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# VERIFICATION / CERTIFICATION REPORT

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## “4.5 MW INDUSTRIAL WASTE BASED GRID-CONNECTED POWER PROJECT IN INDIA

(UNFCCC REGISTRATION NO: 1045)

Verification Period:

30 March 2004 to 22 September 2007

REPORT No. 2008-2026

REVISION No. 02

DET NORSKE VERITAS



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Date of first issue: 9 June 2008	Project No.: 46082026
Approved by: Hendrik W. Brinks Technical Director for CDM	Organisational unit: International Climate Change Services
Client: Sai Renewable Power Private Limited	Client ref.: M. Chandrasekhara Rao Managing Director

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**Summary:**

Det Norske Veritas Certification AS (DNV) has performed a verification of the emission reductions reported for the “4.5 MW Industrial Waste based Grid-connected Power Project” at Kamavarapukota village, West Godavari district, Andhra Pradesh in India managed by Sai Renewable Power Private Limited for the period 30 March 2004 to 22 September 2007.

In our opinion, the GHG emissions reductions reported for the project in the revised monitoring report of version 03 dated 13 January 2009 are fairly stated. This report has been revised as a response to request for review raised by Executive board against the request for issuance submitted for the chosen monitoring period.

The GHG emission reductions were calculated correctly on the basis of the approved baseline and monitoring methodology AMS-I.D (version 10) and the monitoring plan and formulae provided in the validated PDD of 29 May 2007. During the course of this verification, DNV identified two corrective action requests which have been closed by DNV following appropriate clarifications by Sai Renewable Power Private Limited.

Hence, DNV is able to certify that the emission reductions from the “4.5 MW Industrial Waste based Grid-connected Power Project” for the period 30 March 2004 to 22 September 2007 amount to 53 107 tCO<sub>2</sub> equivalent.

Report No.: 2008-2026	Subject Group: Environment	
Report title: 4.5 MW Industrial Waste based Grid-connected Power Project in India		
Work carried out by: Astakala Vidyacharan, Michael Lehmann		
Work verified by: K. Venkata Raman, C Kumaraswamy		
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**Indexing terms**

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## ***Abbreviations***

APPCB	Andhra Pradesh Pollution Control Board
APTRANSCO	Transmission Corporation of Andhra Pradesh Limited
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CEF	Carbon Emission Factor
CER	Certified Emission Reduction(s)
CO <sub>2</sub>	Carbon dioxide
CO <sub>2</sub> e	Carbon dioxide equivalent
DNV	Det Norske Veritas
DNA	Designated National Authority
FAR	Forward Action Request
GHG	Greenhouse gas(es)
IPCC	Intergovernmental Panel on Climate Change
kWh	Kilo Watt hour
MW	Mega Watt
MNES	Ministry of Non-conventional Energy Sources
MP	Monitoring Plan
MVP	Monitoring and Verification Plan
NEDCAP	The Non-Conventional Energy Development Corporation of Andhra Pradesh
NGO	Non-Governmental Organisation
PDD	Project Design Document
SRPPL	Sai Renewable Power Private Limited
UNFCCC	United Nations Framework Convention for Climate Change



## 1 INTRODUCTION

Sai Renewable Power Private Limited (SRPPL) has commissioned Det Norske Veritas Certification AS (DNV) to carry out the verification of emission reductions reported by the “4.5 MW Industrial Waste based Grid-connected Power Project” in Kamavarapukota village, West Godavari district, Andhra Pradesh, India, for the monitoring period 30 March 2004 to 22 September 2007. This report contains the findings from the verification and a certification statement for the certified emission reductions.

### 1.1 Objective

Verification is the periodic independent review and *ex-post* determination by the Designated Operational Entity (DOE) of the monitored reductions in GHG emissions that have occurred as a result of the registered CDM project activity during a defined verification period. Certification is the written assurance by the DOE that, during a specific period in time, a project activity achieved the emission reductions as verified.

### 1.2 Scope

The verification scope is:

- To verify that actual monitoring systems and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan for the project activity,
- To evaluate the GHG emission reduction data and express a conclusion with a reasonable level of assurance about whether the reported GHG emission reduction data is free from material misstatement,
- To verify that the reported GHG emission data is sufficiently supported by evidence.

