

AES SAURASHTRA WINDFARMS

Document Prepared By

Abhijeet S. Jog

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Prepared By	Abhijeet S. Jog
Contact	MITCON Consultancy & Engineering Services Ltd. Kubera Chambers, Shivajinagar, Pune – 411005 Maharashtra, India. Ph. No. +91-20-25533309/25534322 Fax : +91- 20-25533206

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1 PROJECT DETAILS

1.1 Summary Description of the Project

Provide a summary description of the project.

1.2 Sectoral Scope and Project Type

Project activity is the installation of 49 WTGs of 0.8 MW capacity each. The Project is owned by M/s AES Saurashtra Windfarms Private Ltd. (ASW). The generated electricity will be supplied to Gujarat Urja Vikas Nigam Limited (GUVNL) under a long-term Power Purchase Agreement (PPA). Project activity is not a grouped project activity.

Methodology: ACM0002 (Version 12.3.0, EB – 66, Annex 35) – Consolidated baseline methodology for grid-connected electricity generation from renewable sources

Sectoral scope: 1 - Energy industries (renewable - / non-renewable sources)

1.3 Project Proponent

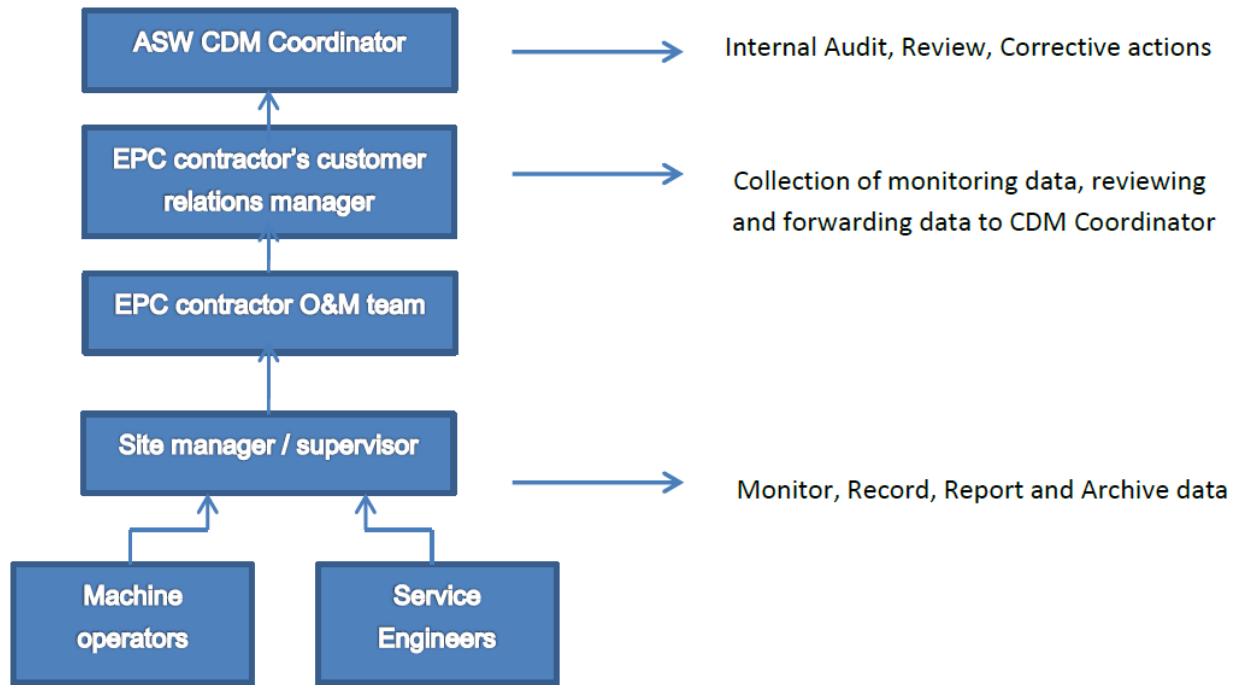
Organization:	AES Saurashtra Windfarms Private Limited
Street/P.O.Box:	Golf Course Road, Sector 54
Building:	Unit No. 202 & 203, Second Floor , Suncity Business Tower
City:	Gurgaon
State/Region:	Haryana
Postcode/ZIP:	122002
Country:	India
Telephone:	+91 – 124 – 4420999, 4300298
FAX:	+91 – 124 – 4300299
E-Mail:	surya.singh@AES.com
URL:	www.aes.com
Represented by:	-
Title:	Director
Salutation:	Mr.
Last name:	Singh
Middle name:	-
First name:	Surya Pratap
Department:	-
Mobile:	(+91) 9650855122
Direct FAX:	+91 – 124 – 4300299
Direct tel:	+91 – 124 – 4420999, 4300298
Personal e-mail:	surya.singh@aes.com

