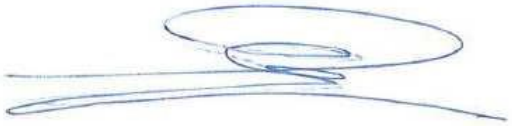
Verification and certification report form for CDM project activities

(Version 01.0)

Complete this form in accordance with the "Attachment: Instructions for filling out the verification and certification report form for CDM project activities" at the end of this form.

VERICATION AND CERTIFICATION REPORT	
Title of the project activity	SHYAM DRI WHR CPP
Reference number of the project activity	1642[1]
Version number of the verification and certification report	02
Completion date of the verification and certification report	2016-12-01
Monitoring period number and duration of this monitoring period	Monitoring period number – 03 Duration – 1/04/2012 to 29/02/2016
Version number of monitoring report to which this report applies	03
Crediting period of the project activity corresponding to this monitoring period	25 Mar 09 - 24 Mar 19 (Fixed)
Project participant(s)	Shyam Metalics& Energy Limited (Formerly known as SHYAM DRI Power Ltd.)
Host Party	India
Sectoral scope(s), selected methodology(ies), and where applicable, selected standardized baseline(s)	1 : Energy industries (renewable - / non-renewable sources) ACM0004 ver. 2 - Consolidated methodology for waste gas and/or heat for power generation
Estimated GHG emission reductions or net anthropogenic GHG removals for this monitoring period in the registered PDD	369,461 tCO_{2e}
Certified GHG emission reductions or net anthropogenic GHG removals for this monitoring period	308,551tCO_{2e}
Name of DOE	Applus certification LGAI Technological Center, S.A. (LGAI Tech. Center S.A)
Name, position and signature of	

[1] https://cdm.unfccc.int/Projects/DB/BVQI1204523116.65/view

theapprover of the verification and certification report	Juan Sendín Caballero , B.U Systems Certifications Manager 

SECTION A. Executive summary

The purpose of the proposed project activity is to generate electricity by generating steam using waste heat contained in the waste flue gases released from 2 numbers of ABC (After Burning Chamber) from two numbers of DRI (Direct Reduced Iron) sponge iron kiln having 350 TPD (Tonnes per day) X 2 Nos. The heat contained in waste gases will be transferred to water which converts water in to steam in two numbers of WHRBs (Waste Heat Recovery Boilers 38tph each) producing aggregate 76 tph (tonnes per hour) steam at 66 kg/cm2 pressure and 490±5^{0}C temperature to generate total 15 MW electricity from Waste Heat.

The purpose of the project activity is to achieve better energy efficiency, achieve sustainable development in the industry and improve the working environment of Sponge Iron-making process. The power so generated shall mainly be used to meet the captive power requirement of Shyam DRI Plant itself.

The net result is reduction in the demand of electricity from coal based captive power generation and resultant reduction in GHG emission.

The following equipment's were installed at the project activity:

S.No.	Major equipments	Specification		Commissioning date
1.	WasteHeatRecoveryBoiler #1	Steam Generation Capacity	38 tph	02/06/2007
		Steam Temp.	490±5^{0}C	
		Steam Pressure	66 kg/cm^2	
2.	WasteHeatRecoveryBoiler #2	Steam Generation Capacity	38 tph	20/06/2007
		Steam Temp.	490±5^{0}C	
		Steam Pressure	66 kg/cm^2	
3.	Coal based AFBC(Atmospheric Fluidized Bed Combustion)	Steam Generation Capacity	54tph	01/05/2007
		Steam Temp.	490±5^{0}C	
		Steam Pressure	67 kg/cm^2	
4.	STG(Steam Turbo Generator)	Power generation capacity	30 MW	28/02/2007
		Inlet steam flow	117tph	
		Steam Temp.	485±5^{0}C	
		Steam Pressure	63.7 kg/cm^2	

The project started its commercial production on 12/07/2007 by synchronization with grid.
Total emission reductions for the monitoring period accounts to 308,551 tonnes of $CO_{2e.}$

The company is located at Village: Pandloi & Nishanbanga P.O. Lapanga/Rengali, Sambalpur District, Orrisa State of INDIA, at Plot No & Chaka No. 981/1293, 949/1295, 1231/1349, 986, 1001/1382 & 1231/1383 and Khatiar Sl.No.116/192 of PS-Kararbaga, about 35 KM from Sambalpur, Railway Station on State Highway No.10.

1. Verification Scope: The verification scope encompasses an independent and objective review and ex-post determination of the monitored reductions in GHG emissions by the DOE. The verification is based on the submitted monitoring report, the validated and registered PDD as well as its validation report ,the applied monitoring methodology, relevant decisions, clarifications and guidance from the CMP and the EB and any other information and references relevant to the project activity's resulting emission reductions. These documents are reviewed against the requirements of the Kyoto Protocol, the CDM Modalities and Procedures and related rules and guidance. Based on the requirements in the VVS version 09.0, Applus+ LGAI has applied a rule-based approach for the verification of the project. The principles of accuracy, completeness, relevance, reliability and credibility were combined with a conservative approach to establish a traceable and transparent verification opinion. The verification considers both quantitative and qualitative information on emission reductions. The verification is not meant to provide any consultancy towards the client. However, stated requests for clarifications, corrective and/or forward actions may provide input for improvement of the monitoring activities.

2. Methodology:

Applus+ LGAI'sapproach to the verification is a two-stage process.

In the 1st stage, Applus+ LGAI completed a strategic review and risk assessment of the projects activities and processes in order to gain a full understanding of:

- Activities associated with all the sources contributing to the project emissions and emission reductions, including leakage if relevant;
- Protocols used to estimate or measure GHG emissions from these sources;
- Collection and handling of data;
- Controls on the collection and handling of data;
- Means of verifying reported data; and
- Compilation of the monitoring report.

Applus+ LGAI used a periodical Verification Checklist which, based on the risk-based assessment of the parameters and data collection and handling processes for each of those parameters, describes the verification approach and the sampling plan.

In the 2nd stage, using the Verification Checklist, Applus+ LGAI verified the implementation of the monitoring plan and the data presented in the Monitoring Report for the period in question. This involved a site visit and a desk review of the Monitoring Report. This Verification Report describes the findings of this assessment.