The verification shall ensure that the reported emission reductions are complete and accurate in order to be certified.

The verification team has, based on the recommendations in the Validation and Verification Manual / 5/, employed a risk based approach, focusing on the identification of significant reporting risks and verifying the mitigation measures for these.

### 1.3 Description of the Project Activity

The project activity is a 4.5 MW (gross) capacity, industrial waste and biomass waste based grid connected power project located at Kamavarapukota village, West Godavari district, Andhra Pradesh, India. The electricity generated is exported to the Andhra Pradesh transmission corporation limited (APTRANSCO), which forms a part of the southern regional grid. The project activity uses palm oil industry wastes such as empty palm bunch fibres and shells as the predominant fuel and also utilises other biomass such as rice husk as support fuel (up to 30%). The project does not have permission to use any fossil fuel. It uses a condensing type steam turbine with a matching boiler of travelling grate technology capable of firing multiple fuels. The technology used in the project is indigenous.

The objective of the project is to reduce anthropogenic GHG emissions by displacing fossil fuel based electricity generation in the southern regional grid of India, with palm oil industrial waste based electricity. The palm oil industrial waste would otherwise, in the baseline scenario have




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been left to decay or burnt uncontrollably. The project thereby helps in reducing the power deficit in the state of Andhra Pradesh and also contributes towards conservation of natural resources like coal.

Project Parties: India

Title of project activity: 4.5 MW Industrial Waste based Grid-connected Power Project.

UNFCCC registration No: 1045

Project Entity: Sai Renewable Power Private Limited,  
H.No.1-10-208, Ashok Nagar, Hyderabad – 500 020,  
Andhra Pradesh, India. Tel: 91+40-27644381, 27637420  
Contact Person: M. Chandrasekhar Rao, Managing Director  
Email: srppsite@yahoo.co.in.

Location of the project activity: Kamavarapukota village, W.G. Dist. Andhra Pradesh, India

The project's emission reductions are determined as the product of the net electricity exported to the grid by the project in a year and the grid emission factor calculated as the weighted average of current generation mix approach, determined *ex-post* for the southern regional grid during each year of monitoring period for the project activity. According to the registered PDD, no leakage effects are associated with the project.

## 2 METHODOLOGY

The verification of the emission reductions has assessed all factors and issues that constitute the basis for emission reductions from the project. As the CDM Executive Board has not yet formally endorsed the application of any materiality principle for verification of emission reductions from CDM projects - implying that emphasis should be on the significant contributors to emission reductions - the DNV team has for this assignment decided to check all factors and issues with the same emphasis. The verification of the emission reductions has assessed all factors and issues that constitute the basis for emission reductions from the project.

### **Verification team**

Astakala Vidyacharan	DNV, India	Team Leader, CDM verifier
Michael Lehmann	DNV, Norway	Sector expert
Kakaraparthi Venkata Raman	DNV, India	Technical reviewer
C Kumaraswamy	DNV, India	Technical reviewer

### **Duration of verification**

Preparation (review of monitoring report, Emission reductions estimations, etc.):	5 May 2008 – 10 May 2008
Site visit:	53 107 tCO <sub>2</sub> e 12 – 13 May 2008
Reporting:	20 June 2008 to 4 November 2008



## 2.1 Review of Documentation

The monitoring reports / 1/ and the emission reduction calculations, provided in the form of spreadsheets submitted by SRPPL, were assessed as a part of the verification. In addition the Project Design Document / 2/, the monitoring plan contained in the PDD, and the validation report / 3/ were assessed. Other documents were also assessed as evidence.

## 2.2 Site Visits

During 12 and 13 May 2008, DNV carried out site visit at Sai Renewable Power Private Limited. During the site visit, DNV verified the actual operation of the project as described in the PDD. The instruments used for monitoring electricity and renewable fuels were checked, including the calibration records for these instruments and these were found to be in order.