Role: Project Owner

Responsibility:

1. Internal Audits
2. Data Review
3. Corrective actions if any

Flow chat of role and responsibilities is as below:



1.4 Other Entities Involved in the Project

Provide contact information and roles/responsibilities for any other entities involved in the development of the project.

1.5 Project Start Date

07/06/2011 (is the date of commissioning of the first WTG)

1.6 Project Crediting Period

Start date of crediting period for VCS verification: 07/06/2011 (Date of commissioning of first WTG)

End date of crediting period for VCS verification: 29/02/2012 (Date one day prior to the start date of crediting period of CDM project activity)

1.7 Project Scale and Estimated GHG Emission Reductions or Removals

Project	√
Large project	

Period	Estimated GHG emission reductions or removals (tCO ₂ e)
Year 1 ¹	80,385
Year 2	80,385
Year 3	80,385
Year 4	80,385
Year 5	80,385
Year 6	80,385
Year 7	80,385
Year 8	80,385
Year 9	80,385
Year 10	80,385
Total estimated ERs	803,850
Total number of crediting years	10
Average annual ERs	80,385

1.8 Description of the Project Activity

Describe the project activity or activities (including the technologies or measures employed) and how it/they will achieve net GHG emission reductions or removals. Indicate the lifetime of the project activity(s).

1.9 Project Location

Details of the location of the project activity:

