbines through a common header. This common header receives steam from WHRB and FBC boiler. Please see figure no. 4, page 90 in the registered PDD. The constituent of total power generated because of WHR steam is the ‘Project Activity’. Since it is not possible to directly monitor the amount of electricity generated due to project activity, the registered PDD made provision for calculation of electrical energy based on total electricity generated by two turbines, enthalpy and quantity of steam generated from WHRB and FBC boiler. Please refer equation no. 1, page 92 of the registered PDD.

During the current monitoring period (1 Jan 2006 to 31 Dec 2006), GPIL has added one WHRB (WHRB 2) of 54 TPH capacity, one steam turbo generator of 10 MW capacity (TG 3) and one steam turbo generator of 30 MW capacity (TG 4). The WHRB 2 is part of another project activity which has been registered as a CDM project (Reference no. 0772). This WHRB 2 has been installed on a 500 TPD sponge iron kiln and feeds steam into same common header. However, it is to be noted that implementation of these new components do not have any impact on the emission reductions generated due the project activity since it is dependent on quantity and enthalpy of steam from WHRB 1. Also it has been verified during the monitoring period under consideration that the emission reductions have been calculated due to steam generation from WHRB 1 only and no other source. The electricity generated is partly used for in-house consumption and is partly wheeled over to group companies through the grid.

Project participant is Godawari Power and Ispat Limited (formerly Ispat Godawari Limited).

The project activity starting date was in July 2002 and the 10 year fixed crediting period started on 1 September, 2002.

The project has been registered as CDM activity on 16 April 2006 having the reference number 0264 (see: <http://cdm.unfccc.int/Projects/DB/SGS-UKL1139564002.3/view.html>). The first monitoring period of this project activity has already been verified in the first periodic verification (see Verification Report No. 818736, Version 02). This periodic verification covers the second monitoring period which directly follows the first one.

## 2 METHODOLOGY

The project assessment aims at being a risk based approach and is based on the methodology developed in the Validation and Verification Manual (for further information see [www.vvmanual.info](http://www.vvmanual.info)), an initiative of all Applicant Entities, which aims to harmonize the approach and quality of all such assessments.

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

- It organizes, details and clarifies the requirements a CDM/JI project is expected to meet;
- It ensures a transparent verification process where the verifier will document how a particular requirement has been proved and the result of the verification.

The verification protocol consists of four tables. The different columns in these tables are described in Figure 1.

The completed protocol is enclosed in Annex 1 to this report.

Periodic Verification Checklist		
Table 1: Data Management System/Controls		
Expectations for GHG data management system/controls	Score	Verifiers Comments (including <i>Forward Action Requests</i> )
The project operator's data management system/controls are assessed to identify reporting risks and to assess the data management system's/control's ability to mitigate reporting risks. The GHG data management system/controls are assessed against the expectations detailed in the table.	<p>A score is assigned as follows:</p> <p><b>Full</b> all best-practice expectations are implemented.</p> <p><b>Partial</b> a proportion of the best practice expectations is implemented</p> <p><b>Limited</b> this should be given if little or none of the system component is in place.</p>	<i>Description of circumstances and further commendation to the conclusion. This is either acceptable based on evidence provided (OK), or a <b>Corrective Action Request (CAR)</b> of risk or non-compliance with stated requirements. The corrective action requests are numbered and presented to the client in the Verification report.</i>

Periodic Verification Checklist		
Table 2: GHG calculation procedures and management control testing		
Identification of potential reporting risk	Identification, assessment and testing of management controls	Areas of residual risks
<p>Identification of potential reporting risks based on an assessment of the emission estimation procedures.</p> <p>Identification of key source data. Focus on those risks that impact the accuracy, com-</p>	<p>Identification of the key controls for each area with potential reporting risks. Assessment of adequacy of the key controls and eventually test that the key controls are actually in operation.</p> <p>Internal controls include, Understand-</p>	<p><i>Identification of areas of residual risks, i.e. areas of potential reporting risks where there are no adequate management controls to mitigate potential reporting risks</i></p> <p><i>Areas where data accuracy,</i></p>





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Periodic Verification Checklist Table 2: GHG calculation procedures and management control testing		
Identification of potential reporting risk	Identification, assessment and testing of management controls	Areas of residual risks
Completeness and consistency of the reported data.	Assignment of responsibilities and roles, Reporting, reviewing and formal management approval of data; Procedures for ensuring data completeness, conformance with reporting guidelines, maintenance of data trails etc.	<i>Completeness and consistency could be improved are highlighted.</i>

Periodic Verification Checklist Table 3: Detailed audit testing of residual risk areas and random testing		
Areas of residual risks	Additional verification testing performed	Conclusions and Areas Requiring Improvement (including FARs)
<p><i>List of residual areas of risks of Periodic Verification Checklist Table 2 where detailed audit testing is necessary.</i></p> <p><i>In addition, other material areas may be selected for detailed audit testing.</i></p>	<p><i>The additional verification testing performed is described. Testing may include:</i></p> <ul style="list-style-type: none"> <li>▪ <i>Sample cross checking of manual transfers of data</i></li> <li>▪ <i>Recalculation</i></li> <li>▪ <i>Spreadsheet ‘walk throughs’ to check links and equations</i></li> <li>▪ <i>Inspection of calibration and maintenance records for key equipment</i></li> <li>▪ <i>Check sampling analysis results</i></li> </ul> <p><i>Discussions with process engineers who have detailed knowledge of process uncertainty/error bands.</i></p>	<p><i>Having investigated the residual risks, the conclusions are noted here. Errors and uncertainties are highlighted.</i></p>

Figure 1 Verification Protocol Tables

## 2.1 Review of Documents

The monitoring report submitted by the client and additional background documents related to the project performance were reviewed. A complete list of all documents reviewed is attached as Annex 2 to this report.