Assessment team

According to the sectoral scopes / technical area and experiences in the sectoral or national business environment, Applus+ LGAI has composed a project assessment team in accordance with the appointment rules in Applus+ LGAI complying with EB's requirements. The composition of assessment team has to be approved by the Applus+ LGAI ensuring that the required skills are covered by the team. The four qualification levels for team members that are assigned by formal appointment rules as below:

- Leader Auditor (LA)
- Auditor (A)
- Auditor Trainee (T)
- Technical Experts (E)

The detail is mentioned below is section B of this report. The CV of personal are incorporated in Appendix 2 of this report.

3. Review of Documentation:

The Monitoring Report version 01 submitted by the PP was made publicly available on the UNFCCC website before the verification activities started. The published MR was assessed based on all the relevant documents. The aim of the assessment in the desk review was to:

- verify the completeness of the data and the information presented in the MR;
- Check the compliance of the MR with respect to the monitoring plan depicted in the registered PDD and verify that the applied methodology was carried out. Particular attention to the frequency of measurements, the quality of the metering equipment including calibration requirements, and the quality assurance and quality control procedures was paid;
- Evaluate the data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions.

A complete list of documents reviewed is available in Appendix 3 of this report.

4. On-site Assessment and follow-up Interviews:

As a part of the verification, the on-site inspection has been performed by the assessment team.

The objective of the on-site assessment is to:

- confirm the implementation and operation of the project;
- review the data flow for generating, aggregating and reporting the monitoring parameters;
- confirm the correct implementation of procedures for operations and data collection;
- cross-check the information provided in the MR documentation with other sources;
- check the monitoring equipment against the requirements of the PDD and the approved methodology, including calibrations, maintenance, etc.;
- review the calculations and assumptions used to obtain the GHG data and ER;
- Indentify if the quality control and quality assurance procedures are in place to prevent or correct errors or omissions in the reported parameters.

The details are mentioned in section D.2 of this report.

5. Quality of Evidences

Sufficient evidence covering the full verification period in the required frequency is available to verify the figures stated in the final MR. The source of the evidences will be discussed in Appendix 3 of this report. Specific cross-checks have been done in cases that further sources were available. The monitoring report's figures were checked by the assessment team against the raw data. The data collection system meets the requirements of the monitoring plan as per the methodology.

6. Reporting of Findings

As an outcome of the verification process, theassessment team can raise different types of findings.

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

a) Non-compliance with the monitoring plan or methodology are found in monitoring and reporting and has not been sufficiently documented by the project participants, or if the evidence provided to prove conformity is insufficient;

b) Modifications to the implementation, operation and monitoring of the registered project activity has not been sufficiently documented by the project participants;

c) Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impact the quantity of emission reductions;

d) Issues identified in a FAR during validation to be verified during verification or previous verification(s) have not been resolved by the project participants.

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

All CARs and CLs raised during verification shall be resolved prior to submitting a request for issuance.

Forward Action Requests (FARs) may be raised during verification for actions where the monitoring and reporting require attention and/or adjustment for the next verification period. All the CARs/CLs are being discussed in Appendix 4 of this report

7. Internal Quality Control

As a final step of verification, the final documentation including the verification report has to undergo an internal quality control by the Technical Reviewer. Each report has to be finally approved either by the DOE's Technical Manager or the Deputy. In case one of these two persons is part of the assessment team, the approval can only be given by the person who is not a part of the assessment team. If the documents have been satisfactorily approved, the request of issuance is submitted to CDM EB along with the requisite documents.

SECTION B. Verification team, technical reviewer and approver

B.1. Verificationteam member

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)	Involvement in			
						Desk review	On-site inspection	Interview(s)	Verification findings
1.	Team Leader	ER	DAS	SUKANTA	Outsource entity	Y	Y	Y	Y
	Technical Expert	ER	DAS	SUKANTA	Outsource entity	Y	Y	Y	Y

B.2. Technical reviewer and approver of the verification and certification report

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1.	Technical reviewer	IR	Sitjes Cabanas	Miquel	Applus+ LGAI
2.	Technical reviewer (support)	IR	Rodrigo Vega	Natalia	Applus+ LGAI

SECTION C. Application of materiality

C.1. Consideration of materiality in planning the verification

No.	Risk that could lead to material errors, omissions or misstatements	Assessment of the risk		Response to the risk in the verification plan and/or sampling plan
		Risk level	Justification	
1.	No risk	Nil	Not applicable	Complete verification of all the values indicated in the emission reduction spreadsheet with documents such as log book records of Steam flow/temperature/pressure meters, electricity meters, Auxiliary meters and all the monitoring parameters are covered. Assessment team visited the complete plant site and there was no sampling involved neither during onsite visit nor during document verifications.

C.2. Consideration of materiality in conducting the verification

In line with Guidelines for Application of materiality in verifications, a reasonable level of assurance is defined for the verification of the project by complete verification of all the values indicated in the emission reduction spreadsheet with source documents such as log book records of Steam flow/temperature/pressure meters, electricity meters, Auxiliary meters and all the monitoring parameters. There are no material errors, omissions or misstatements.

SECTION D. Means of verification

D.1. Desk review

The verification was performed primarily based on the review of the monitoring report version 01 and the supporting documentations. This process included review of data and information presented to verify their completeness and review of the monitoring plan and monitoring methodology, paying particular attention to the frequency of measurements, the quality of metering equipment used including calibration requirements, and the QA/QC procedures, and an evaluation of data management and the QA/QC system in the context of their influence on the generation and reporting of emission reduction.

The initial MR Version 1.0 submitted by the project participant and additional background documents related to the emission reductions are reviewed as an initial step of the verification process. The subsequent step involved the identification of corrective action requests and clarification requests (CAR and CR) which are presented in Appendix 4 of this report. As a result of these findings, the MR is revised to MR Version 3. MR Version 03 is then checked by the assessment team and found that the MR is revised according to the findings raised and thus a positive verification opinion is provided. A complete list of all documents and records reviewed is as attached in Appendix 03 of this report.