Interviewed organisation	Interview topics
Sai Renewable Power Private Limited	<ul style="list-style-type: none"> <li>➤ Whether the project has been implemented as planned</li> <li>➤ Calculation of <i>ex-post</i> baseline emission factor</li> <li>➤ Adherence to monitoring plan established in the registered Project Design Document.</li> <li>➤ Management procedures like internal audits and reviews to minimise uncertainties in data monitoring and data management</li> <li>➤ Project performance</li> <li>➤ Resources, training needs and procedures for operation and maintenance.</li> <li>➤ Surplus availability of fuel in region</li> </ul>

## 2.3 Internal Quality Control

The draft verification report including the initial findings of verification underwent a technical review before being submitted to the project participant. The final verification report underwent another technical review before requesting for issuance of the project activity. The technical reviews were performed by a technical reviewer qualified in accordance with DNV's qualification scheme for CDM validation and verification.

## 2.4 Assessment

The data presented in the monitoring report were assessed in detail by a thorough review of the detailed project documentation and production records, interviews with personnel at Sai Renewable Power Private Limited, collection of measurements, observation of established monitoring and reporting practices and assessment of the reliability of monitoring equipment. This has enabled the verification team to assess the accuracy and completeness of reported monitoring results and verify the correct application of the approved monitoring methodology. Data from other sources include the grid emission factor which is estimated *ex-post* through out the crediting period and periodical fuel analysis by external parties, have been verified and assessed.



## 2.5 Reporting of Findings

Findings established during the verification may be that:

- i) the verification is not able to obtain sufficient evidence for the reported emission reductions or part of the reported emission reductions. In this case these emission reductions shall not be verified and certified;
- ii) the verification has identified material misstatements in the reported emission reductions. Emission reductions with material misstatements shall be discounted based on the verifiers' *ex-post* determination of the achieved emission reductions.

A Forward Action Requests (FAR) should be issued, where:

the actual project monitoring and reporting practices requires attention and /or adjustment for the next consecutive verification period, or an adjustment of the MP is recommended.

In the context of FARs, 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.

## 3 VERIFICATION FINDINGS

### 3.1 Remaining Issues, CARs, FARs from Previous Validation or Verification

According to the validation report / 3/, no CAR or CL's from the validation were required to be closed out during verification. This has again been confirmed by DNV. During this periodic verification, two CAR's have been raised by DNV.

### 3.2 Project Implementation

The project was commissioned in March 2004. The project boundaries and all key equipments are in line with the registered PDD. The project boundary covers sources of fuel supply, electricity generation and the grid to which the generated electricity is exported. The following equipment is operational as addressed in the PDD:

- 4.5 MW gross capacity steam turbine
- Travelling grate type boiler of capacity (20 t/hr steam at 66 kg/cm<sup>2</sup> and 485°C)
- Fuel handling system for shredding of palm waste bunches
- De-mineralised water plant for boiler feed water supply
- Electrostatic precipitator
- Energy meters for monitoring electricity
- 40 t weighbridge for fuel monitoring




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The project has all statutory clearances like consent for operation including air and water consents from the Andhra Pradesh Pollution Control Board, and clearance from NEDCAP a nodal agency for MNES for monitoring of renewable energy power projects. These documents have been verified by DNV during the site visit. In addition the verification of air and effluent reports confirm that relevant pollution parameters as specified in the consents are within the specified limits. The project has agreements in place for the supply of biomass wastes and palm waste brunches.

The following plant outages during the chosen verification period (30 March 2004 to 22 September 2007) have been recorded and verified to be correct:

- Total forced outage (including other outages) : 5 645 hrs
- Total planned outage : 2 977 hrs
- Total outages : 8 622 hrs

### 3.3 Completeness of Monitoring

The approved baseline methodology AMS-I.D (version 10) has been applied for the project activity. In accordance with AMS-I.D, the baseline for the project activity has been calculated *ex-post* by determining the CO<sub>2</sub> emissions from the electricity generation from the southern regional grid using the weighted average of current generation mix approach. IPCC emission factors and the grid emission factor from the CO<sub>2</sub> data base of CEA web site / 15/ for the verification period have been used as defined in the validated and registered PDD. Though the baseline emission factor for the years 2004-05 and 2005-06 calculated at 0.795 and 0.739 kgCO<sub>2</sub>/kWh respectively, in the registered PDD have been validated prior to the registration of the project, in-order to be conservative, the emission factor data published by Central Electricity Authority (CEA) has been considered for each year of chosen verification period as mentioned below.

