



Verified Carbon Standard

“WIND POWER PROJECT AT ANTHIYUR, TAMIL NADU”

Document Prepared by:
“Windage Power Company (P) LTD”

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1 PROJECT DETAILS

1.1 Summary Description of the Implementation Status of the Project

The project activity is a 14.85 MW wind farm consisting of 9 Vestas (India) Pvt. Ltd. WTGs of NM82/1650 kW capacity each. The project activity is implemented in the Anthiyur Village of Udumalpet and Pollachi Talukas of Coimbatore District in state of Tamil Nadu. The project activity involves implementation of WTGs as a voluntary measure to strengthen the regional grid of India through wind power generation potential available to India. The generated electricity shall be fed into the Tamil Nadu Electricity Board (TNEB). The electricity generation from the project activity is free of GHG emissions since wind energy (a zero emission source) is harnessed for electricity generation. However, in the baseline scenario, in the absence of the project activity the electricity would have been generated from the power stations operating in the grid. The commissioning date of each of the WTGs along with their H.T. Service Number is provided below:

Location Name	S.F. Nos	HT. Service Number ¹	Date of commissioning
NSL 1	38&39/3	507	31.03.2005
NSL 2	150/3A2,150/3B,158/1	508	31.03.2005
NSL 3	104/1&109/1	510	31.03.2005
NSL 4	56/1C,47/8&56/1B	533	29.04.2005
NSL 5	431/3	509	31.03.2005
NSL 6	95/2,95/3&95/4	551	17.05.2005
NSL 7	17&18	497	30.03.2005
NSL 8	.2/1	511	31.03.2005
NSL 9	254/A1,255/2B,255/2C	482	26.03.2005

The total emission reductions achieved in this monitoring period from 01-Nov-2019 to 31-Oct-2020 are 30,183 tCO₂e.

¹ These are the current HTSC Nos. which were assigned by TNEB as per their internal practice which is not under the control of PP. The HTSC nos. were different at the time of validation, however change in HTSC nos. affected by TNEB during the previous year, same was reported under the ER calculation sheet along with the previous HTSC nos.

1.2 Sectoral Scope and Project Type

Sectoral scope : 01, Energy Industries (renewable /non-renewable sources)
Project Type : I, Renewable energy projects

The project is not a grouped (but a bundle of 9 WTGs) project activity.

1.3 Project Proponent

Organization name	Windage Power Company (P) LTD
Contact person	Mr. A. Rajnikant
Title	DGM – Power Division
Address	#8-2-684/2/A, NSL ICON, Road No. 12, Banjara Hills, Town / City: Hyderabad, Andhra Pradesh, PIN: 500034, India.
Telephone	+91 40 3051 4444
Email	rajnikant.a@nslpower.com

1.4 Other Entities Involved in the Project

Organization name	WeAct Pty Ltd
Role in the Project	Authorized Representative#
Contact person	Satish Duvvuru
Title	Director
Address	1/115 Chapal Street, Widnsor,Victoria-3181, Australia.
Telephone	Ph: +61-409 135 580
Email	satish@weact.com.au

#WeAct is the authorized entity for communication with DOE and carbon credits transactions.

1.5 Project Start Date

26 March 2005 (Date on which the project began reducing or removing GHG emissions i.e. the commissioning date of the project).