## 2.2 Follow-up Interviews

On February 8 and 9 2007 TÜV SÜD performed interviews with project stakeholders to confirm selected information. Representatives of Godawri Power and Ispat Limited were interviewed. The main topics of the interviews are summarized in Table 1.



**Table 1 Interview topics**

<b>Interviewed organization</b>	<b>Interview topics</b>
➤ Godawri Power and Ispat Limited	<ul style="list-style-type: none"><li>➤ Changes to project design and implementation since last verification</li><li>➤ Technical equipment and operation</li><li>➤ Monitoring plan</li><li>➤ Monitored data</li><li>➤ Data uncertainty and residual risks</li><li>➤ GHG calculation</li><li>➤ Compliance with national laws and regulations</li></ul>

## **2.3 Resolution of Corrective and Forward Action Requests**

The objective of this phase of the verification was to resolve the requests for corrective actions and any other outstanding issues which needed to be clarified for TÜV SÜD's positive conclusion on the GHG emission reduction calculation. The Corrective Action Requests and Clarification Requests, raised by TÜV SÜD were resolved during communication between the client and TÜV SÜD. Forward Action Requests are indicated issues which do not effect the generation of emission reduction in the verified period, but shall be improved in order to ensure the reliability of future data. To guarantee the transparency of the verification process, the concerns raised and responses that have been given are summarized in chapter 3 below and documented in more detail in the verification protocol in Annex 1.



### **3 VERIFICATION FINDINGS**

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

The findings from the desk review of the final monitoring report and the findings from interviews during the follow up visit are summarized. A more detailed record of these findings can be found in the Verification Protocol in Annex 1.

- 1) Where TÜV SÜD had identified issues that needed clarification or that represented a risk to the fulfillment of the project objectives, a Clarification or Corrective Action Request, respectively, have been issued. The Clarification and Corrective Action Requests are stated, where applicable, in the following sections and are further documented in the Verification Protocol in Annex 1. The second periodic verification of the project resulted in four Corrective Action Requests and one Clarification Request.
- 2) Where Corrective Action Requests have been issued, the exchanges between the Client and TÜV SÜD to resolve these Corrective Action Requests are summarized.
- 3) In the context of Forward Action Requests, risks have been identified, which may endanger the delivery of high quality CERs in the future, i.e. by deviations from standard procedures as defined by the MP. As a consequence, such aspects should receive a special focus during the next consecutive verification. A FAR may originate from lack of data sustaining claimed emission reductions. Forward Action Requests are understood as recommendation for future project monitoring; they are stated, where applicable, in the following sections and are further documented in the Verification Protocol in Annex 1. The second periodic verification of this project resulted in no Forward Action Requests.
- 4) The final conclusions for verification subject are presented.

The verification findings relate to the project implementation as documented and described in the final monitoring report.

### 3.1 Completeness of Monitoring

The reporting procedures reflect the monitoring plan content. The necessary procedures for the information flow, data transfer and data trails have been defined in the Procedure for GHG performance. The following internal parameters were monitored according to the monitoring plan of the registered final PDD:

1. Steam generated from WHRB 1 and FBC boiler (total steam generated)
2. Steam supplied to TG 1 and TG 2 (total steam consumed)
3. Average temperature of the steam from WHRB 1 and FBC boiler
4. Average pressure of steam from WHRB 1 and FBC boiler
5. Total electricity generated by TG 1 and TG 2
6. Total auxiliary consumption

Because of addition of new equipments in the system (as defined in section 1.3 of the report) following parameters have also been monitored:

1. Steam generated from WHRB 2
2. Steam supplied to TG 3 and TG 4
3. Auxiliary steam flow for TG #4
4. Average temperature of the steam from WHRB 2
5. Average pressure of steam from WHRB 2
6. Electricity generated by TG 3 and TG 4
7. Total auxiliary consumption

As a result of monitoring of all these parameters the following parameters are calculated:

1. Net steam supplied to TG 4 (difference of steam supplied to TG 4 and auxiliary steam flow for TG 4)
2. Vent steam (difference of steam generated from WHRB 1, WHRB 2, FBC boiler and steam supplied to TG 1, TG 2, TG 3, TG 4)
3. Effective WHR steam (difference of steam generated from WHRB 1 and vent steam)
4. Net electricity generated by all four TGs (difference of total electricity generated by TG 1, TG 2, TG 3, TG 4 and total auxiliary consumption)

Although the temperature and pressure of steam and hence enthalpy of steam generated from WHRB 1, WHRB 2 and FBC boiler is found to be within the same range. Hence the net electricity generated due to WHRB 1 is based on effective WHRB1 steam & its enthalpy, total steam generated by WHRB 1 & its enthalpy, steam generated by WHRB 2 & its enthalpy, steam generated by FBC & its enthalpy supplied to TG 1, TG 2, TG 3 and TG 4 and net electricity generated from TG 1, TG 2, TG 3 and TG 4.