Year of Verification	Weighted Average Grid Emission factor (KgCO <sub>2</sub> /kWh)
2004-05	785.02
2005-06	735.95
2006-07	721.94
2007-08 (Up to 22nd Sept. 2007)	721.94

This data has been sourced from the CO<sub>2</sub> data base published by the Central Electricity Authority of India. DNV verified the calculations of the grid emission factor published on the CEA website. Since the electricity generation data for the year 2007-08 were not available in the CEA web site at the time of publishing the monitoring report, the emission factor of 0.72194 kgCO<sub>2</sub>/kWh for southern region of India for year 2006-07 has been used for calculating the




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emission reduction for the year 2007-08. This is in line with the clarification provided by the Executive Board on approved methodologies (AM\_CLA\_0038).

Based on the validated emission factors and the net electricity exported to the grid, the emission reductions have been verified to be 53 107 tCO<sub>2</sub>e for the period 30 March 2004 to 22 September 2007.

As required by the monitoring methodology AMS-I.D, version 10 and the monitoring plan of the registered PDD, the following parameters are monitored.

- Electricity generation – gross generation, auxiliary consumption, net export to grid and import from the grid.
- Biomass fuel used (both palm waste and other biomass fuels).
- Grid emission factor
- Net calorific value of the fuels
- Biomass surplus for each type of renewable fuel used in the project

During the chosen verification period, it has been verified that the project activity has generated 85 539.1 MWh (gross) and has displaced 71 441.5 MWh net, (after deducting power import from grid) in the southern electricity grid, by consuming various types of renewable biomass and palm industrial waste equivalent to 187 779 tonnes. The project activity is not permitted to use any fossil fuel like coal for co-firing. This was confirmed during the site visit and, hence no project emissions have been accounted for during the chosen period.

CAR/FAR	PP Response	DNV Conclusion
<p><b>CAR1</b> As per the registered PDD, annual surplus biomass assessment has to be carried out for both palm oil industrial waste and biomass residues separately. This is not seen to be addressed.</p>	<p>The annual assessment carried out for each year of monitoring period, covers both type of fuels adequately. However as a response to CAR, now independent reports for both types of fuels for every year carried out by an independent consultant have been submitted.</p>	<p>A separate yearly assessment for 2005/2006 and 2006/2007 on surplus availability of palm oil industrial waste and biomass, conducted by an independent assessor, M.C. Jain &amp; Associates, Bhilai, India has been presented. The assessment is based on most recent data available.</p> <p>The year 2004/2005 was covered during validation of the project.</p> <p>It has been confirmed that the surplus availability of the each of the industrial wastes and each type of biomasses is more than the required 25%.</p> <p>Hence no leakage for competing use of biomass has been considered.</p> <p>CAR is closed.</p>



The parameters reported, including source, frequency and review criteria as indicated in the monitoring plan were verified to be correct and in line with the monitoring plan of the registered PDD. Necessary management system procedures including responsibility and authority of monitoring activities have been verified to be consistent with the PDD. Knowledge of personnel associated with the project activity was also found to be satisfactory.

### 3.4 Accuracy of Emission Reduction Calculations

No significant reporting risks have been identified for the data reported. All the data required for emission reduction calculations are manually recorded in log sheets (turbine log, boiler log and electrical log) once in each shift i.e., after every 8 hours. These are then transferred to the spreadsheets for emission reduction calculations. Fuel consumption particulars such as type, quantity and source are maintained at their point of entry and recorded in these log sheets. These have been verified by DNV.

All other data are culled out either from the log books or daily power generation and fuel consumption reports. The fuel consumption data is recorded on a daily basis. The responsibility of ensuring that there is no data misstatement is with manager of the plant, subsequently the verified reports are sent to head office for management reference. Periodical internal audits are carried out by the CDM team from head office to ensure the transparency and accuracy of the data being monitored and recorded.

The analysis of fuel being consumed is carried out in internal laboratories on daily basis and from external laboratories, on regular basis, when ever there is a change in source of fuel.

DNV has verified that the calibration of monitoring equipment has been carried out regularly / 8/. Quantity of biomass received is weighed twice during entry and exit on duly calibrated and checked weigh bridges / 13/ and subjected to quality check and rejection criteria of Sai Renewable Power Private Limited.