1.6 Project Crediting Period

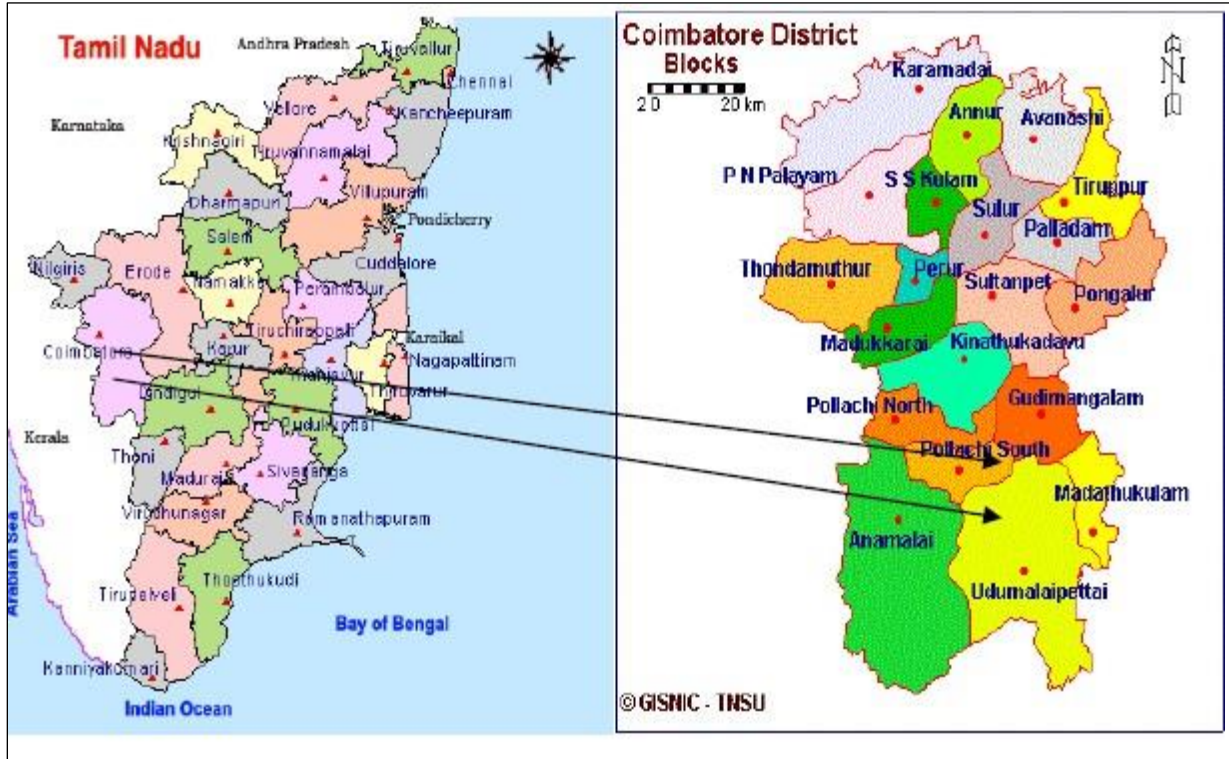
The ongoing crediting period under VCS is as follows:

Duration of the current crediting period : 10 years.
Start date of the current crediting period : 01 April 2016
End date of the current crediting period : 31 March 2026.

This is the second renewal crediting period for the project activity.

1.7 Project Location

The 14.85 MW wind farm is located near Anthiyur Village of Udumalpet and Pollachi Talukas of Coimbatore District in Tamil Nadu. This wind farm is located 60 Km south – east of Coimbatore, Tamil Nadu. The altitude of wind farm is 380 m.



Location of Project:

S. No	Location Name	S.F. Nos	Village Name	Taluk Name	Co-ordinates			HT.
					North	East	Altitude in meters	Service Number
1	NSL1	38&39/3	Koolanayakan Patti	Pollachi	10° 36' 49.6~	77° 09' 15.3~	385	507
2	NSL2	150/3A2,1 5	Gomangalam Puthoor	Pollachi	10° 37' 21.4~	77° 09' 30.0~	380	508
3	NSL3	104/1& 109/1	Gomangalam Puthoor	Pollachi	10° 36' 48.2~	77° 09' 51.0~	386	510
4	NSL4	56/1C,47/8 &56/1B	Gomangalam Puthoor	Pollachi	10° 37' 01.2~	77° 09' 45.6~	383	533
5	NSL5	431/3	Gomangalam	Pollachi	10° 37' 15.5~	77° 09' 52.9~	379	509
6	NSL6	95/2,95/3 &95/4	Gomangalam Puthoor	Pollachi	10° 36' 39.6~	77° 10' 07.7~	385	551

7	NSL7	17&18	Venasa Patti	Udumalpet	10°37' 11.7~	77°11' 25.2~	383	497
8	NSL8	.2/1	Venasa Patti	Udumalpet	10°37' 27.5~	77°11' 21.0~	379	511
9	NSL9	254/A1, 255/2B, 255/2C	Pannai Kinaru	Udumalpet	10°38' 33.8~	77°11' 02.9~	364	482

1.8 Title and Reference of Methodology

Title: Grid connected Renewable Electricity Generation

Reference: AMS I.D., Version 18.0

Reference to tools:

“Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period.” Version 03.0.1

‘Tool to calculate the emission factor for an electricity system (Version 06.0)

1.9 Participation under other GHG Programs

The project is not registered under any other GHG programs.

