

SOLAR POWER PROJECT BY SAI SUDHIR ENERGY LIMITED

Document Prepared By Saisudhir Energy Limited

Contact Information

Mr. P. Udayasankar
Saisudhir Energy Limited
401 GP Elite, 8-2-283/4, Road no 14,
Banjara hills, Hyderabad-500034.
Phone: 040 23554038
Email: udayasankar@saisudhirenergy.net

Project Title	Solar Power project by Sai Sudhir Energy Limited
Version	01
Date of Issue	04-March-2013
Prepared By	Saisudhir Energy Limited
Contact	Saisudhir Energy Limited, 401 GP Elite, 8-2-283/4, Road no 14, Banjara hills, Hyderabad-500034. Phone: 040 23554038 Email: udayasankar@saisudhirenergy.net

Table of Contents

Section no.	Name	Page no.
1.	Project details	3
2.	Application of methodology	7
3.	Quantification of GHG Emission Reductions and Removals	8
4.	Monitoring	9
5.	Environmental Impact	10
6.	Stakeholder comments	10

1 PROJECT DETAILS

1.1 Summary Description of the Project

Saisudhir Energy Limited (SSEL) has installed a new grid connected 5 MWp solar power project. The project participant supply power to the grid and replaces the equal amount of power which would have otherwise been generated by grid connected carbon intensive power plants. The project activity uses solar photovoltaic CIS Thin film module for producing the power. The generated power from this project activity is supplied to the Southern grid. The project participant has signed Power Purchase Agreement (PPA) for 25 years period, with NTPC Vidyut Vyapar Nigam Limited (NVVN), New Delhi, India.

This is a CDM registered verification project. The reference number of the project is 6317 and registration date on 31st May 2012 (Date of registration action 17th August 2012). The project has been commissioned on 5th January 2012.

Please refer section A.4.2. of the registered PDD. The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/RINA1338475072.72/view>

1.2 Sectoral Scope and Project Type

According to the categorisation system of the Clean Development Mechanism, which is part of Green House Gas (GHG) program that has been approved by the VCS board, the project is categorised as:

Sectoral Scope: 01, Energy industries (renewable-/ non-renewable sources)

Type I : Renewable energy projects

This is not a grouped project. Please refer section A.4.5. of the registered PDD. The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/RINA1338475072.72/view>

1.3 Project Proponent

Mr. P. Udayasankar

Director, Saisudhir Energy Limited, 401 GP Elite, 8-2-283/4, Road no 14,
Banjara hills, Hyderabad-500034.

Phone: 040 23554038

Email: udayasankar@saisudhirenergy.net

The project participant oversees the overall functioning and maintenance of the project activity, the dedicated team formed under his supervision will work on specified tasks.

1.4 Other Entities Involved in the Project

Not applicable

1.5 Project Start Date

The project got commissioned on 5th January 2012.

1.6 Project Crediting Period

CDM crediting period: Ten years (from 31st May 2012 to 30th May 2022).

VCS crediting period: 5th January 2012 to 30th May 2012

1.7 Project Scale and Estimated GHG Emission Reductions or Removals

The crediting period for the project is 31st May 2012 to 30th May 2022. Please refer section A.4.3. of the registered PDD. The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/RINA1338475072.72/view>

Project	Project activity falls under this category as estimated GHG emission reduction are less than 300,000 tonnes of CO ₂ e per year as shown in below table.
Large project	Not applicable

Years	Estimated GHG emission reductions or removals (tCO ₂ e)
Year 1	8,491
Year 2	8,406
Year 3	8,321
Year 4	8,238
Year 5	8,155
Year 6	8,073
Year 7	7,992
Year 8	7,911
Year 9	7,832
Year 10	7,753

Total estimated ERs	81,172
Total number of crediting years	10
Average annual ERs	8,117

1.8 Description of the Project Activity

Please refer section A.4.2. of the registered PDD. The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/RINA1338475072.72/view>