The implemented monitoring system is completely covering all these parameter and found to be effectively implemented.

The carbon emission factor is used as a predetermined default value which has been defined in the registered PDD and confirmed during validation of the project i.e 0.75861 kg CO<sub>2</sub>/kWh. According to the monitoring plan the baseline emissions are directly calculated by multiplying the emission factor with net electricity generated from WHR project activity.

#### 3.1.1 Findings

##### Corrective Action request No.1

The monitoring report should describe clearly all changes carried out at project site after initial verification. This should include the specification of the new boilers, generating equipments, changes if any in metering equipment, and also provide the revised single line diagram with the position of monitoring equipments.

### Response

After the initial verification the following modifications were performed by the project proponent at the project site.

- (a) Installation of WHRB # 2
- (b) Installation of TG # 3 (10MW capacity) and TG # 4 (30 MW capacity).
- (c) Replacement of electro mechanical energy meters with digital energy meters for TG # 1, TG # 2, TG # 3, Auxiliary Transformer Meter # 1, Auxiliary Transformer Meter # 2.

The detail (capacity and specifications) of the above-mentioned modifications of the new equipments and meters installed after first verifications are provided in the revised Monitoring Report.

### Corrective Action Request No.2

In line with the monitoring plan in the registered PDD, the data on temperature and pressure of the steam from WHRSG and FBC boiler should be provided in the monitoring report.

### Response

The average monthly data on temperature and pressure of the steam generated from WHRB #1, WHRB #2 and FBC boiler have been included in the revised monitoring report. The monthly average temperature and pressure are calculated from the daily data of steam temperature and pressure.

### Clarification Request No.1

Please clarify the terminology “Auxiliary Steam Flow” as mentioned on page 20 and 22 of the monitoring report. Please explain its implication on the emission reduction calculations and provide the monitored data in the monitoring report.

### Response

As mentioned in the Monitoring Report “Auxiliary Steam Flow” is applicable for TG#3 and TG#4. “Auxiliary Steam Flow” represents the steam required in the ejector system to create vacuum in the condenser of TG#3 and TG#4.

## **3.1.2 Conclusion**

The revised monitoring report provides details of equipments that have been added during this monitoring period. The revised report also includes data on steam temperature and pressure from all the sources. The revised monitoring report calculates the enthalpies of steam from WHRB 1, WHRB 2 and FBC and uses these enthalpy data for calculation of emission reductions. The explanation on auxiliary steam flow is clear. The auxiliary steam for TG 3 is tapped before steam flow to TG 3 is measured. This will not have any impact on the emission reduction calculations for the project activity. The auxiliary steam for TG 4 is tapped after steam flow to TG 3 is measured. Based on this information, the audit team asked the client to provide monitored data for ‘TG 4 Auxiliary Steam Flow’ and deduct it from monitored steam flow to TG 4 to arrive at the net steam flow to TG 4. The TG 4 started operation in November 2006 and the correction has been made to the data for TG 4 steam flow for November 2006 and December 2006 in the revised monitoring report. This correction has led to reduction in emission reductions in a conservative manner. Auxiliary steam flow would not have any impact on the emission reduction calculations because steam flow to each turbine is monitored before steam is drawn for ejector system. The project complies with the requirements.

## 3.2 Accuracy of Emission Reduction Calculations

The reporting procedures reflect the monitoring plan content. The calculation of the emission reduction is correctly carried out in relation to net electricity generated from the Waste Heat Recovery Boiler #1, as discussed in section 3.1 above.

The data for all the monitored parameters (as defined in section 3.1) has been provided and is available in a highly structured manner as part of the monthly reports. In addition monthly returns of power generation are submitted to Chattisgarh Electricity Board which allows an immediate and correct recording of the total electricity generated from each turbine and total auxiliary consumption of the whole system for each month during the crediting period.

The necessary procedures for the information flow, data transfer and data trails have been defined in the internal documents relevant for the determination of the net electricity generated by WHR project activity.

### 3.2.1 Findings

#### Corrective Action Request No.3

The data of vent steam mentioned in **Table 3: Calculation of Effective WHR Steam** of the monitoring report for the months of Jan, April, June, Sept and Oct 2006 is not matching with the data available at plant site.

#### Response

The accounting for ‘vent steam’ quantity has been revised for the entire monitoring period (i.e 1st January 2006 -31st December 2006) and the revised value of the same is incorporated in the monitoring report.

#### Corrective Action Request No.4

Effective WHRSG steam flow mentioned in **Table 3: Calculation of Effective WHR Steam** of the monitoring report for the months of Jan, April, June, Sept and Oct 2006 is not matching with this data mentioned in **Table: Calculation of Net WHR Power Generation** on page 26 of the monitoring report.

#### Response

The **Table: Calculation of Net WHR Power Generation** has been updated as per the revised data of **‘Effective WHR Steam’**. This updated table is provided in the revised monitoring report.