1.10 Other Forms of Credit

Emission Trading Programs and Other Binding Limits:

Not Applicable. The GHG emissions generated from the project activity are not included in any other emissions trading program or any other mechanism that includes GHG allowance trading or other binding limits.

Other Forms of Environmental Credit:

The project activity has not been applied under any other GHG or any related programs; also, the project activity has not sought or received another form of GHG-related environmental credit, including renewable energy certificates, during this monitoring period. PP has submitted the declaration confirming the same to the verifying DOE.

1.11 Sustainable Development

Project’s contribution to sustainable development:

The project primarily assists the region as a whole in stimulating and accelerating the commercialization of grid connected renewable energy technologies.

The project activity contributes to the sustainable development in the following way:

Social well-being: Enhancing local employment in the rural area around the project. Capacity-building and empowerment of vulnerable sections of the rural community dwelling in the project area.

Economic well-being: During the construction and operation phases, the project activity would generate small business opportunities for local stakeholders such as bankers, suppliers, manufacturers and contractors.

Environmental well-being: This project activity contributes to sustainable development through generation of eco-friendly power resulting in the increase of the share of renewable energy power generation in the regional and national grid. It would aid in strengthening India's rural electrification coverage. Wind power projects also aid in reducing GHG emissions and other pollutants (SOx, NOx, PM etc).

Technological well-being: The project activity helps in increasing the share of renewable energy power generation in the regional and national grid. The project activity also, encourages clean, renewable and efficient technologies.

2 SAFEGUARDS

2.1 No Net Harm

Being renewable wind power generation project there is no negative environmental and socio-economic impacts in fact project activity contributes positively by providing environment friendly power generation leading to sustainable development of the region. Also, the generation of employment supports uplift of socio-economic status of region.

2.2 Local Stakeholder Consultation

The Project is already registered with VCS and registered VCS Project Description; sections 5.3 & 5.4 provides the reference for the Local Stakeholder Consultation Process as in-line with VCS requirement.

For ongoing communication, the PP has placed a grievance register onsite where the stakeholders can put down his/her complain/feedback/comments etc. and the same if found genuine will be addressed immediately and necessary actions shall be taken. However, there is no feedback/grievance has been reported within this monitoring period. Therefore, no action was required. The photos of the grievance register submitted to DOE.

2.3 AFOLU-Specific Safeguards

Not applicable to the project activity.

3 IMPLEMENTATION STATUS

3.1 Implementation Status of the Project Activity

The implementation status of the project activity includes the following information:

The project activity has been in operation since its date of commissioning. There is no any event of break down or non-operational phase during the monitoring period.

There are no any other changes related to the project proponent or project observed. Project is implemented and operational as per the VCS Project description submitted

No events have happened that may impact the GHG emission reductions or removals and monitoring during this monitoring period.

3.2 Deviations

3.2.1 Methodology Deviations

No methodological deviation applied to the project activity.

3.2.2 Project Description Deviations

As per section 13.18.2 Para 2 of VCS standard v.4 "Where the deviation does not impact the applicability of the methodology, additionality or the appropriateness of the baseline scenario, and the project remains in compliance with the applied methodology, the deviation shall be described and justified in the monitoring report." Same has been explained and justified below.

In Current Monitoring Period, a deviation has been taken on account of delay in meter calibration. As per VCS PD "The project adheres to all the mandatory regulatory and statutory requirements at the state as well as national level."

It was proposed that meters will be calibrated annually; however as per prevailing practice in the project region there is no dedicated interval for meter calibration. Therefore, PP has referred to national practice as per CEA order dated 17 Mar 2016; which prescribes in the para 18(b) that "all the meters shall be tested once in five years". Details of calibration of energy meters are provided in Section 3.3 of the MR. The validity of calibration from the previous date is still within the five years period. However, as a conservative approach PP has considered the delay in calibration of existing energy meters and appropriate error factor has been applied. Therefore, this delay has been considered as project deviation in line with the guidance provided under section 13.18.2 para 2 of VCS standard v.4.

However, it does not impact the existing applicability conditions of the methodology, additionality or the appropriateness of the baseline scenario.