D.2. On-site inspection

Duration of on-site inspection: 01/04/2016 to 02/04/2016				
No.	**Activity performed on-site**	**Site location**	**Date**	**Team member**
1.	The verification team conducted visits to the project site on01/04/2016 to 02/04/2016 to confirm the information and to resolve issues identified in the document review. An on-site assessment was conducted as a part of verification activity and involved: 1) an assessment of the implementation and operation of the CDM project activity as per the registered PDD 2) a review of information flows for generating, aggregating and reporting of the monitoring parameters 3) interviews with relevant personnel to confirm that the operational and data collection procedures are implemented in accordance with the Monitoring Plan 4) a cross-check between information provided in the MR and data from other sources 5) a check of the monitoring equipment including calibration performance, and observations of monitoring practices against the requirements of the PDD and the applied methodology 6) a review of calculations and assumptions made in determining the GHG data and ERs, and 7) an identification of QA/QC procedures in place to prevent, or identify and correct, any errors or omissions in the reported monitoring parameters	The company is located at Village: Pandloi & Nishanbanga P.O. Lapanga/Rengali, Sambalpur District, Orrisa State of INDIA, at Plot No & Chaka No. 981/1293, 949/1295, 1231/1349, 986, 1001/1382 & 1231/1383 and Khatiar Sl.No.116/192 of PS- Kararbaga, about 35 KM from Sambalpur, Railway Station on State Highway No.10.	01/04/2016 to 02/04/2016	Mr. Das

D.3. Interviews

No.	**Interviewee**			**Date**	**Subject**	**Team member**
	Last name	**First name**	**Affiliation**			
1.	Debnath'	Amit	Manager, Shyam Metalics and Energy Limited	01/04/2016 to 02/04/2016	As described above in section D.2 of this report	Mr. Das
2	Patil	Ramkrishna	GM, EKI Energy Services Limited	01/04/2016 to 02/04/2016	As described above in section D.2 of this report	Mr. Das

D.4. Sampling approach

Assessment team visited the complete plant site and there was no sampling involved neither during onsite visit nor during document verifications.

D.5. Clarification requests, corrective action requestsand forward action requests raised

Areas of verification findings	No. of CL	No. of CAR	No. of FAR
Compliance of the monitoring report with the monitoring report form	00	00	00
Compliance of the project implementation with the registered PDD	00	00	00
Post-registration changes	00	00	00
Compliance of the monitoring plan with the monitoring methodology including applicable tool and standardized baseline	00	00	00
Compliance of monitoring activities with the registered monitoring plan	00	00	00
Compliance with the calibration frequency requirements for measuring instruments	00	01	00
Assessment of data and calculation of emission reductions or net removals	00	02	01
Others (please specify) 1. Matter related technical specifications of the equipments installed 2. Matter related to breakdown details of the power plant	00	02	00
Total	00	05	01

SECTION E. Verification findings

E.1. Compliance of the monitoring report with the monitoring report form

Means of verification	The verification team has determined whether the monitoring report was completed using the valid version available at UN home page. The verification team has checked whether all the sections of the monitoring report follows the guidelines provided in the template.
Findings	No finding raised regarding this compliance
Conclusion	PP has used the version 5.1 of the MR form which is the current and active version. The monitoring report has been prepared as per the instructions provided in the template. DOE has made the version 1.0 of the monitoring report covering the monitoring period from 1/04/2012 to 29/02/2016 publicly available on 08/03/2016 through its dedicated interface on the UNFCCC CDM website before undertaking the site visit for the verification on 01/04/2016 to 02/04/2016. The verification team has concluded that the monitoring report was completed using the valid version of the applicable monitoring report form and is followed the guidelines contained in the template.

E.2. Remaining forward action requests from validation and/or previous verification

FAR ID	01	**Section no.**		**Date:**03-04-2016
Description of CAR				
During the document verification it was observed that a FAR was raised during the 2nd verification of the project. PP is requested to include the same and provide a satisfactory closure of the same during present verification.				
Project participant response				**Date:**01/09/2016
PP has recorded the diesel consumption and electricity generation from DG set for the project activity. The electricity generation from DG set have been deducted to determine the net electricity generation from project activity. Also Diesel consumption by DG set are recorded and monthly data is mentioned in ER calculation excel spreadsheet.				
Documentation provided by project participant				
MR revised				
DOE assessment				**Date:**10/09/2016
The log records were not provided to the DOE. CAR is open				
Project participant response				**Date:**01/10/2016
The log book data has been provided now				
Documentation provided by project participant				

Log book data Revised MR and ER spreadsheet version 03 dated 01/10/2016	
DOE assessment	**Date:** 03/10/2016
The Diesel consumption (in litre) was recorded in the log book for the complete monitoring period. The electricity generated from the DG set is also recorded by the PP as per the requirement of the previous verification FAR. Since the electricity generated from the diesel consumption is deducted during baseline emission calculation, DOE is of the opinion that the FAR is addressed properly during this verification and thus closed for present verification.	

Hence, FAR from the previous verification (2nd periodic verification) is closed successfully.

E.3. Compliance of the project implementation with the registered project design document

Means of verification	The verification team determined the conformity of the actual implemented project activity and its operation with the registered project design document. DOE has, by means of a desk review and an on-site visit, assessed whether all physical features of the proposed CDM project activity proposed in the registered PDD are in place, and that the project participants have operated the CDM project activity as per the registered PDD
Findings	No CAR raised for the compliance
Conclusion	The verification team has reviewed the commissioning certificates to conclude that the capacity of the project is same as mentioned in the registered PDD. The capacity does not change after the registration of the project activity. Project activity is to generate electricity by generating steam using waste heat contained in the waste flue gases released from 2 numbers of ABC (After Burning Chamber) from two numbers of DRI (Direct Reduced Iron) sponge iron kiln having 350 TPD (Tonnes per day) X 2 Nos. The heat contained in waste gases will be transferred to water which converts water in to steam in two numbers of WHRBs (Waste Heat Recovery Boilers 38tph each) producing aggregate 76 tph (tonnes per hour) steam at 66 kg/cm^2 pressure and 490±5^{0}C temperature to generate total 15 MW electricity from Waste Heat. Based on the documentary evidence of commissioning certificates and physical verification DOE concludes that the project was implemented as per the registered PDD.

E.4. Post-registration changes

E.4.1. Temporary deviations from the registered monitoring plan, monitoring methodology or standardized baseline

There are no temporary deviations observed for this monitoring period.

E.4.2. Corrections

No correction approval is required from EB.

E.4.3. Changes to the start date of the crediting period

This is 3rdperiodic verification and there is no change in the start date of crediting period

E.4.4. Inclusion of a monitoring plan to a registered project activity

The monitoring plan was already included in the registered PDD (UN number: 1642). Thus this clause is not applicable

E.4.5. Permanent changes from registered monitoring plan, monitoring methodology or standardized baseline

Not applicable for this present monitoring period.

E.4.6. Changes to the project design of a registered project activity

No change in project design for the current monitoring period.