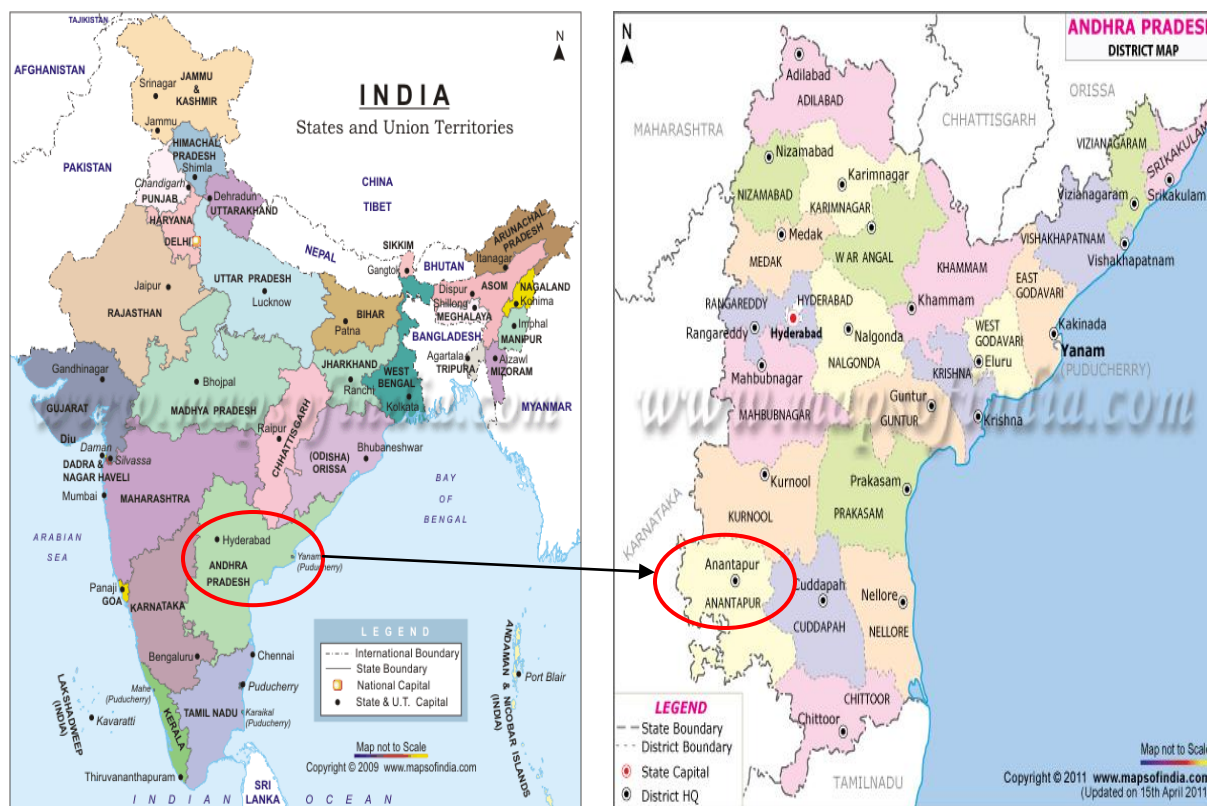
1.9 Project Location

The Proposed project site is in T. Veerapuram village located in Raydurg Taluk of Anantapur district. The coordinates of the site are

Latitude : 14° 45' 41.97" N

Longitude : 76° 57' 03.86" E

The location map is as given below^{1,2}



¹ <http://www.mapsofindia.com/maps/india/indiastateandunion.htm>

² <http://www.mapsofindia.com/maps/andhrapradesh/andhrapradesh-district.htm>

1.10 Conditions Prior to Project Initiation

This is a Greenfield project. The project activity replaces the carbon intensive grid electricity. Thereby reducing the dependence on fossil fuel based generation units and as there are no associated emissions with this project it contributes to the reduction of green house gases (GHG) emissions.

Please refer section A.4.2. of the registered PDD. The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/RINA1338475072.72/view>

1.11 Compliance with Laws, Statutes and Other Regulatory Frameworks

The project activity is not mandated by any local or national laws.

1.12 Ownership and Other Programs

1.12.1 Right of Use

For the ownership details of the project any of the following may be referred to:

- Commissioning certificates
- Power purchase agreement

1.12.2 Emissions Trading Programs and Other Binding Limits

The net GHG emission reductions or removals generated by the project will not be used for compliance with an emissions trading program or to meet binding limits on GHG emissions.

1.12.3 Participation under Other GHG Programs

This is registered CDM project. The reference no. for the project is 6317 and it was registered on 31st May 2012. Please refer to the registered PDD. The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/RINA1338475072.72/view>

1.12.4 Other Forms of Environmental Credit

The project has been purely taken up as CDM project and has not been applied for any form of environmental credit. The project is registered at UNFCCC with a reference number 6317³. The project activity is claiming credits under the VCS program for the pre-registration period (05/01/2012 to 30th May 2012).

The solar based power generation forming a part of this project activity has not applied for any other form of environmental credits.