Another deviation has been applicable for HTSC nos. As demonstrated under the footnote reference 1, the state authority TNEB has assigned different HTSC nos. as per their internal practice and revision. However, there is no other material change to the project activity except the nos. These updated HTSC nos. are reported under the ER sheet and also included under the Appendix 1.

3.3 Grouped Projects

Not applicable as the project is not a grouped project.

4 DATA AND PARAMETERS

4.1 Data and Parameters Available at Validation

Data / Parameter	EF _{Grid,y}
Data unit	tCO ₂ /MWh
Description	Combined margin CO ₂ Emission Factor of Indian Grid
Source of data	Calculated from operating and built margin, using 75%-25% weights used (Source: CEA database, Version 11, April 2016 http://www.cea.nic.in/reports/others/thermal/tpece/cdm_co2/user_guide_ver11.pdf)
Value applied	0.9777
Justification of choice of data or description of measurement methods and procedures applied	CEA has estimated the simple operating margin and build margin emission factors for the regional grids. For calculating the CO ₂ emission factor as per combined margin method for the second crediting period, the weights of 0.75 for operating margin and 0.25 for build margin for Indian grid are considered as per 'Tool to calculate the emission factor for an electricity system (Version 06.0).
Purpose of Data	Calculation of baseline emissions
Comments	The Combined Margin would be calculated ex ante and fixed during the crediting period. Please refer to the VCS PD of Renewal of Crediting Period, version 1 (Dated: 20/03/2017)

Data / Parameter	EF _{OM,y}
Data unit	tCO ₂ /MWh
Description	Simple operating margin emission factor of Indian Grid
Source of data	Calculated from CEA database, Version 11, April 2016 (http://www.cea.nic.in/reports/others/thermal/tpece/cdm_co2/user_guide_ver11.pdf)
Value applied	0.9941
Justification of choice of data or description of measurement methods and procedures applied	CEA has estimated the simple operating margin and build margin emission factors for the regional grids. For calculating the CO ₂ emission factor as per combined margin method for the second crediting period, the weighted average value of simple operating margin pertaining to Indian grid has been considered, as per 'Tool to calculate the emission factor for an electricity system (Version 06.0)
Purpose of Data	Calculation of baseline emissions
Comments	This value is calculated ex-ante and fixed during the crediting period. Please refer to the renewal of crediting period PD version 1 (Dated: 20/03/2017)

Data / Parameter	EF _{BM,y}
Data unit	tCO ₂ /MWh
Description	Build margin emission factor of Indian Grid
Source of data	Calculated from CEA database, Version 11, April 2016 (http://www.cea.nic.in/reports/others/thermal/tpece/cdm_co2/user_guide_ver11.pdf)
Value applied	0.9285
Justification of choice of data or description of measurement methods and procedures applied	CEA has estimated the build margin emission factors for the regional grids. For calculating the CO ₂ emission factor as per combined margin method for the second crediting period, the build margin value for the most recent year (i.e. 2014-15) pertaining to the Indian grid has been considered, as per 'Tool to calculate the emission factor for an electricity system (Version 06.0)
Purpose of Data	Calculation of baseline emissions
Comments	This value is calculated ex-ante and fixed during the crediting period. Please refer to the renewal of crediting period PD version 1 (Dated: 20/03/2017)

4.2 Data and Parameters Monitored

For the project activity, the following parameters are being monitored on continuous basis:

Data / Parameter	EG _{Gross,y}
Data unit	kWh
Description	Gross Electricity export to the grid by the project during the year y
Source of data	From the certified joint meter readings
Description of measurement methods and procedures to be applied	Gross electricity generated by each WTG is recorded with the aid of energy meter for that WTG. The procedures for metering and meter reading will be as per the provisions of the power purchase agreement.
Frequency of monitoring/recording	The parameter will be monitored continuously and recorded at least monthly.
Value monitored	31,218,374.13
Monitoring equipment	Energy Meter
QA/QC procedures to be applied	QA/QC procedures will be as implemented by TNEB– state government utility. It was proposed that the meters used are calibrated by utility once in a year to ensure accuracy of data. However, as per prevailing practice in the region such frequency is not addressed. Hence PP has proposed.
Purpose of the data	Used to calculate baseline emissions
Calculation method	Same as mentioned under the description of measurement methods
Comments	All records relating to the project are kept in a secure and retrievable manner for at least two years after the end of the project crediting period.