E.4.7. Types of changes specific to afforestation and reforestation project activities

Not applicable for this project activity.

E.5. Compliance of monitoring plan with the monitoring methodology including applicable tool and standardized baseline

Means of verification	The verification team determined whether the registered monitoring plan is in accordance with the applied methodology ACM0004 ver. 2 including applicable tools.
Findings	No Finding was raised regarding Compliance of monitoring plan with the monitoring methodology including applicable tool and standardized baseline
Conclusion	The verification team was is able to confirm that the monitoring plan contained in the registered PDD is in accordance with the approved methodology applied by the project activity, i.e. ACM0004 ver. 2 and its applicable tools

E.6. Compliance of monitoring activities with the registered monitoring plan

E.6.1. Data and parameters fixed ex ante or at renewal of crediting period

Means of verification	The assessment team checked the registered PDD to confirm the ex-ante fixed parameter mentioned in the current monitoring report. Assessment team also interviewed the personal onsite to check further regarding the ex-ante values used for emission reduction calculation.
Findings	No findings were raised regarding the same.
Conclusion	EF_{CO2i} and $EF_{captive,y}$ were mentioned as ex-ante fixed parameter. Assessment team checked the values, source of data, choice of data, purpose of the data mentioned in the MR from the registered PDD and confirms that the similar approach was considered for the current monitoring period. The ex-ante values EF_{CO2i} were considered from IPCC default value of 2006 (presently active) to calculate the emission factor and $EF_{captive,y}$ was already determined during the validation and subsequent registration of the project activity for baseline emission calculations. There is no mismatch from the ex-ante fixed value as in registered PDD and thus assessment team confirms that the values were used correctly and appropriately.

E.6.2. Data and parameters monitored

Means of verification	The assessment team checked the registered PDD to confirm the ex-post parameter mentioned in the current monitoring report. Assessment team also interviewed the personal onsite to check further regarding the ex-post parameter monitoring and confirms that the same is in line with the registered PDD.
Findings	No findings were raised regarding this issue.
Conclusion	During the verification all relevant monitoring parameters mentioned in the MR (as also listed in chapter B.7.1, B.7.2 and Annex 4 of the registered PDD) have been verified with regard to the appropriateness of the applied measurement / determination method, the correctness of the values applied for ER calculation, the accuracy and applied QA/QC measures.

	Assessment team checked all the monitoring parameters as per the registered monitoring plan and following are the conclusion resulted from the analysis: EG_{Gen} : Gross electricity generated by entire CPP This parameter is measured through the electronic meter provided at the output of TG It was observed during the site visit that data is measured continuously for the complete monitoring period. The data is first recorded in the DCS system and then the same is transferred in the plant log book which is signed by the plant manager on a daily basis. This is consistent with the requirements in the registered PDD. Furthermore, it was also verified during the site visit that there has been no exchange/modification/retrofit of the measuring equipments occurred for the complete monitoring period. The accuracy of the meter used for monitoring the gross electricity generated is found to be controlled and calibrated in accordance with the registered Monitoring plan of the registered PDD. It can therefore be concluded that the QA/QC procedures are in place and in accordance to the registered Monitoring plan. The log book is therefore used as cross check mechanism and the log records are maintained by the plant manager has been submitted to the DOE. The same have been verified and found to be acceptable by the assessment team. EG_{AUXCPP} : Auxiliary electricity consumption by entire CPP The parameter was monitored by energy meter as per the criteria mentioned in the registered PDD. The measurement is continuous via DCS system and then transferred to a log book which is maintained by the shift engineer and approved by shift in charge as the daily report. This is consistent with the requirements mentioned in the registered PDD. The same has been verified by the verification team and further supplemented by interviews conducted on site. It was also confirmed during the site visit that there has been no exchange of the measuring equipments during the monitoring period. The log book maintained by the plant manager has been submitted to the assessment team. Log books are used as cross check mechanism for the parameter. The same have been verified and found to be acceptable by the assessment team. $EG_{y,CPP}$: Net electricity generated by entire CPP This is a calculated value, arrived by the difference between the gross electricity generated by CPP and the auxiliary electricity consumed by CPP. The value is checked in the emission reduction calculation sheet. The values are found correct. Hence the calculation is found to be conservative and correct. Since the value is calculated there is no calibration involved. The calculation is done as per the formula mentioned in the registered PDD and thus acceptable to the assessment team. E_{GEN} : Gross electricity generation due to WHRB This is a calculated value, arrived at by multiplying the "% contribution of enthalpy of steam from WHRB" to "Gross electricity generated by TG i.e $E_{GEN.}$ The procedure for arriving at the net electricity generated has been observed to be in place as per the registered PDD. The determination method is therefore found to be in accordance with the Monitoring Plan of the registered PDD and the applied methodology. Since the

	value is calculated there is no calibration involved. The calculation is done as per the formula mentioned in the registered PDD and thus acceptable to the assessment team. Moreover, to further cross check the gross generation assessment team checked Form F, Under Rule -7(II), as per Govt of India. Assessment team checked the generation under form F and ER sheet and found the value to be correct and conservative. E_{AUX} : Auxiliary electricity consumption for WHRB electricity generation This is a calculated value, arrived at by multiplying the "% contribution of enthalpy of steam from WHRB" to "Auxiliary electricity consumption by entire CPP i. e (E_{AUXCPP}) The procedure for arriving at the net electricity generated has been observed to be in place as per the registered PDD. The determination method is therefore found to be in accordance with the Monitoring Plan of the registered PDD and the applied methodology. Since the value is calculated there is no calibration involved. The calculation is done as per the formula mentioned in the registered PDD and thus acceptable to the assessment team. EG_y : Net electricity generated due to WHRB This is a calculated value, arrived at by the difference between the "Gross Electricity generation due to WHRB" and the "Auxiliary consumption for WHRB electricity generation" The determination method is therefore found to be in accordance with the Monitoring Plan of the registered PDD and the applied methodology. Since the value is calculated there is no calibration involved. The calculation is done as per the formula mentioned in the registered PDD and thus acceptable to the assessment team. Steam Temp. (T1, T2 & T3): Temperature of steam at outlet of WHRB-1, WHRB-2and AFBC (Steam Temp.(T1, T2 & T3) During site visit it was observed that The temperature meters are provided at the output ofWHRB-1, WHRB-2 and AFBC. The meter readings are available on DCS continuously and same is transferred to logbook to be maintained by shift engineer, approved by shift in charge as the daily report. The procedure for measuring the steam temperature has been observed to be in place as mentioned in the registered PDD. The same has also been checked with the readings in the log book verified on site. The method of measurement is in line with the registered Monitoring plan and the applied methodology. The same has been verified by the verification team on site. Steam Pressure (P1&P2): Pressure of steam at outlet of WHRB-1 and WHRB-2(Steam Pressure (P1, P2)) The steam pressure is found to be measured at the outlets of WHRBs 1 and 2 by the pressure gauges. The readings are available on the DCS (Distributed Control Systems) continuously. The recording of this value has also been observed from the daily reports approved by the shift in charge. No delay in calibration observed for the pressure gauge.