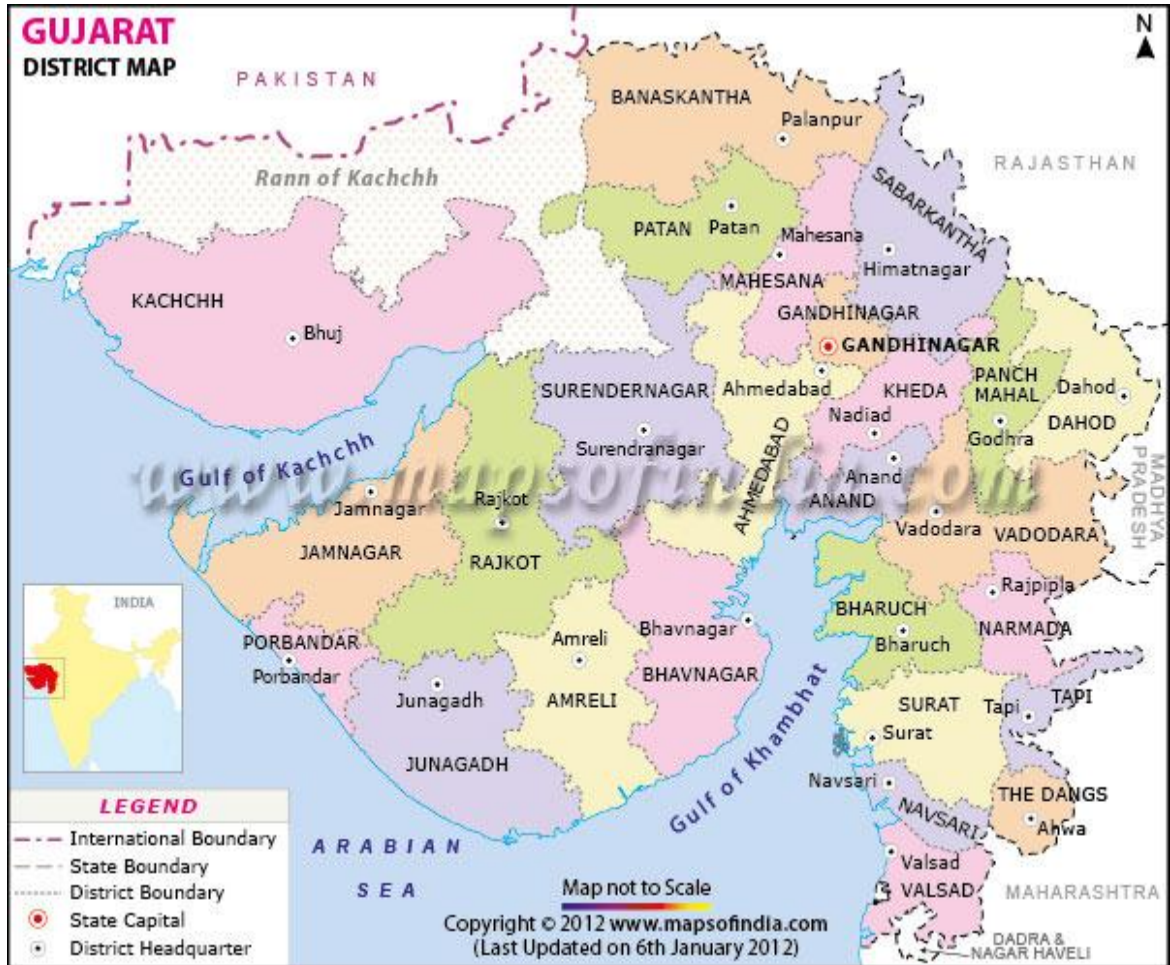
Sr. No.	Loc. No.	Latitude (N)	Longitude (E)	Survey No.	Village	Taluk
1	CH-01	21°53'59.2"	69°22'37.8"	416/1	Chachlana	Kalyanpur
2	CH-02	21°54'6.3"	69°22'35.7"	416/1	Chachlana	Kalyanpur
3	CH-03	21°54'13.6"	69°22'23.1"	416/1	Chachlana	Kalyanpur
4	CH-04	21°54'19.0"	69°22'18.6"	416/1	Chachlana	Kalyanpur
5	CH-05	21°54'28.5"	69°22'16.0"	416/1	Chachlana	Kalyanpur
6	CH-06	21°54'33.4"	69°22'12.0"	416/1	Chachlana	Kalyanpur
7	CH-07	21°54'40.8"	69°22'11.0"	416/1/P1	Chachlana	Kalyanpur
8	CH-09	21°54'48.4"	69°21'55.7"	416/1	Chachlana	Kalyanpur
9	CH-15	21°54'56.0"	69°21'43.3"	416/1/P1	Chachlana	Kalyanpur
10	JO-44	21°59'52.2"	69°17'22.6"	38	Jodhpar	Kalyanpur
11	JO-45	21°59'43.6"	69°17'27.2"	38	Jodhpar	Kalyanpur
12	JO-54N	21°58'59.3"	69°17'44.7"	8/1/P2	Jodhpar	Kalyanpur
13	JO-58	21°59'28.3"	69°17'24.0"	69/P1/P1	Jodhpar	Kalyanpur

¹ Year 1 starts from 01/03/2012. Each year extends for 12 months.