Data / Parameter	EG _{net,y}
Data unit	MWh/year
Description	Net electricity supplied to the grid
Source of data	Monthly joint Energy Meter Reading Reports of 9 energy meters covering 9 numbers of WTG
Description of measurement methods and procedures to be applied	Continuous measurement and monthly recording. The monitoring of 'Net Electricity supplied to the grid' would be as per the details provided in Power Purchase Agreement signed between the TNEB and project owner. The HTSC No. for the individual or group of turbines represents the unique identification of the joint meter. The net electricity supplied to the grid is calculated by the summation of the net electricity export figures of individual WTGs.
Frequency of monitoring/recording	The parameter will be monitored continuously and recorded at least monthly.
Value monitored	30,871.559
Monitoring equipment	Energy Meter
QA/QC procedures to be applied	Every month these meter readings will be recorded by TNEB representative and plant personnel. The meters at the substation will be two-way meters and will be in the custody of TNEB. The quantity of net electricity supplied will be cross-verified from the invoice raised on TNEB by the project proponent
Purpose of the data	Used to calculate baseline emissions
Calculation method	Same as mentioned under the description of measurement methods
Comments	All records relating to the project are kept in a secure and retrievable manner for at least two years after the end of the project crediting period.

Data / Parameter	EG _{import,y}
Data unit	kWh
Description	Electricity imported from the grid by the project during the year y
Source of data	From the certified joint meter readings
Description of measurement methods and procedures to be applied	Calculated as measurement from the energy meters available at the generation points.
Frequency of monitoring/recording	The parameter will be monitored continuously and recorded at least monthly.
Value monitored	3,46,815.25
Monitoring equipment	Energy Meter
QA/QC procedures to be applied	The electricity imported by the individual WTG is recorded. The electricity imported is adjusted against the gross export by the project activity to the

	grid. To be cross-checked with monthly invoices or receipts of payments.
Purpose of the data	Used to calculate baseline emissions
Calculation method	Same as mentioned under the description of measurement methods
Comments	All records relating to the project are kept in a secure and retrievable manner for at least two years after the end of the project crediting period.

4.3 Monitoring Plan

Purpose of monitoring

The purpose of monitoring is to measure the gross electricity exported, net electricity supplied to the grid and the electricity imported from the project activity to verify the emission reductions.

Types of data and information to be reported, including units of measurement

The approved monitoring methodology (AMS-1.D version 18) requires monitoring of the gross electricity exported, net electricity supplied to the grid and the electricity imported from the project activity.

Origin of the data

The source of the data on monitoring parameters is certified joint meter readings.

Metering Equipment

Metering system-Energy Meter for each WTG for metering the exported electricity to the grid and imported electricity from grid system

Data Monitoring:

The data is monitored at the main meter of each WTG.

1. Equipment:

The main meter is an Energy Meter of accuracy class 0.2s. The meters will have capability of recording half-hourly and monthly readings.

2. Meter readings:

The monthly meter readings at the project site and receiving station are taken simultaneously by the site personnel and electricity board personnel every month. A document indicating number of kilo-watt-hours indicated by meter will be prepared and signed by officials of the electricity board and operating Office.

a) Accuracy:

All meters installed at the project site are of 0.2s accuracy class. Each meter is jointly inspected and sealed in the presence of both the parties. The accuracy of monitoring parameter is ensured by adhering to the calibration and testing procedure as described in the QA/QC procedures described for each parameter in Section 4.1. The project will adhere to all the mandatory regulatory and statutory requirements at the state as well as national level. The data will be archived for a period of 2 years after the end of the crediting period in the hard copy format.

b) Testing:

All meters were supposed to be tested for accuracy every year in accordance with the VCS PD. However, the calibration and maintenance of energy meters is beyond the control of project participant and is sole responsibility of state utility. The consumption by equipment's / electricity exported to the grid registered by main meters hold good for purpose of billing as long as errors in main meters are within the permissible limits. Therefore, as per the provision of CEA Order 2016, PP has considered testing of energy meters once in five years.