	The procedure for measuring the steam pressure has been observed to be in place as mentioned in the registered PDD. The same has also been checked with the readings in the log book verified on site. The method of measurement is in line with the registered Monitoring plan and the applied methodology. The same has been verified by the verification team on site. Steam Pressure (P3): Pressure of steam at outlet of AFBC (Steam Pressure (P3)) The steam pressure is found to be measured at the outlets of AFBC by the pressure gauges. The readings are available on the DCS (Distributed Control Systems) continuously. The recording of this value has also been observed from the daily reports approved by the shift in charge. No delay in calibration observed for the pressure gauge at the steam outlet of AFBC boiler. The procedure for measuring the steam flow has been observed to be in place as mentioned in the registered PDD. The same has also been checked with the readings in the log book verified on site. The method of measurement is in line with the registered Monitoring plan and the applied methodology. The same has been verified by the verification team on site. Steam Flow (F1, F2): Steam flow at outlet of WHRB-1 and WHRB-2 (Steam Flow(F1, F2)) The steam flow is found to be measured by the steam flow meters provided at the outlets of WHRBs 1 and 2. It has been found that transmitters feed the reading into the DCS (Distributed Controlled Unit) on a continuous basis. The recording of this value has also been observed from the daily reports i.e. log book maintained by the shift engineer which is further approved by the shift in charge. The metering equipments are calibrated annually. The procedure for measuring the steam flow has been observed to be in place as mentioned in the registered PDD by the verification team. The same has also been checked with the readings in the log book verified on site The method of measurement is in line with the registered Monitoring Plan and the applied methodology. The same has been verified by the verification team on site and found correct. Steam Flow (F3): Steam flow at outlet of AFBC (Steam Flow (F3)) The steam flow is found to be measured at the output of AFBC by the steam flow meter. The readings are available on the DCS (Distributed Controlled Unit) continuously. The same are maintained as daily reports by the shift engineer which are further approved by the shift in charge. The procedure for measuring the steam flow has been observed to be in place as mentioned in the registered PDD by the verification team. The same has also been checked with the readings in the log book verified on site The method of measurement is in line with the registered Monitoring Plan and the applied methodology. The same has been verified by the verification team on site and found correct.

	Steam Flow (F4): Steam flow at inlet of TG (Steam Flow(F4) The steam flow is found to be measured at the inlet of the Turbine Generator by the steam flow meter. The readings are available on the DCS (Distributed Controlled Unit) continuously. The same are maintained as daily reports by the shift engineer which are further approved by the shift in charge. The procedure for measuring the steam flow has been observed to be in place as mentioned in the registered PDD. The same has also been checked with the readings in the log book verified on site. The method of measurement is in line with the registered MP and the applied methodology. The same has been verified by the verification team on site and found correct. EG_{IMPORT} : Gross electricity imported from Grid The data is observed to be measured by an electric meter provided at the substation where the grid interface is established. This was confirmed during the site visit. The data measurement is found to be continuous. Monthly joint meter readings (JMR) for the electricity imported from the grid are available at the plant and the same were checked during the site visit. Furthermore, no exchange of equipments has been observed during the present morning period. The method for measurement is in line with the registered Monitoring plan and the applied methodology. However this parameter is not used for emission reduction calculation. EG_{EXPORT} : Gross electricity exported to Grid The data is observed to be measured by an electric meter provided at the substation where the interface with the grid was established. This was confirmed during the site visit. The data measurement is found to be continuous. Monthly joint meter readings (JMR) for the electricity exported to the grid are available at the plant and the same were checked during the site visit. Furthermore, no exchange of equipments has been observed during the morning period. The method for measurement is in line with the registered Monitoring plan and the applied methodology. However this parameter is not used for emission reduction calculation. It can be confirmed that all monitoring parameters have been measured / determined without material misstatements and in line with all applicable standards and relevant requirements. The calibration of measurement equipment has been conducted at the Frequency as specified by the methodology and monitoring plan of the registered PDD

E.6.3. Implementation of sampling plan

Means of verification	The verification assessed whether the compliance of the sampling efforts and surveys with the registered sampling plan in accordance with the "Standard for sampling and surveys for CDM project activities and programme of activities" if PP had applied a sampling approach to determine data and parameters monitored.
Findings	There is no CAR/CL raised in this section.

Conclusion	PP did not apply sampling plan to determine data and parameters monitored during this monitoring period. Assessment team visited the complete plant site and there was no sampling involved neither during onsite visit nor during document verifications.

E.7. Compliance with the calibration frequency requirements for measuring instruments

Means of verification	The verification team determined whether the calibration of the measuring equipment that has an impact on the claimed emission reductions is conducted by the PP at a frequency specified in the registered monitoring plan.
Findings	CAR 02 was raised during the verification process and closed successfully. Please check Appendix 4 for the detail closure.
Conclusion	The calibration details for meters used for monitoring parameters are as below

Equipment	INSTRUMENTS NAME	TAG NO.	Serial Number	Accuracy	Calibration dates
WHRB-1	STEAM PRESSURE	PT-12132	231388	0.1%	10/12/2011, 8/12/2012, 5/12/2013, 4/12/2014, 3/12/2015 Validity of calibration : 02/12/2016
	STEAM TEMPERATURE	TT-12125	231360	0.1%	
	STEAM FLOW	FT-12129	231407	0.1%	
WHRB-2	STEAM PRESSURE	PT-22132	231391	0.1%	
	STEAM TEMPERATURE	TT-22125	231361	0.1%	
	STEAM FLOW	FT-22129	231408	0.1%	
AFBC-1	STEAM PRESSURE	PT-202	250454	0.1%	
	STEAM TEMPERATURE	TT-201	250462	0.1%	
	STEAM FLOW	FT-201	250457/3664785*	0.1%	
TURBINE-1	STEAM PRESSURE	PT-001	4673691	0.1%	
	STEAM TEMPERATURE	TT-001	615566	0.1%	
	STEAM FLOW	FT-001	292898	0.1%	

* Note – The steam flow meter for AFBC 250457 was replaced by 3664785 on 04/12/2014.