Daily power generation data (including gross generation and auxiliary consumption) is monitored and recorded from calibrated energy meters / 7/. Officials of the Andhra Pradesh State Transport Corporation of Andhra Pradesh (APTRANSCO) monitor and record the power exported to the grid through the export/import power meters on a monthly basis. The auxiliary meter and other internal meters (class 0.5 accuracy) are calibrated on annual basis through an external party. The main energy meter and check meter (of class 0.2 accuracy) which are under control of APSEB are tested periodically and calibrated annually as per procedures defined in Power Purchase Agreement by the Electricity Board. The calibration certificates of the instruments used for data monitoring and recording were also verified during the site visit.

CAR/FAR	PP Response	DNV Conclusion
<b>CAR-2</b> Though not used in calculations directly, the measured readings of auxiliary meter need to be made part of monitoring report.	The issue has been addressed in the revised Monitoring report dated 8 September 2008, and demonstrated that the auxiliary power estimated based on difference of gross electricity generated and electricity exported is more conservative than the measure value of electricity, as	The response has been reviewed and found to be satisfactory.  CAR closed.



	this reading does not account the transmission losses hence is always more than the measured value. Clear explanation is also included in the revised monitoring report.	
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The net electricity displaced in the southern region grid due to project activity has been arrived at as the difference of power export to the grid and the power import from the grid, both of which are recorded in the Joint Meter Readings (JMR) certificates / 9/ recorded jointly by APTRANSCO officials and project representatives. All the power generation, fuel receipt and consumption data are maintained daily in electronic as well as hard print form, and have been assessed for correctness.

As seen from the table below, the emission reductions claimed are less than the estimated emission reductions in the registered PDD.

<i>Year</i>	<i>CER as per PDD</i>	<i>CER as per MR</i>	<i>% Deviation</i>
2004-05	15 115	14,924	-1.26
2005-06	17 545	17 453	-0.524
2006-07	20 049	12 802	-36.14
2007-08 (~6 months)	10 024	7 928	-20.91

### 3.5 Quality of Evidence to Determine Emission Reductions

The emission reductions reported during 30 March 2004 to 22 September 2007 was verified to be 53 107 tCO<sub>2</sub>e.

Sufficient evidence was presented for the reported net emission reductions.

### 3.6 Management System and Quality Assurance

Sai Renewable Power Private Limited has established management procedures and implemented effectively to ensure that the process is consistent. The procedures cover management responsibilities, data monitoring procedures, training procedures, periodical internal audits, management reviews and corrective actions in case of any deviations effectively.



## 4 VERIFICATION STATEMENT

*Det Norske Veritas Certification AS (DNV) has been engaged by Sai Renewable Power Private Limited to examine the greenhouse gas (GHG) emission reductions reported from the 4.5 MW Industrial Waste based Grid-connected Power Project (CDM registration reference no. 1045) for the period, 30 March 2004 to 22 September 2007, equating to 53 107 tCO<sub>2</sub>e.*

*The project has applied the approved baseline and monitoring methodologies AMS-I.D version 10, and emissions reductions are reported in the revised monitoring report of version 03 dated 13 January 2009.*

### ***Responsibilities of the 4.5 MW Industrial Waste based Grid-connected Power Project and management of Sai Renewable Power Private Limited and DNV.***

*The management of the “4.5 MW Industrial Waste based Grid-connected Power Project” is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions on the basis set out within the project monitoring and verification plan. 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.*

*It is DNV’s responsibility to express an independent verification statement on the reported GHG emission reductions from the project for the period 30 March 2004 to 22 September 2007.*

### ***Basis of GHG verification opinion***

*Our verification approach was based on the requirements as defined under the Kyoto Protocol, the Marrakech 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. Our examination includes assessment, on a test basis, of evidence relevant to the amounts and disclosures in relation to the project’s GHG emissions for the period from 30 March 2004 to 22 September 2007.*

*DNV planned and performed the work to obtain the information and explanations considered necessary to provide sufficient evidence to give reasonable assurance that the amount of GHG emission reductions for the period 30 March 2004 to 22 September 2007 are fairly stated.*

*We conducted our verification on the basis of the monitoring methodology AMS-I.D version 10, and the monitoring plan included in the PDD of the project. The verification included:*