Energy Meter Calibration Details (Please refer ER sheet for detailed information):

Location Name	Current HTSC. No	Energy Meter - Sl. No	Make	Accuracy Class	Type	Date of Calibration / Date of replacement	Validity of Calibration*
NSL-1	507	4321904	Genus	0.2s	03D-183 (DLMS)	08-05-2017	07-05-2022
NSL-2	508	4321911	Genus	0.2s	03D-183 (DLMS)	08-05-2017	07-05-2022
NSL-3	510	4321912	Genus	0.2s	03D-183 (DLMS)	08-05-2017	07-05-2022
NSL-4	533	4321910	Genus	0.2s	03D-183 (DLMS)	08-05-2017	07-05-2022
NSL-5	509	4321907	Genus	0.2s	03D-183 (DLMS)	08-05-2017	07-05-2022
NSL-6	551	4321909	Genus	0.2s	03D-183 (DLMS)	08-05-2017	07-05-2022
NSL-7	497	4321903	Genus	0.2s	03D-183 (DLMS)	08-05-2017	07-05-2022
NSL-8	511	4321905	Genus	0.2s	03D-183 (DLMS)	08-05-2017	07-05-2022
NSL-9	482	4322619	Genus	0.2s	03D-183 (DLMS)	08-05-2017	07-05-2022

*As compared to the provision of calibration/testing frequency prescribed under the VCS-PD, the meters are supposed to undergo testing/calibration once in a year. Therefore, delay in meter calibration can be considered for the period 01/11/2019 to 31/10/2020. However, as explained above, PP has applied maximum permissible error (i.e. 0.2 %) for the whole monitoring period i.e. from 01/11/2019 to 31/10/2020, and also considered this as project design deviation. The meter calibration is not under the purview of PP. TNEB is the sole authority to conduct the meter calibration and in absence of annual practice of calibration PP has considered CEA order dated 17 Mar 2016; which prescribes under the para 18(b) that "all the meters shall be tested once in five years." Thus, validity of the calibration is considered for five years, whereas error factor has been considered to estimate a conservative ER value.

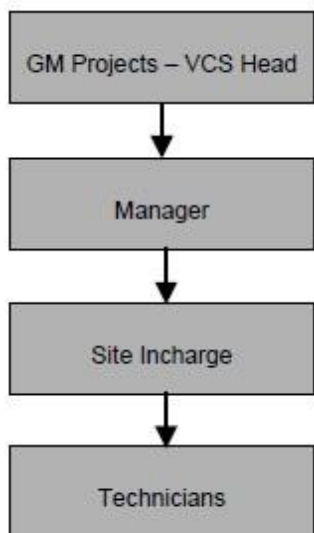
3. Billing:

A daily generation report is prepared by site personnel. As discussed, the meters are capable of storing readings, which is submitted to the state electricity board along with the cumulative meter reading for the wind farm. This is maintained by the state authorities. These readings are used to determine line losses as well as power exported to the grid.

Monitoring roles and responsibilities

The operational and management structure implemented by Windage Power Company

(P) LTD (previously known as NSL) is as follows:



The General Manager (GM) manager is the head of the VCS team and would be responsible for coordinating with the manager and ensures that the monitoring is carried out in a transparent and accurate manner. The manager coordinates with the site in charge and the technicians and takes care of all the day to day activities of the plant and is responsible for testing the equipment, billing and archiving the data. The site in charge and the technicians are responsible for recording the operation and downtime hours of the project activity.

The monitoring team is also responsible for the following:

- Overall maintenance of the WTGs
- Calculation of actual creditable emission reduction in the most transparent and relevant manner
- For claims and settlement of electricity payment from the state utility every month
- Renewal of contracts with OEMs, insurance etc.
- Periodical meter checking, calibration etc.
- Meet the training needs of the personnel other than from the O&M contract at site
- Extracting, checking and Maintenance of data both manual and electronic form and preservation for the entire crediting period
- The authority and responsibility of project overall project coordination in relation to the VCS validation would be with the project proponent.

Procedures for internal audit and Management review:

An internal audit of the project activity would be done on an annual basis by a special audit team. The audit team would comprise competitive persons who would be appointed by the General Manager in charge.

The audit team after the audit would submit their observations to the Manager for his review and necessary action. The Manager would instruct the VCS team to take the required corrective action if any, suggested by the audit team.