The calibration details of energy meters are as below

Instruments Name	Serial no	Make	Accuracy	Calibration Dates	Validity
Gross Energy Generation Meter	6607878	L & T	0.5%	18/11/2011, 30/03/2012, 22/01/2013, 05/12/2013, 04/12/2014, 03/12/2015	02/12/2016
Auxiliary Meter	98001/3-2406	Conzerv	1 %	10/12/2011, 08/12/2012,	02/12/2016

Auxiliary Meter	98001/2-2406	Conzerv	1 %	05/12/2013, 04/12/2014, 03/12/2015	
Grid Export Meter	APM03642	Secure	0.2%	12/04/2011, 29/11/2012, 09/01/2014, 23/04/2015, 20/04/2016	19/04/2021
Grid Import Meter	WSC26713	Secure	0.2%	10/02/2011, 05/03/2012	04/03/2017

Note – For steam parameters (pressure, temperature and flow), Gross Energy meters and Auxiliary meters, the calibration frequency is considered as annual as per industry practice/registered PDD.

However the grid export and grid import meters are under custody of state electricity board and not under control of PP. As per registered PDD, these grid export and import meters will be calibrated at required interval as per prevailing law of grid, thus calibration frequency is considered as once in a five year as per Central Electricity Authority (CEA) notification dated 17/03/2006. Also monitored data from these grid export, grid import meters are not used for emission reduction calculations, thus there is no any impact of emission reductions ir-respective of calibration done or not.

No delayed calibrations were observed in the project activity for this monitoring period. All the meters are of same accuracy class as per the requirement of the state where the project is located. On-site visit and interview with O&M personnel also conforms the same.

E.8. Assessment of data and calculation of emission reductions or net removals

E.8.1. Calculation of baseline GHG emissions or baseline net GHG removals by sinks

Means of verification	The verification team assessed whether the data and calculations of GHG emission reductions achieved resulting from the registered CDM project activity. The verification team has checked whether calculations of baseline GHG emissions, project GHG emissions and leakage GHG emissions have been carried out in accordance with the formulae and methods described in the registered monitoring plan
Findings	CAR 1 and CAR 5 were raised during the verification process and closed successfully. Please check Appendix 4 for the detail closure.
Conclusion	The baseline emission is calculated as per the formula mentioned in the registered PDD and approved methodology. All the parameters used in the calculation is correct and as per onsite practice and registered PDD. The calculation approach is thus appropriate and hence DOE is of the opinion that the calculation is conservative and correct.

E.8.2. Calculation of project GHG emissions or actual net GHG removals by sinks

Means of verification	The verification team assessed whether the data and calculations of GHG emission reductions achieved resulting from the registered CDM project activity. The verification team has checked whether calculations of baseline GHG emissions, project GHG emissions and leakage GHG emissions have been carried out in accordance with the formulae and methods described in the registered monitoring plan
Findings	No findings raised
Conclusion	Project emission is zero as per the requirement of the methodology

E.8.3. Calculation of leakage GHG emissions

Means of verification	The verification team assessed whether the data and calculations of GHG emission reductions achieved resulting from the registered CDM project activity. The verification team has checked whether calculations of baseline GHG emissions, project GHG emissions and leakage GHG emissions have been carried out in

	accordance with the formulae and methods described in the registered monitoring plan
Findings	No findings were raised.
Conclusion	The leakage emissions are regarded as zero according to the applied methodology.

E.8.4. Summary of calculation of GHG emission reductions or net anthropogenic GHG removals by sinks

Means of verification	The verification team assessed whether the data and calculations of GHG emission reductions achieved resulting from the registered CDM project activity. The verification team has checked whether calculations of baseline GHG emissions, project GHG emissions and leakage GHG emissions have been carried out in accordance with the formulae and methods described in the registered monitoring plan.
Findings	CAR 5 were raised during the verification process and closed successfully. Please check Appendix 4 for the detail closure.
Conclusion	Emission reductions in this monitoring period are: Total Baseline Emissions: 308,551tCO_2e Total Project Emission: 0 Total Leakage: 0

E.8.5. Comparison of actual GHG emission reductions or net anthropogenic GHG removals by sinks with estimates in registered PDD

Means of verification	The verification team has determined the CER achieved during this monitoring period with the estimated value and reason for increase if any.
Findings	No findings raised
Conclusion	The actual CER is -16.49% less than the estimated value. Further explanation is thus not required as actual is less than the estimated value of the registered PDD

E.8.6. Remarks on difference from estimated value in registered PDD

Means of verification	The verification team has determined the CER achieved during this monitoring period with the estimated value and reason for increase if any.
Findings	No findings raised
Conclusion	The actual CER is -16.49% less than the estimated value. Further explanation is thus not required as actual is less than the estimated value of the registered PDD

E.8.7. Actual GHG emission reductions or net anthropogenic GHG removals by sinks during the first commitment period and the period from 1 January 2013 onwards

Means of verification	The verification team has determined the CER achieved during first commitment period and second commitment period
Findings	There is no CAR/CL raised in this section.
Conclusion	1. GHG emission reductions or net GHG removals by sinks reported up to 31 December 2012: 50,170 tCO2e 2. GHG emission reductions or net GHG removals by sinks reported from 1 January 2013 onwards: 258,381tCO2e

SECTION F. Internal quality control

As a final step of verification, the final documentation including the verification report has to undergo an internal quality control by the Technical Reviewer. Each report has to be finally approved either by the DOE's Technical Manager or the Deputy. In case one of these two persons is part of the assessment team, the approval can only be given by the person who is not a part of the assessment team. If the documents have been satisfactorily approved, the request of issuance is submitted to CDM EB along with the requisite documents

SECTION G. Verification opinion

Applus+ LGAI has been engaged byM/s Shyam Metalics& Energy Limited to perform the 3rd periodic verification of the "SHYAM DRI WHR CPP" (UNFCCC Ref. No. 1642).

The management ofShyam Metalics& Energy Limitedis responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions on the basis set out within the project's Monitoring Plan in the registered PDD version 03 completed on 09/04/2008 and the applied methodology ACM004 version 02.