### 3.2.2 Conclusion

During the months of Jan, April, June, Sept and Oct 2006 there were periods when the WHRB 1 was not operating. For these periods the vent steam was not attributed to the project activity. As a result, the vent steam (used for emission reduction calculations due to project activity) for these months was not exactly equal to difference of total steam generated by WHRB 1, WHRB 2 & FBC and steam consumed by TG 1, TG 2, TG 3 & TG 4. This approach is deemed reasonable. However, as a conservative approach the revised monitoring report calculates the vent steam as difference of total steam generated by WHRB 1, WHRB 2 & FBC and steam consumed by TG 1, TG 2, TG 3 & TG 4 for each month. The data has been revised and it now presents the correct estimation of emission reductions. The project complies with the requirements.

### **3.3 Quality of Evidence to Determine Emission Reductions**

Spot checks with recently downloaded raw data and newly consolidated monthly emission reduction calculations have been performed directly linked to the data systems. It has been seen that data sets received concerning monthly consolidated data is reproducible by raw data. Furthermore spot checks have been made on-site verifying the continuous operation of the monitoring equipment.

The audit team did verify the following parameters:

- Joint gross and auxiliary energy meter recording sheets for each month.
- Pressure and temperature parameters of steam generated from different sources
- Steam production from all the sources
- Steam consumption at all turbines

All data except vent steam data was found to be in compliance with the figures stated in the monitoring report. The vent steam data has been corrected in the revised monitoring report. The key parameters are measured with calibrated meters. The calibration certificate confirms the calibration status of the energy meters, steam flow meters and steam temperature & pressure meters. Since last verification all energy meters of class CL 2S have been changed to meters of higher accuracy CL 0.5S leading to higher accuracy of data.

#### **3.3.1 Findings**

None

#### **3.3.2 Conclusion**

The project complies with the requirements.

### **3.4 Management System and Quality Assurance**

No CDM specific internal audits are required as such because the monitoring and measurement of gross electricity generation by all turbines and auxiliary consumption by all captive power utilities are done diligently every month jointly with Chattisgarh State Electricity Board (CSEB) officials. This is done because as per the requirements of the State Government, GPIL is bound to pay cess for their captive power generation.

However, quality assurance procedures are in place and internal audits are conducted to determine whether data is compiled accurately as per the monitoring plan. Staff is made aware of the quality assurance procedures.

Although only two persons in charge and one disciplinarian are involved, the verification team feels confident with data protection. The IT system is based on standard PC and MS-office solutions.

#### **3.4.1 Findings**

None



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### **3.4.2 Conclusion**

The project complies with the requirements.



## 4 PROJECT SCORECARD

Risk Areas		Conclusions			Summary of findings and comments
		Baseline Emissions	Project Emissions	Emission Reductions	
<b>Completeness</b>	Source coverage/ boundary definition	✓	✓	✓	All relevant sources are covered by the monitoring plan and the boundaries of the project are defined correctly and transparently. The indicated .CAR1, CAR2 & CR1 have been addressed and now in place.
<b>Accuracy</b>	Physical Measurement and Analysis	✓	✓	✓	The Data is accurately measured and presented in transparent manner. CAR 3 and CAR4 have been addressed.
	Data calculations	✓	✓	✓	The data calculations are accurate
	Data management & reporting	✓	✓	✓	A data management system is in place.
<b>Consistency</b>	Changes in the project activity.	-	-	-	There are no changes in the waste heat recovery project activity to date, however details of new equipments that have been installed at site are given in section 1.3 of this report.



Industrie Service

## 5 VERIFICATION STATEMENT

TÜV SÜD Industrie Service GmbH has performed a verification of the CDM project: "Waste Heat Based 7MW Captive Power Project". The verification is based on the currently valid documentation of the UN Framework Convention on Climate Change (UNFCCC). In this context, the relevant documents are the "Marrakech Accords".

The management of Godawari Power and Ispat Limited is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions of the "Waste Heat Based 7MW Captive Power Project" project on the basis set out within the project Monitoring and Verification Plan indicated in the final PDD version, dated 16 January 2006. The development and maintenance of records and reporting procedures in accordance with that plan, including the calculation and determination of GHG emission reductions from the project is the responsibility of the management of the project.

The verifier confirms that the project is implemented as planned and described in validated and registered project design documents. Installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately. The monitoring system is in place and the project generates GHG emission reductions.

The verifier can confirm that the GHG emission reduction is calculated without material misstatements. Our opinion relates to the project's GHG emissions and resulting GHG emissions reductions reported and related to the valid and registered project baseline and monitoring, and its associated documents. Based on the information we have seen and evaluated we confirm the following statement:

Reporting period: From 01-01-2006 to 31-12-2006

Verified emission in the above reporting period:

Baseline emissions: 18,607 48,793 t CO<sub>2</sub> equivalents

Project emissions: 0 t CO<sub>2</sub> equivalents

Emission reductions: 18,607 48,793 t CO<sub>2</sub> equivalents

Munich, 2007-0504-1503

Munich, 2007-0504-1503

A handwritten signature in blue ink, appearing to read 'Javier Castro'.

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Javier Castro

**Deputy Head of Certification  
Body "Climate and Energy"**


A handwritten signature in blue ink, appearing to read 'Ayse Frey'.