Procedures for corrective actions for better future monitoring and reporting:

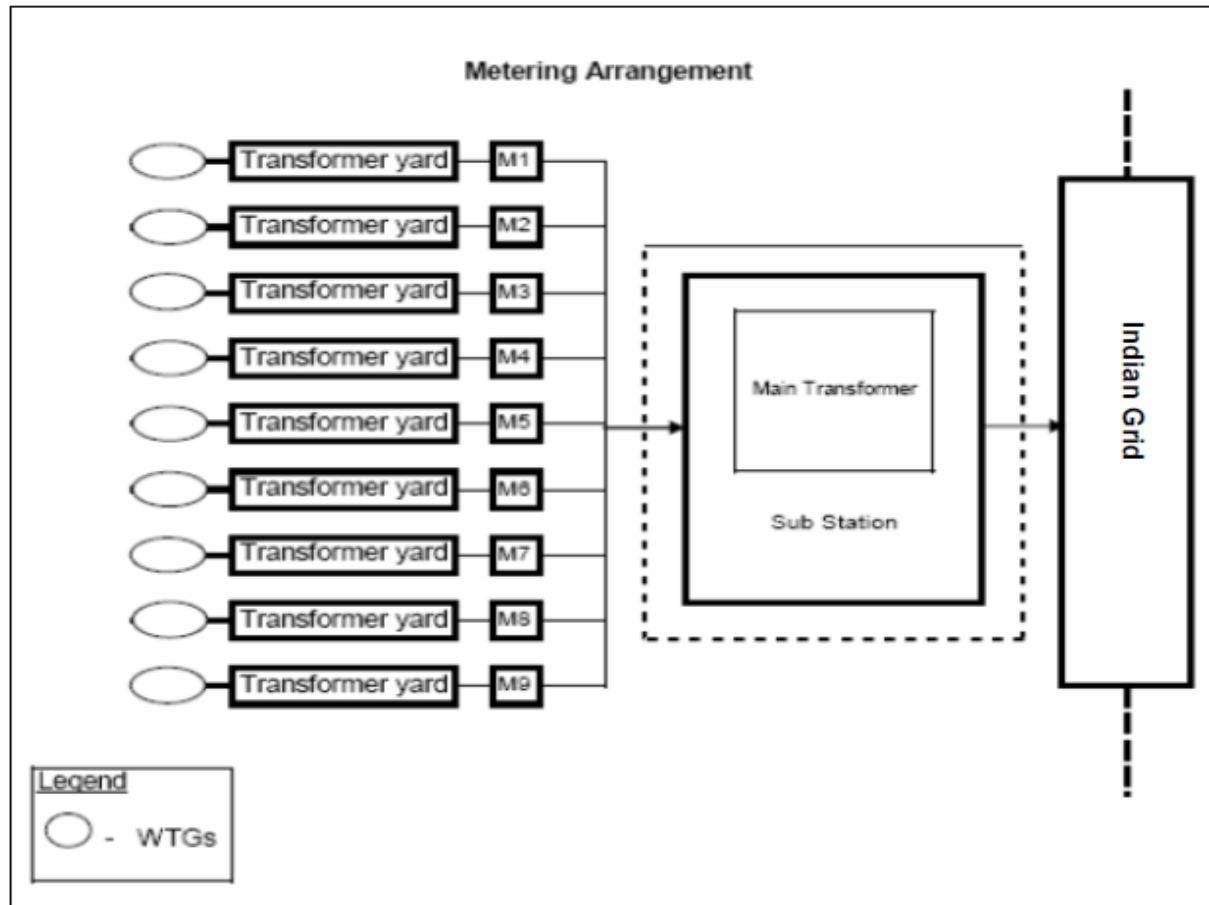
Errors or deviations will be identified during the annual internal audits. The VCS team Head (i.e., General Manager in charge) would take up these matters during the annual VCS team meetings (that normally would happen a few days after internal audit reports are prepared and submitted). The root cause of these errors would be discussed and appropriate action would be taken for better future monitoring and reporting. The corrective actions may include:

- Training of monitoring personnel where ever required
- Replacement or repair of equipment's

Procedures for maintenance of monitoring equipment's:

- The Site Engineer would conduct a physical inspection of all the energy meters once a month
- Any maintenance requirements would be immediately attended
- The energy meters will undergo a preventive maintenance one a year
- The responsibility of maintenance will be with the Site Engineer
- Maintenance history card would be maintained for all energy meters

The schematic diagram of the project activity is as given below:



5 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS

5.1 Baseline Emissions

Baseline emissions include only CO₂ emissions from electricity generation in fossil fuel fired power plants connected to the Southern Grid that are displaced by the project activity. The Baseline Emissions would be calculated using the formula

$$BE_y = EG_{BL,y} \times EF_{CO_2}$$

Where,

BE_y is Baseline Emissions in year y (tCO₂e/y)