- collection of evidence supporting the reported data,*
- checking whether the provisions of the monitoring methodology AMS-I.D version 10, and the monitoring plan in the PDD were consistently and appropriately applied.*

*We have verified whether the information included in the monitoring report of version 03 dated 13 January 2009 / 1/ is correct and that the emissions reductions achieved have been determined correctly.*

**Opinion**

*In our opinion, GHG emissions reported for the project reported in monitoring report of version 03 dated 13 January 2009 / 1/ are fairly stated.*

*The GHG emission reductions were calculated correctly on the basis of the approved baseline and monitoring methodology AMS-I.D version 10 and the monitoring plan and formulae provided in the validated PDD version 3 of 29 May 2007.*

*DNV is able to certify that the emission reductions from the “4.5 MW Industrial Waste based Grid-connected Power Project” for the period 30 March 2004 to 22 September 2007 amount to 53 107 tCO<sub>2</sub>e.*

*Bangalore & Oslo, 20 January 2009*

*Chandrashekara Kumaraswamy  
Manager  
Climate Change Services  
Det Norske Veritas Certification AS*

*Hendrik W. Brinks  
Technical Director for CDM  
Climate Change Services  
Det Norske Veritas Certification AS*



## 5 REFERENCES

*Documents provided by the Project Participants that relate directly to the GHG components of the project. These have been used as direct sources of evidence for the periodic verification conclusions, and are usually further checked through interviews with key personnel.*

- / 1/ Sai Renewable Power Private Limited: “4.5 MW Industrial Waste based Grid-connected Power Project” Monitoring report of 30 March 2004 to 22 September 2007 of version 01 dated 3 April 2008 and version 02 dated 8 September 2008 **and version 03 dated 13 January 2009.**
- / 2/ Sai Renewable Power Private Limited: CDM PDD for “4.5 MW Industrial Waste based Grid-connected Power Project”, version 3 of 29 May 2007.
- / 3/ Validation Report – “4.5 MW Industrial Waste based Grid-connected Power Project” DNV Report No. 2006-9013 revision 03 dated 30 May 2007.

*Background documents related to the design and/or methodologies employed in the design or other reference documents.*

- / 4/ Appendix B of the simplified modalities and procedures for small-scale CDM project activities: *Indicative simplified baseline and monitoring methodologies for selected small-scale CDM project activity categories*. AMS-I.D, version 10: 23 December 2006.
- / 5/ International Emission Trading Association (IETA) & the World Bank’s Prototype Carbon Fund (PCF): *Validation and Verification Manual*. <http://www.ieta.org/ieta/www/pages/index.php?IdSitePage=200>
- / 6/ Consent for operation from Andhra Pradesh State Pollution Control Board dated 24 April 2007.
- / 7/ Calibration of internal electricity meters by Prashanti Electrical Services (gross and auxiliary meters) 1) dated 24 November 2004 2) dated 24 November 2005 3) dated 25 November 2006 & 4) dated.23 November 2007.
- / 8/ Calibration certificates of main and check meters by STQC 1) dated 24 November 2005 2) dated 27 February 2006 and 3) dated 22 August 2007.
- / 9/ Monthly energy export certificates from APTRANSCO and invoices raised by SRPPL for the electricity exported for each month.
- / 10/ Periodical GHG Audit reports.
- / 11/ Periodical fuel test certificates from Ana Labs, Hyderabad.
- / 12/ Plant records of daily fuel consumption and Electricity generation.
- / 13/ Calibration certificates of 40 t Weighbridge from Controller of Legal Metrology 1) dated 25 October 2004, 2) dated 16 November 2005 3) dated 16 November 2006.
- / 14/ Surplus biomass assessment study reports for 2005-06, 2006-07 by M.C. Jain Associates, Bhilai, India.
- / 15/ <http://cea.nic.in/planning/c%20and%20e/Government%20of%20India%20website.htm>



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Persons interviewed during the verification, or persons who contributed with other information that are not included in the documents listed above.

/ 16/	M. Chandrashekhara Rao	Managing Director, SRPPL
	T. Surya Prakash	Shift In-charge, SRPPL
	Venu Bahadur Reddy	Manager-CDM, Zenith Energy

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