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Ayse Frey

**Project Manager**


## **Annex 1: Verification Protocol**

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## 1 PERIODIC VERIFICATION CHECKLIST

**Table 1: Data Management System/Controls**


Expectations for GHG data management system/controls	Score	Verifiers Comments (including <i>Forward Action Requests</i> )
<b>1. Defined organizational structure, responsibilities and competencies</b>		
<b>1.1. Position and roles</b>	Full	The overall authority of the project is personally supervised by General Manager Power Mr. Vinay Shandliya. Mr. Shandliya has further shift engineers who work in shifts. The same are responsible for manning the plant in shift. Trained boiler operators are deployed in manning the operations. A clear organization chart with the list of manpower deployed demonstrates clear positioning and responsibilities.
<b>1.2. Responsibilities</b>	Full	The responsibilities are clearly defined as detailed in section 1.1 above.
<b>1.3. Competencies needed</b>	Full	As the project affords trained and qualified shift engineers all competencies needed meet the requirements, including that of operating personals
<b>2. Conformance with monitoring plan</b>		

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Expectations for GHG data management system/controls	Score	Verifiers Comments (including <i>Forward Action Requests</i> )
2.1. Reporting procedures	Partial	<p>Sine the last verification one additional Waste Heat Recovery Steam Generator (WHRSG) and two turbines have been added and all turbines are fed through common steam header. Since the registered PDD allows calculation of electricity generation by project activity based on apportioning of 'steam enthalpy', the same principle has been also extended to the new installations and does not require any change in reporting procedures. It is to be noted that the steam generated by the new WHRSG is not accounted for emission reductions claim in the project activity.</p> <p><u>Corrective Action request No.1</u></p> <p>The monitoring report should describe clearly all changes carried out at project site after initial verification. This should include the specification of the new boilers, generating equipments, changes if any in metering equipment, and also provide the revised single line diagram with the position of monitoring equipments.</p> <p>The reporting procedures do not completely reflect the monitoring plan content.</p>

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Expectations for GHG data management system/controls	Score	Verifiers Comments (including <i>Forward Action Requests</i> )
<b>2.2.</b>		<u>Corrective Action Request No.2</u> In line with the monitoring plan in the registered PDD, the data on temperature and pressure of the steam from WHRSG and FBC boiler should be provided in the monitoring report. <u>Clarification Request No.1</u> Please clarify the terminology "Auxiliary Steam Flow" as mentioned on page 20 and 22 of the monitoring report. Please explain its implication on the emission reduction calculations and provide the monitored data in the monitoring report.
<b>2.3. Necessary Changes</b>	Full	No changes to the monitoring plan are required.
<b>3. Application of GHG determination methods</b>		
<b>3.1. Methods used</b>	Partial	The reporting procedures reflect the monitoring plan partially. See CAR 2.
<b>3.2. Information/process flow</b>	Full	The necessary procedures have been defined in internal documents relevant for the determination of the net electricity generated by the project activity.


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Expectations for GHG data management system/controls	Score	Verifiers Comments (including <i>Forward Action Requests</i> )
<b>3.3. Data transfer</b>	Partial	<p>The necessary procedures have been defined in internal documents relevant for the determination of the net electricity generated by the project activity. However, some errors were found in the calculation of the emission reduction.</p> <p><u>Corrective Action Request No.3</u></p> <p>The data of vent steam mentioned in <b>Table 3: Calculation of Effective WHR Steam</b> of the monitoring report for the months of Jan, April, June, Sept, Oct, 06 is not matching with the data available at plant site.</p> <p><u>Corrective Action Request No.4</u></p> <p>Effective WHRSG steam flow mentioned in <b>Table 3: Calculation of Effective WHR Steam</b> of the monitoring report for the months of Jan, April, June, Sept and Oct is not matching with this data <u>mentioned in Table: Calculation of Net WHR Power Generation on page 26 of the monitoring report.</u></p>
<b>3.4. Data trails</b>	Full	The necessary procedures have been defined in internal documents relevant for the determination of the net electricity generated by the project activity.
<b>4. Identification and maintenance of key process parameters</b>		
<b>4.1. Identification of key parameters</b>	Full	The critical parameters for the determination of GHG emissions are the produced amount of electricity and steam, which are measured by calibrated meters.


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Expectations for GHG data management system/controls	Score	Verifiers Comments (including <i>Forward Action Requests</i> )
<b>4.2. Calibration/maintenance</b>	Full	The calibration certificate confirms the calibration status of the energy meters, steam flow meters and steam temperature & pressure meters. Since last verification all energy meters of class CL 2S have been changed to meters of higher accuracy CL 0.5S.
<b>5. GHG Calculations</b>		
<b>5.1. Use of estimates and default data</b>	Full	The carbon emission factor is used as a predetermined default value which has been defined in the PDD and confirmed during validation of the project.
<b>5.2. Guidance on checks and reviews</b>	Full	<p>No CDM specific internal audits are required as such because the monitoring and measurement of gross electricity generation by all turbines and auxiliary consumption by all captive power utilities are done diligently every month jointly with Chattisgarh State Electricity Board (CSEB) officials. This is done because as per the requirements of the State Government, GPIL is bound to pay cess for their captive power generation.</p> <p>However, quality assurance procedures are in place and internal audits are conducted to determine whether data is compiled accurately as per the monitoring plan. Staff is made aware of the quality assurance procedures.</p>