EG_{BL,y} is Energy Baseline in year y, kWh

EF_{CO₂} is CO₂ Emission Factor in year y; t CO₂ / kWh

$$\begin{aligned} \text{Baseline Emissions} &= 30,871.559 \text{ MWh} \times 0.9777 \text{ tCO}_2/\text{MWh} \\ &= 30,183 \text{ tonnes of CO}_2 \text{ (rounded down value considered)} \end{aligned}$$

5.2 Project Emissions

As per methodology, for wind power projects PE_y = 0 tonnes of CO₂.

5.3 Leakage

As per the methodology, no leakage is considered from the project activity.

5.4 Net GHG Emission Reductions and Removals

Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)
Year 2019 (1 st Nov 2019 to 31 st Dec 2019)	1,104	0	0	1,104
Year 2020 (1 st Jan 2020 to 31 st Oct 2020)	29,079	0	0	29,079
Total	30,183	0	0	30,183

The comparison of actual ER with estimated ERs as per registered PD has been included under the ER sheet and also provided justification based on facts and information.

Detail Calculation has been provided in ER sheet (refer to the ER sheet final version 02). However, the comparison of actual emission with the estimated ER has been presented below:

Comparison of actual emission reductions with estimates in the revised PDD	
MP Start Date	01-11-2019
MP End Date	31-10-2020
Days	366
Annual VER as per revised VCSPD (renewal CP)	30,928
Estimated VER in VCS PD for the equivalent period of the current MP	31,012
Actual values achieved during this monitoring period	30,183
% change in actual VERs with estimates in revised PD	-2.67%

The actual ER achieved is marginally lower than to the PD estimated ER for the comparable period. This is mainly due to slight decrease in generation during the current MP due to lower PLF.

APPENDIX 1: POWER EXPORTED AND POWER IMPORTED BY WTGS

Month	EG _{Gross,y} (Gross Electricity export to the grid by the project during the year y) (kWh)	EG _{Import,y} (Electricity imported from the grid by the project during the year y) (kWh)	EG _{net,y} (Net electricity supplied to the grid) (MWh)	Baseline Emission Factor (tCO ₂ /MWh)	Baseline emissions (tCO ₂)	Project emissions (tCO ₂)	Leakage emissions (tCO ₂)	Emission Reductions (tCO ₂)
Nov-19	5,15,008.92	48,120.05	466.89	0.9777	456	0	0	456
Dec-19	7,03,656.87	41,149.13	662.51	0.9777	648	0	0	648
Sub Total	12,18,665.78	89,269.18	1,129.40	0.9777	1,104	-	-	1,104
Jan-20	5,86,857.93	47,388.59	539.47	0.9777	527	0	0	527
Feb-20	8,79,993.49	36,583.02	843.41	0.9777	825	0	0	825
Mar-20	5,45,766.28	56,757.29	489.01	0.9777	478	0	0	478
Apr-20	9,12,633.08	47,067.95	865.57	0.9777	846	0	0	846
May-20	32,89,115.59	25,063.03	3,264.05	0.9777	3,191	0	0	3,191
Jun-20	53,06,707.32	4,375.73	5,302.33	0.9777	5,184	0	0	5,184
Jul-20	46,94,308.57	10,248.46	4,684.06	0.9777	4,580	0	0	4,580
Aug-20	58,29,602.43	2,553.10	5,827.05	0.9777	5,697	0	0	5,697
Sep-20	42,71,019.84	12,842.63	4,258.18	0.9777	4,163	0	0	4,163
Oct-20	36,83,703.83	14,666.27	3,669.04	0.9777	3,587	0	0	3,587
Sub Total	2,99,99,708.34	2,57,546.06	29,742.16	0.9777	29,079	-	-	29,079
Grand Total	3,12,18,374.13	3,46,815.25	30,871.559		30,183	-	-	30,183

The changes in HTSC nos. are reported below:

Local Ref.	Old HTSC Nos.	New HTSC Nos.
NSL-1	751	507
NSL-2	752	508
NSL-3	754	510
NSL-4	788	533
NSL-5	753	509
NSL-6	808	551
NSL-7	728	497
NSL-8	755	511
NSL-9	690	482