14	JO-74	22°0'22.1"	69°16'45.3"	182/1	Hadmatiya	Kalyanpur
15	JO-75	22°0'33.8"	69°16'59.8"	182/P4/P1	Hadmatiya	Kalyanpur
16	GO-01	22°8'19.6"	69°3'19.4"	181/P1	Gorinja	Dwarka
17	GO-02	22°8'26.3"	69°3'17.6"	181/P1	Gorinja	Dwarka
18	GO-03	22°8'34.8"	69°3'19.1"	181/P1	Gorinja	Dwarka
19	GO-04	22°8'39.1"	69°3'11.0"	181/P1	Gorinja	Dwarka
20	GO-05	22°9'0.6"	69°3'17.6"	181/P1	Gorinja	Dwarka
21	GO-06	22°8'53.2"	69°3'17.7"	181/P1	Gorinja	Dwarka
22	GO-07	22°8'47.1"	69°3'23.2"	181/P1	Gorinja	Dwarka
23	GO-08	22°8'41.4"	69°3'28.4"	181/P1	Gorinja	Dwarka
24	GO-09	22°8'35.8"	69°3'33.5"	181/P1	Gorinja	Dwarka
25	GO-10	22°8'29.8"	69°3'39.0"	181/P1	Gorinja	Dwarka
26	GO-12	22°8'50.2"	69°3'43.2"	181/P1	Gorinja	Dwarka
27	GO-11	22°8'56.5"	69°3'38.9"	181/P1	Gorinja	Dwarka
28	GO-16	22°9'46.5"	69°2'4.4"	278/P1	Gorinja	Dwarka
29	VA-17	22°9'52.7"	69°1'59.0"	351/P1	Vachhu	Dwarka
30	VG 414	21°52'52.2"	69°21'40.3"	180/P1	Virpur Gangadi	Kalyanpur
31	VG 415	21°53'0.7"	69°21'26.6"	180/P1	Virpur Gangadi	Kalyanpur
32	VG 416	21°52'55.8"	69°21'5.4"	180/P1	Virpur Gangadi	Kalyanpur
33	VG 422	21°53'36.7"	69°20'46.3"	19P	Virpur Gangadi	Kalyanpur
34	VG 423	21°53'48.6"	69°20'51.0"	19P	Virpur Gangadi	Kalyanpur
35	VG 424	21°53'59.7"	69°20'50.6"	19P	Virpur Gangadi	Kalyanpur
36	VG 426	21°54'9.5"	69°20'50.5"	19P	Virpur Gangadi	Kalyanpur
37	LA 448	21°54'53.3"	69°17'58.1"	415/1/2	Lamba	Kalyanpur
38	LA 456	21°55'22.7"	69°18'46.3"	30/P1	Lamba	Kalyanpur
39	HA 551	22°1'2.7"	69°18'27.6"	182/P1	Hadmatiya	Kalyanpur
40	HA 552	22°0'48.3"	69°18'27.2"	182/P1	Hadmatiya	Kalyanpur
41	HA 553	22°0'40.4"	69°18'28.0"	182/P1	Hadmatiya	Kalyanpur
42	HA 554	22°0'38.8"	69°18'42.4"	182/P1	Hadmatiya	Kalyanpur
43	JO 750	21°58'14.9"	69°17'26.4"	144/P7	Jodhpar	Kalyanpur
44	KU 742	22°3'38.1"	69°9'19.1"	125/1	Kurunga	Dwarka
45	KU 743	22°3'43.3"	69°9'12.4"	125/1	Kurunga	Dwarka
46	OK 744	22°5'3.0"	69°7'8.7"	24P	Okhamadhi	Dwarka
47	OK 745	22°5'20.2"	69°6'42.6"	131P	Okhamadhi	Dwarka
48	OK 746	22°5'25.3"	69°6'35.2"	131P	Okhamadhi	Dwarka
49	OK 747	22°5'30.0"	69°6'32.0"	131P	Okhamadhi	Dwarka

Location Map:

Project is located in Jamnagar district of Gujarat in India.



1.10 Conditions Prior to Project Initiation

This project activity is installed as new wind power project at site where there was no renewable energy power plant operating prior to the implementation of the project activity (Greenfield plant), As the project activity is a renewable energy project (wind power project), electricity generated through this project activity does not emit any harmful gases (GHG) into the atmosphere

1.11 Compliance with Laws, Statutes and Other Regulatory Frameworks

Identify and demonstrate compliance of the project with all and any relevant local, regional and national laws, statutes and regulatory frameworks.