Our verification approach was based on the requirements as defined under the Kyoto Protocol, Marrakesh accord, as well as those defined by the CDM Executive Board.Our approach is risk-based, drawing on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate these. The verification can confirm that:

- the project is operated as planned and described in the project design document approved by the EB;
- the monitoring plan is as per the applied methodology;
- the monitoring in Monitoring Report is as per the PDD and the monitoring plan approved by the EB;
- the development and maintenance of records and reporting procedures are in accordance with the registered monitoring plan;
- the installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately;
- the monitoring system is in place and generates GHG emission reductions data;
- the GHG emission reductions are calculated without material misstatements.

In our opinion, the GHG emission reductions for "SHYAM DRI WHR CPP"for the monitoring period 1/04/2012 to 29/02/2016 as reported in Monitoring Report, prepared on the basis of the project's Monitoring Plan are fairly stated.

Based on the information we have seen and evaluated, we confirm the following statement:

Reporting period:	From 1/04/2012 to 29/02/2016
Verified emissions in the above reporting period:	
Leakage emissions	0 tCO_2 equivalents
Project emissions	0 tCO_2 equivalents
Baseline emissions	308,551tCO_2 equivalents
Emission reductions	308,551tCO_2equivalents

SECTION H. Certification statement

Same as above

Appendix 1. Abbreviations

Abbreviations	Full texts
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction(s)
CMS	Central Monitoring system
CEA	Central Electricity Authority
CL	Clarification request
CM	Combined Margin
CMS	Central Monitoring system
CO2	Carbon dioxide
CO2e	Carbon dioxide equivalent
DNA	Designated National Authority
DOE	Designated Operational Entity
DR	Document Review
EF	Emission Factor
EIA	Environmental Impact Assessment
ER	Emission Reductions sheet
FAR	Forward Action Request
JMR	Joint Meter reading
GHG	Greenhouse gas(es)
GWP	Global Warming potential
RBI	Reserve Bank Of India
PP	Project Participant

Appendix 2. Competence of team members and technical reviewers

1. Mr. Sukanta DAS, has done M. SC in (Electronics and Photonics) and M. Tech in (Energy technology) from Tezpur Central University/ Indian Institute of technology Bombay in India respectively. He is a certified lead auditor for ISO 14001 EMS LA and ISO 9001 QMS LA from International registry for Certified Auditors (IRCA) and Certified Lean Management practitioner from Quality Council of India (QCI). He has more than eight years of working experience at TUV NoRD/ Re-consult/CRA/APPLUS certifications under various categories of projects stating from Renewable to waste to supercritical projects. He was JI/ CDM Lead Assessor in TUV NoRD and was involved in more than 100 CDM validation and verifications activities in Gold Standard, VCS, CDM projects as a team leader/technical reviewer / validator / verifier covering the sectoral scope 1, 13 technical areas 1.2/1.1/13.1. Currently he is associated with True Quality Certifications Private Limited and is empanelled with APPLUS certification to carry out GHG audit.

2. Mr. Miquel Sitjes Cabanas has a Bachelor Science degree in Chemistry by the Universidad de Barcelona - Spain (1975). He has 15 years of experience in a Spanish chemical group company specialized in the manufacturing of raw chemical products, where he worked as the Manager of Production and Quality and Environmental Control. He also worked in the Spanish pharmaceutical industry for 7 years as Quality, Manufacturing and Environmental Manager. Currently, he works for Applus+ LGAI Technological Center since 1999. Since 2006, he is the Technical Manager of Applus+LGAI, working under quality, and environmental standards such as ISO 9001, ISO 14001, GHG Verification, CDM, VCS and GS

3. Ms. Natalia Rodrigo Vega has a Bachelor's Degree on Environmental Engineering and Master´s Degree on Environmental and Quality Management System (under ISO 9001 and 14001).

   She Works in Applus Environmental and Quality Management Systems Department since March 2012, being specially involved on technical support tasks related to CDM-VCS and GS Standards, among others (i.e. GHG verification and ProyectoClima)

Appendix 3. Documents reviewed or referenced

<table>
<tr><th>No.</th><th>Author</th><th>Title</th><th>References to the document</th><th>Provider</th></tr>
<tr><td>1</td><td>NA</td><td>Commissioning certificates of the power plant</td><td>
<table>
<tr><th>S.No.</th><th>Major equipments</th><th>Commissioning date</th></tr>
<tr><td>1.</td><td>WasteHeatRecoveryBoiler #1</td><td>02/06/2007</td></tr>
<tr><td>2.</td><td>WasteHeatRecoveryBoiler #2</td><td>20/06/2007</td></tr>
<tr><td>3.</td><td>Coal based AFBC(Atmospheric Fluidized Bed Combustion)</td><td>01/05/2007</td></tr>
<tr><td>4.</td><td>STG(Steam Turbo Generator)</td><td>28/02/2007</td></tr>
</table>
</td><td>Project participant</td></tr>
<tr><td>2</td><td>NA</td><td>Contract of the project participant with the DOE</td><td>Contract document signed between PP and DOE</td><td>Project participant</td></tr>
<tr><td>3</td><td>NA</td><td>VVS standard-version 09</td><td>UNFCCC web site</td><td>UNFCCC</td></tr>
<tr><td>4</td><td>NA</td><td>Calibration certificates</td><td>Calibration certificates of all the monitoring meters</td><td>Project participant</td></tr>
<tr><td>5</td><td>NA</td><td>MR version 01

MR version 02

MR version 03</td><td>MR version 01 dated 03/03/2016

MR version 02 dated 01/09/2016

MR version 03 dated 01/10/2016</td><td>Project participant</td></tr>
<tr><td>6</td><td>NA</td><td>ER sheet version 01

ER sheet version 02</td><td>ER sheet version 01 dated 01/10/2016

ER sheet version 02 dated 01/10/2016.</td><td>Project participant</td></tr>
<tr><td>7</td><td>NA</td><td>Actual geo-coordinates by GE</td><td>Actual coordinates</td><td>Project participant</td></tr>
<tr><td>8</td><td>NA</td><td>Break Down details of both the Units</td><td>Log book records onsite</td><td>Project participant</td></tr>
<tr><td>9</td><td>NA</td><td>Guidelines</td><td>UNFCCC web site</td><td>UNFCC</td></tr>
</table>

		for Application of materiality in verifications version 2.0		C
10	NA	Log records	Log records for steam consumption. Steam temperature and steam pressure, gross generation, auxiliary consumption and diesel consumption	Project participant