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Expectations for GHG data management system/controls	Score	Verifiers Comments (including <i>Forward Action Requests</i> )
<b>5.3. Internal validation and verification</b>	Partial	<p>No CDM specific internal audits are required as such because the monitoring and measurement of gross electricity generation by all turbines and auxiliary consumption by all captive power utilities are done diligently every month jointly with Chattisgarh State Electricity Board (CSEB) officials. This is done because as per the requirements of the State Government, GPIL is bound to pay cess for their captive power generation.</p> <p>However, quality assurance procedures are in place and internal audits are conducted to determine whether data is compiled accurately as per the monitoring plan. Staff is made aware of the quality assurance procedures.</p> <p>The audit team did verify the following parameters:</p> <ul style="list-style-type: none"> <li>• Joint gross and auxiliary energy meter recording sheets for each month.</li> <li>• Pressure and temperature parameters of steam generated from different sources</li> <li>• Steam production from all the sources</li> <li>• Steam consumption at all turbines</li> </ul> <p>All data is not in compliance with the figures stated in the monitoring report. Please see CAR 3 and CAR 4.</p>


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Expectations for GHG data management system/controls	Score	Verifiers Comments (including <i>Forward Action Requests</i> )
<b>5.4. Data protection measures</b>	Full	The key parameters are measured by calibrated meters.  Although only two persons in charge and one disciplinarian are involved, the verification team feels confident with data protection.
<b>5.5. IT systems</b>	Full	The IT system is based on standard PC and MS-office solutions. Hence the verification team feels confident about its use.


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**Table 2: GHG calculation procedures and management control testing**

Identification of potential reporting risk	Identification, assessment and testing of management controls	Areas of residual risks
<p>Potential reporting risks based on an assessment of the emission estimation procedures can be expected to occur in the following fields of action:</p> <ol style="list-style-type: none"> <li>1. raw data collection</li> <li>2. calculation methods,</li> </ol> <p>Key source data applicable to the project assessed are hereby:</p> <ul style="list-style-type: none"> <li>• Metering records (for electricity production)</li> <li>• Steam flow, temperature and pressure measurement</li> <li>• Accounting records (from communication to costing sections ),</li> </ul> <p>Appropriate calibration and maintenance of equipment resulting in a high accuracy of data supplied is in place.</p> <p>It is hereby needed to focus on those risks that impact the accuracy, completeness and consistency of the reported data. Risks are weakness in the GHG calculation systems and may include:</p> <ul style="list-style-type: none"> <li>➤ manual transfer of data/manual calculations,</li> </ul>	<p>Regarding the potential reporting risks identified in the left column the following mitigation measures have been observed during the document review and the on site mission:</p> <p>Raw data collection:</p> <p>As the project involves the generation of steam from the FBC boiler which is fed to the common steam header, the total amount of electricity generated by all the turbines, total steam produced by each of WHR boiler and generation of steam from FBC Boiler and steam temperature &amp; pressure are the parameters to be obtained for the GHG calculation.</p> <p>Key source of data for these parameter are:</p> <ul style="list-style-type: none"> <li>• Gross and auxiliary energy meter readings</li> <li>• Steam flow meter readings</li> <li>• Steam temperature and pressure meter readings</li> </ul> <p>The meters are installed in the sheet steel enclosure panels. The meters are of reputed make in India.</p> <p>The allocation of responsibilities is documented in a written form.</p>	<p>The issue remaining is the way the data obtained is used to calculate the emission reduction in a conservative manner according to the approach prescribed in the PDD by taking into account the quantity of vent steam.</p> <p>It is clear from the monitoring report that the auxiliary consumption is deducted from the gross electricity generation to calculate the net electricity generated by the project activity to obtain the right figure for the calculation of the emission reductions.</p>


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Identification of potential reporting risk	Identification, assessment and testing of management controls	Areas of residual risks
<ul style="list-style-type: none"> <li>➤ position of metering equipment</li> <li>➤ unclear origins of data,</li> <li>➤ accuracy due to technological limitations,</li> </ul>	<p>The necessary procedures have been defined in the internal documents and additional internal documents relevant for the determination of the electricity exported to the other manufacturing processes and wheeled over portion to the group company.</p> <p>Calculation methods:</p> <p>The reporting procedures reflect the monitoring plan content and the method used to calculate the emission reduction is correct due to the consideration of the auxiliary power use in the determination of the net electricity exported to the other manufacturing processes unit and wheeling of electricity to group company. It also proportionally reduces the generated electricity in proportion to FBC Boiler generated steam, thus deducting the emissions caused by fossil fuel. The calculations take care of the additional WHRSG and turbines added during the monitoring period under consideration.</p>	


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**Table 3: Detailed audit testing of residual risk areas and random testing**