1.12.5 Projects Rejected by Other GHG Programs

This project has not been rejected by any other GHG program. It is registered CDM project and the emission reductions are being claimed for the pre-registration period.

1.13 Additional Information Relevant to the Project

Eligibility Criteria

This is not a grouped project hence the criteria is not applicable.

Leakage Management

No leakage emissions are considered for this Project activity since no energy generating equipment is transferred from another activity and/or the existing equipment is transferred to another activity.

Please refer section B.6.1. of the registered PDD. The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/RINA1338475072.72/view>

Commercially Sensitive Information

There is no such information which is deemed as commercially sensitive.

Further Information

Not applicable

³ <http://cdm.unfccc.int/Projects/DB/RINA1338475072.72/view>

2 APPLICATION OF METHODOLOGY

2.1 Title and Reference of Methodology

Please refer section B.1 of the registered PDD. The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/RINA1338475072.72/view>

2.2 Applicability of Methodology

Please refer section B.2 of the registered PDD. The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/RINA1338475072.72/view>

2.3 Project Boundary

Please refer section B.3 of the registered PDD. The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/RINA1338475072.72/view>

Source		Gas	Included?	Justification/Explanation
Baseline	CO ₂ emissions from electricity generation in fossil fired power stations, displaced by project activity.	CO ₂	Yes	Main emission source and only gas identified in the baseline methodology.
		CH ₄	No	Not considered. This is conservative.
		N ₂ O	No	Not considered. This is conservative.
		Other	No	Not considered. This is conservative.
Project	Proposed Project	CO ₂	No	As per the baseline methodology, project emissions are not considered for solar power project.
		CH ₄	No	As per the baseline methodology, project emissions are not considered for solar power project.
		N ₂ O	No	As per the baseline methodology, project emissions are not considered for solar power project.
		Other	No	As per the baseline methodology, project emissions are not considered for solar power project.

2.4 Baseline Scenario

Please refer section B.4 of the registered PDD. The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/RINA1338475072.72/view>

2.5 Additionality

Please refer section B.5 of the registered PDD. The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/RINA1338475072.72/view>

2.6 Methodology Deviations

Not applicable

3 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS

3.1 Baseline Emissions

Please refer section B.6.3 of the registered PDD. The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/RINA1338475072.72/view>

3.2 Project Emissions

Please refer section B.6.3 of the registered PDD. The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/RINA1338475072.72/view>

3.3 Leakage

Please refer section B.6.3 of the registered PDD. The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/RINA1338475072.72/view>

3.4 Summary of GHG Emission Reductions and Removals

Please refer section B.6.4 of the registered PDD. The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/RINA1338475072.72/view>

Years	Estimated baseline emissions or removals (tCO ₂ e)	Estimated project emissions or removals (tCO ₂ e)	Estimated leakage emissions (tCO ₂ e)	Estimated net GHG emission reductions or removals (tCO ₂ e)
Year A				
Year B				
Year C				

Year...				
Total				

4 MONITORING

4.1 Data and Parameters Available at Validation

Please refer section B.6.2 of the registered PDD. The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/RINA1338475072.72/view>

Data Unit / Parameter:	
Data unit:	
Description:	
Source of data:	
Value applied:	
Justification of choice of data or description of measurement methods and procedures applied:	
Any comment:	

4.2 Data and Parameters Monitored

Please refer section B.7.1 of the registered PDD. The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/RINA1338475072.72/view>

Data Unit / Parameter:	
Data unit:	
Description:	
Source of data:	
Description of measurement methods and procedures to be applied:	<i>Identify how the data/parameter is measured</i>
Frequency of monitoring/recording:	<i>Identify measurement and recording frequency</i>
Value applied:	<i>Provide estimated value for the purpose of calculating ex-ante GHG emission reductions or removals</i>
Monitoring equipment:	<i>Identify equipment used to monitor the data/parameter including type, accuracy class, serial number of equipment</i>
QA/QC procedures to be applied:	<i>Identify calibration information such as frequency, date of last calibration and validity</i>

Calculation method:	<i>If applicable</i>
Any comment:	

4.3 Description of the Monitoring Plan

Please refer section B.7.2 of the registered PDD. The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/RINA1338475072.72/view>

5 ENVIRONMENTAL IMPACT

Please refer section D of the registered PDD. The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/RINA1338475072.72/view>

6 STAKEHOLDER COMMENTS

Please refer section E of the registered PDD. The web link for the same is mentioned below:

<http://cdm.unfccc.int/Projects/DB/RINA1338475072.72/view>