Appendix 4. Clarification requests, corrective action requests and forward action requests

Table 1 Remaining FAR from validation and/or previous verification

FAR ID	01	**Section no.**		**Date:**03-04-2016
Description of CAR				
During the document verification it was observed that a FAR was raised during the 2nd verification of the project. PP is requested to include the same and provide a satisfactory closure of the same during present verification.				
Project participant response				**Date:**01/09/2016
PP has recorded the diesel consumption and electricity generation from DG set for the project activity. The electricity generation from DG set have been deducted to determine the net electricity generation from project activity. Also Diesel consumption by DG set are recorded and monthly data is mentioned in ER calculation excel spreadsheet.				
Documentation provided by project participant				
MR revised				
DOE assessment				**Date:**10/09/2016
The log records were not provided to the DOE. CAR is open				
Project participant response				**Date:**01/10/2016
The log book data has been provided now				
Documentation provided by project participant				
Log book data Revised MR and ER spreadsheet version 03 dated 01/10/2016				
DOE assessment				**Date:** 03/10/2016
The Diesel consumption (in litre) was recorded in the log book for the complete monitoring period. The electricity generated from the DG set is also recorded by the PP as per the requirement of the previous verification FAR. Since the electricity generated from the diesel consumption is deducted during baseline emission calculation, DOE is of the opinion that the FAR is addressed properly during this verification and thus closed for present verification.				

Table 2. CAR from this verification

CAR ID	01	**Section no.**		**Date:**03-04-2016
Description of CAR				
The supporting documents like the Commission certificates, Log book records, invoices, in house monitoring reports involving all the monitoring parameters are not submitted to the assessment team. The emission reduction calculation as presented in the Monitoring report version 01 is thus reserved. Corrective action is sought in this regard.				
Project participant response				**Date:**01/09/2016
The supporting documents are provided along with revised MR and ER spreadsheet.				

Documentation provided by project participant	
Commissioning Certificates, In house monitoring data Revised MR and ER spreadsheet	
DOE assessment	**Date:**10/09/2016
Commissioning certificates are checked and it was observed that the installed equipments are in line with PDD/MR. The monthly data corresponding to different monitoring parameters were submitted to the assessment team. However log records for the same to cross check is missing. CAR is thus open in this context	
Project participant response	**Date:** 01/10/2016
The log book data, DCS data for monitored data has been provided now	
Documentation provided by project participant	
Log book data, DCS data for monitored parameter. Revised MR and ER spreadsheet version 03 dated 01/10/2016	
DOE assessment	**Date:** 03/10/2016
The log book records are now submitted to the assessment team. The total records were checked from the log sheets for all the monitoring parameters. CAR is thus closed.	

CAR ID	02	**Section no.**		**Date:**03-04-2016
Description of CAR				
During the site visit and subsequent document review it was observed that the calibration details of the site meters (including all the monitoring meters) are missing for the complete monitoring period. Corrective action is sought in the respective section of the MR and supporting documents for further analysis.				
Project participant response				**Date:**01/09/2016
The calibration details are provided in MR and calibration certificates are submitted for the same.				
Documentation provided by project participant				
Calibration documents				
DOE assessment				**Date:**10/09/2016
All the calibration reports were checked by the assessment team for all the monitoring parameters. The calibrations are as per the frequency mentioned in the PDD/MR. The same is thus acceptable to the DOE. CAR is this closed.				

CAR ID	03	**Section no.**		**Date:**03-04-2016
Description of CAR				
The technical details of all the measuring parameters (Like Steam Flow meter, electricity meters) and equipment used (like WHRB boilers, 2 numbers of ABC (After Burning Chamber), two numbers of DRI sponge iron kinetic)for the monitoring period is missing. The assessment will be reserved till the supporting is submitted to the assessment team.				
Project participant response				**Date:**01/09/2016
The technical details are mentioned in Monitoring report and supporting are submitted for the same.				
Documentation provided by project participant				
Technical details submitted to DOE *Revised MR*				
DOE assessment				**Date:**10/09/2016
The technical specifications as mentioned in the MR are as per the site equipments installed and also in line with manufacturer specifications. The technical specifications are now revised in the MR version 02. CAR is thus closed.				

CAR ID	04	**Section no.**		**Date:**03-04-2016
Description of CAR				
The breakdown details of the plant are missing in the MR. Moreover, the supporting document regarding the breakdown details are also not provided to the assessment team. Corrective action is sought in the respective section of the MR and supporting documents for further analysis.				
Project participant response				**Date:**01/09/2016

The hourly data mentioned in ER calculation spreadsheet clearly reflects the period when equipment was not in operational. Thus break down details are provided in ER calculation spreadsheet. The supporting documents are submitted for the same.
Documentation provided by project participant
Breakdown details provided

DOE assessment	**Date:**10/09/2016
The log records of break down are not provided to the assessment team. CAR is thus open.	
Project participant response	**Date:** 01/10/2016
The break down details has been provided now	
Documentation provided by project participant	
Break down details Revised MR and ER spreadsheet version 03 dated 01/10/2016	
DOE assessment	**Date:** 03/10/2016
The breakdown details were checked by the assessment team. All scheduled maintenance and work is done by the PP. NO forced break down observed CAR is thus closed.	

CAR ID	05	**Section no.**		**Date:**03-04-2016
Description of CAR				
The emission reduction calculation is not detailed out in the MR. Please provide a sample calculation for each state for further analysis.Moreover, details Emission reduction sheet is also not provided to the assessment team. Corrective action is sought in this regard.				
Project participant response				**Date:**01/09/2016
The emission reduction calculation spreadsheet has been submitted now. The sample calculations have been provided in MR. The proportional % for enthalpy of steam for WHRB 1 and 2 has been determined based on enthalpy of steam at header and enthalpy of steam at TG inlet and minimum value is considered as conservative approach.				
Documentation provided by project participant				
Revised MR				
DOE assessment				**Date: 10/09/2016**
Sample calculation is acceptable to the DOE. The emission reduction calculation is now detailed out in the MR. CAR is thus closed.				

Table 3 FAR from this verification

FAR ID	A	**Section No.**		**Date:**04/10/2016
Description of FAR				
The DG sets fuel consumption and electricity generation records will be checked during next verification as well, hence FAR A is thus raised in this present verification.				
Project participant response				**Date:**DD/MM/YYYY
Documentation provided by project participant				
DOE assessment				**Date:**DD/MM/YYYY