Areas of residual risks	Additional verification testing performed	Conclusions and Areas Requiring Improvement (including <i>Forward Action Requests</i> )
<p>The issue remaining is the way the data obtained is used to calculate the emission reduction in a conservative manner according to the approach prescribed in the PDD by taking into account the quantity of vent steam.</p> <p>It is clear from the monitoring report that the auxiliary consumption is deducted from the gross electricity generation to calculate the net electricity generated by the project activity to obtain the right figure for the calculation of the emission reductions.</p>	<p>There has been a complete check of data transferred from readings to the calculation tool. There were some errors in such transfer.</p> <p>The correct installation, calibration and maintenance of the metering equipments can be confirmed.</p> <p>Clarification is requested on following issues:  <u>Clarification Request No.1</u></p> <p>Please clarify the terminology "Auxiliary Steam Flow" as mentioned on page 20 and 22 of the monitoring report. Please explain its implication on the emission reduction calculations and provide the monitored data in the monitoring report.</p>	<p>Having investigated the residual risks, the audit team comes to the following conclusion:  Immediate action is needed with respect to the following:  <u>Corrective Action request No.1</u></p> <p>The monitoring report should describe clearly all changes carried out at project site after initial verification. This should include the specification of the new boilers, generating equipments, changes if any in metering equipment, and also provide the revised single line diagram with the position of monitoring equipments.</p> <p><u>Corrective Action Request No.2</u></p> <p>In line with the monitoring plan in the registered PDD, the data on temperature and pressure of the steam from WHRSG and FBC boiler should be provided in the monitoring report.</p> <p><u>Corrective Action Request No.3</u></p> <p>The data of vent steam mentioned in <b>Table 3: Calculation of Effective WHR Steam</b> of the monitoring report for the months of Jan, April, June, Sept, Oct, 06 is not matching with the data available at plant site.</p> <p><u>Corrective Action Request No.4</u></p> <p><u>Effective WHRSG steam flow mentioned in Table 3: Calculation of Effective WHR Steam</u> of the monitoring report for the</p>


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Areas of residual risks	Additional verification testing performed	Conclusions and Areas Requiring Improvement (including <i>Forward Action Requests</i> )
		months of Jan, April, June, Sept and Oct 06 is not matching with this data mentioned in Table: <b>Calculation of Net WHR Power Generation</b> on page 26 of the monitoring report.

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**Table 4: Compilation of open issues**


Draft report corrective and forward action requests by audit team	Summary of project owner response	Audit team conclusion
<p><u>Corrective Action request No.1</u></p> <p>The monitoring report should describe clearly all changes carried out at project site after initial verification. This should include the specification of the new boilers, generating equipments, changes if any in metering equipment, and also provide the revised single line diagram with the position of monitoring equipments.</p>	<p>After the initial verification the following modifications were performed by the project proponent at the project site.</p> <ul style="list-style-type: none"> <li>(a) Installation of WHRB # 2</li> <li>(b) Installation of TG # 3 (10MW capacity) and TG # 4 (30 MW capacity).</li> <li>(c) Replacement of electro mechanical energy meters with digital energy meters for TG # 1, TG # 2, TG # 3, Auxiliary Transformer Meter # 1, Auxiliary Transformer Meter # 2.</li> </ul> <p>The detail (capacity and specifications) of the above-mentioned modifications of the new equipments and meters installed after first verifications are provided in the revised Monitoring Report.</p>	<p>The details of addition since last verification have been included in the revised monitoring report in transparent manner. The meters for measurement of energy have been replaced by the digital energy meters of higher accuracy and reputed make.</p> <p>☑</p>
<p><u>Corrective Action Request No.2</u></p> <p>In line with the monitoring plan in the registered PDD, the data on temperature and pressure of the steam from WHRSG and FBC boiler should be pro-</p>	<p>The average monthly data on temperature and pressure of the steam generated from WHRB #1, WHRB #2 and FBC boiler have been included in the</p>	<p>The average temperature and pressure for each month of the monitoring period has been entered</p>

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Draft report corrective and forward action requests by audit team	Summary of project owner response	Audit team conclusion
vided in the monitoring report.	revised monitoring report. The monthly average temperature and pressure are calculated from the daily data of steam temperature and pressure.	in the report. <input checked="" type="checkbox"/>
<u>Corrective Action Request No.3</u> The data of vent steam mentioned in <b>Table 3: Calculation of Effective WHR Steam</b> of the monitoring report for the months of Jan April, June, Sept, Oct. 06 are not matching with the data available at plant site.	The accounting for 'vent steam' quantity has been revised for the entire monitoring period (i.e 1 <sup>st</sup> January 2006 -31 <sup>st</sup> December 2006) and the revised value of the same is incorporated in the monitoring report.	The data for vent steam has been verified and found to be in line with the plant records <input checked="" type="checkbox"/>
<u>Corrective Action Request No.4</u> Effective WHRSG steam flow mentioned in <b>Table 3: Calculation of Effective WHR Steam</b> of the monitoring report for the months of Jan, April, June, Sept and Oct 06 is not matching with this data mentioned in Table: <b>Calculation of Net WHR Power Generation</b> on page 26 of the monitoring report.	The <b>Table: Calculation of Net WHR Power Generation</b> has been updated as per the revised data of ' <b>Effective WHR Steam</b> '. This updated table is provided in the revised monitoring report.	The value has been corrected in the revised monitoring report. <input checked="" type="checkbox"/>
<u>Clarification Request No.1</u> Please clarify the terminology "Auxiliary Steam Flow" as mentioned on page 20 and 22 of the monitoring report. Please explain its implication on the emission reduction calculations and provide the monitored data in the monitoring report.	As mentioned in the Monitoring Report "Auxiliary Steam Flow" is applicable for TG#3 and TG#4. "Auxiliary Steam Flow" represents the steam required in the ejector system to create vacuum in the condenser of TG#3 and TG#4.	The explanation is clear. <b>Auxiliary steam flow would not have any impact on the emission reduction calculations.</b> <input checked="" type="checkbox"/>