1.12 Ownership and Other Programs

1.12.1 Right of Use

Following documents are provided as a proof of title.

- Power Purchase Agreement
- Commissioning Certificates of WTG's

1.12.2 Emissions Trading Programs and Other Binding Limits

Project activity will not be involved in any other emission trading programs or to meet binding limits on GHG emissions.

1.12.3 Participation under Other GHG Programs

Project got registered under Clean Development Mechanism (CDM) with UNFCCC on 28/02/2012. Project reference number is 5777².

1.12.4 Other Forms of Environmental Credit

Not Applicable

1.12.5 Projects Rejected by Other GHG Programs

Indicate whether the project has been rejected by any other GHG programs. Where the project has been rejected, provide the relevant information.

1.13 Additional Information Relevant to the Project

Eligibility Criteria

As project activity is not a grouped project activity, the eligibility criteria is not applicable.

Leakage Management

According to ACM 0002, the main emissions potentially giving rise to leakage in the context of electric sector projects are emissions arising due to activities such as power plant construction and upstream emissions from fossil fuel use (e.g. extraction, processing, and transport). These emissions sources are neglected. Thus leakage emissions are nil.

Commercially Sensitive Information

No commercially sensitive information has been excluded from the public version of the project description, hence not applicable.

Further Information

Not Applicable

² <http://cdm.unfccc.int/Projects/projsearch.html>

2 APPLICATION OF METHODOLOGY

2.1 Title and Reference of Methodology

Provide the title, reference and version number of the methodology or methodologies applied to the project.

2.2 Applicability of Methodology

Demonstrate and justify that the project activity(s) meet the applicability conditions of the methodology(s) applied to the project.

2.3 Project Boundary

Define the project boundary and identify the relevant GHG sources, sinks and reservoirs for the project and baseline scenarios (including leakage if applicable).

Source		Gas	Included?	Justification/Explanation
Baseline	Source 1	CO ₂		
		CH ₄		
		N ₂ O		
		Other		
	Source 2	CO ₂		
		CH ₄		
		N ₂ O		
		Other		
Project	Source 1	CO ₂		
		CH ₄		
		N ₂ O		
		Other		
	Source 2	CO ₂		
		CH ₄		
		N ₂ O		
		Other		

2.4 Baseline Scenario

Identify and justify the baseline scenario.

2.5 Additionality

Demonstrate and assess the additionality of the project, undertaken in accordance with the applied methodology.

2.6 Methodology Deviations

Describe and justify any methodology deviations.

3 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS

3.1 Baseline Emissions

Describe the procedure for quantification of the baseline emissions and/or removals. Include all relevant equations.

3.2 Project Emissions

Describe the procedure for quantification of the project emissions and/or removals. Include all relevant equations.

3.3 Leakage

Describe the procedure for quantification of the leakage emissions. Include all relevant equations.

3.4 Summary of GHG Emission Reductions and Removals

Describe the procedure for quantification of net GHG emission reductions and removals. Include all relevant equations. For AFOLU projects, include net change in carbon stocks.

Provide the ex-ante calculation (estimate) of baseline emissions/removals, project emissions/removals, leakage emissions and net emission reductions and removals, using the table below:

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

Describe data and parameters available at validation using the following table (copy table for each data unit/parameter).

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

Describe data and parameters monitored subsequent to validation using the following table (copy table for each data unit/parameter).

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

- *Describe the monitoring plan.*
- *Identify organizational structure, responsibilities and competencies.*
- *Describe methods for generating, recording, storing, aggregating, collating and reporting data on monitored parameters.*
- *Describe procedures for handling internal auditing and non-conformities.*

Line diagrams may be used to display the GHG collection and management system.

5 ENVIRONMENTAL IMPACT

Summarize any environmental impact assessments carried out with respect to the project, where applicable.

6 STAKEHOLDER COMMENTS

Summarize relevant outcomes from stakeholder consultations and mechanisms for on-going communication.