## **Annex 2: Information Reference List**

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Ref. No.	Document or Type of Information
1.	Registered Project Design Document for CDM project "Waste Heat Based Captive Power Plant " of Godawri Power & Ispat Limited , Riapur
2.	<a href="http://cdm.unfccc.int/Projects/DB/SGS-UKL1139564002.3/Monitoring/TUEV-SUED1145452210.91/CertificationReport">http://cdm.unfccc.int/Projects/DB/SGS-UKL1139564002.3/Monitoring/TUEV-SUED1145452210.91/CertificationReport</a> Verification report for the first period 1 <sup>st</sup> September 2002 to 31 <sup>st</sup> December 2005.
3.	On-site interviews and inspection at the project site conducted on February 8 <sup>th</sup> & 9 <sup>th</sup> , 2007 by auditing team of TÜV SÜD Validation team:  Sunil Kathuria                      Lead Auditor, TUV South Asia Pvt. Ltd. Supratik Dutta                      Trainee-GHG Auditor, TUV South Asia Pvt. Ltd.  Interviewed persons: Mr. J.P. Tiwari                      President Power Plant, Godawri Power & Ispat Limited Mr Vinay Shandilya                      Vice President- Power, Godawri Power & Ispat Limited Mr. O.R. Rao                      Assistant General Manager Operations & Maintenance, Godawri Power & Ispat Limited Mr. Sanjay Gupta                      Manager Instrumentation, Godawri Power & Ispat Limited Mr. Mithilesh Singh                      Senior Engineer, Operations
4.	Monitoring Report for "Waste heat based 7MW Captive Power Project" Reference no. UNFCCC 00000264-CDMP for the period 1 September 2002 to 31 December 2005. <a href="http://cdm.unfccc.int/Projects/DB/SGS-UKL1139564002.3/Monitoring/TUEV-SUED1145452210.91/report">http://cdm.unfccc.int/Projects/DB/SGS-UKL1139564002.3/Monitoring/TUEV-SUED1145452210.91/report</a>
5.	Monitoring Report for "Waste heat based 7MW Captive Power Project" Reference no. UNFCCC 00000264-CDMP for the period 1 January 2006 to 31 December 2006, submitted 05.02.2007
6.	UNFCCC homepage <a href="http://www.unfccc.int">http://www.unfccc.int</a> .
7.	Simplified Modalities and Procedures for Small-Scale CDM project activities.
8.	Samples of "Daily Electrical Energy Reports", Godawri Power & Ispat Limited , dated respective dates, submitted 09.02.2007
9.	Monthly returns of power generation in form "G" for period January 2006 to December 2006 Godawri Power & Ispat Limited, dated monthly, submitted 09.02.2007.
10.	Organization chart for daily monitoring , Godawri Power & Ispat Limited , dated nil, submitted 09.02.2007
11.	Records of calibration of steam pressures and temperatures measuring transmitters Bhilai Calibration Laboratory dated 22.11.2006, submitted 09.02.2007
12.	Sample of monthly summary of steam parameters, Godawri Power & Ispat Limited, dated monthly, submitted 09.02.2007.

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Ref. No.	Document or Type of Information
13.	Renewal of Consent to Operate under Water Act 1974 Air Act 1981, Chattisgarh Environment Conservation Board, dated 27.07.2006, , submitted 09.02.2007
14.	Records of calibration of energy meters , Secure Meters Limited , respective dated 2006, submitted 09.02.2007
15.	Boiler certificates for all boilers Form VI, Chattisgarh Boiler Inspection Department, dated 15.05.06, 04.05.06, 11.08.06, 11.03.06 submitted 09.02.2007.
16.	Electrical inspection report, Chattisgarh State Electricity Board dated 20.12.2005, submitted 09.02.2007.
17.	Factory License, The Director Industrial Health Safety, Chattisgarh, dated 22.11.2006, submitted 09.02.2007.
18.	Organization chart for the power plant, Godawri Power & Ispat Limited , dated nil ,submitted 09.02.2007
19.	Records of Calibration schedule, Godawri Power & Ispat Limited, dated nil, submitted 09.02.2007
20.	Supplementary power agreement between Godawri Power & Ispat Limited & Chattisgarh State Electricity Board, dated 18 .10.06, submitted 09.02.2007
21.	Second supplementary wheeling of power agreement between Godawri Power & Ispat Limited & Chattisgarh State Electricity Board, dated 18 .10.06, submitted 09.02.2007
22.	Screen print of steam measurement stations for all boilers and turbines, Godawri Power & Ispat Limited, dated 09.02.2007 , submitted 09.02.2007
23.	Communication of change of meters, Godawri Power & Ispat Limited, dated Oct 06 & Nov. 06, submitted 09.02.2007
24.	Permission for erection of 30MW turbine, Chief Electrical Inspectorate, Chattisgarh state, dated 06.09.2006, submitted 09.02.2007
25.	Summary of plantation of trees for 2005-06, Godawri Power & Ispat Limited, dated 06.07.2006, submitted 09.02.2007
26.	Sample of maintenance log book, Godawri Power & Ispat Limited, dated 02.01.2006, submitted 09.02.2007
27.	Training record of maintenance operators , SKF Bearings, dated 26.10.06, submitted 09.02.2007
28.	Submission of monthly statement on environmental parameters to State Pollution Board, Godawri Power & Ispat Limited, dated 04.10.2006, submitted 09.02.2007
29.	Photographs of the site visit, Audit Team of TUV South Asia dated 8 and 9 February, 2007