

TEMPLATE

MONITORING REPORT

PUBLICATION DATE 14.10.2020

VERSION v. 1.1

RELATED SUPPORT - TEMPLATE GUIDE Monitoring Report v. 1.1

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KEY PROJECT INFORMATION

Key Project Information

GS ID (s) of Project (s)	GS11401
Title of the project (s) covered by monitoring report	Bhesada Wind Power Project in Rajasthan
Version number of the PDD/VPA-DD (s) applicable to this monitoring report	05
Version number of the monitoring report	1.5
Completion date of the monitoring report	26/08/2025
Date of project design certification	12/01/2023
Date of Last Annual Report	14/04/2025
Monitoring period number	04
Duration of this monitoring period	01/05/2024 to 31/08/2024
Project Representative	Renew Power Synergy Private Limited
Host Country	India
Activity Requirements applied	☐ Community Services Activities ☒ Renewable Energy Activities ☐ Land Use and Forestry Activities/Risks & Capacities ☐ N/A
Methodology (ies) applied and version number	ACM0002- Grid-connected electricity generation from renewable sources - Version 20.0
Product Requirements applied	☒ GHG Emissions Reduction & Sequestration ☐ Renewable Energy Label ☐ N/A

Table 1 - Sustainable Development Contributions Achieved

Sustainable Development Goals Targeted	SDG Impact	Amount Achieved	Units/ Products
SDG 13- Take urgent action to combat climate change and its impact	Emission reductions	66,811	GSVER (tCO ₂ e)
SDG 7- Ensure access to affordable, reliable and modern energy for all	MWh of renewable energy generated	71,802.78	MWh

SDG 8 – Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	Number of trainings and hiring through project	Total number of trainings imparted to employees during the entire monitoring period: 33 The total number of employment opportunities created till date is 42. However, the total number of employments opportunities¹ created during the entire monitoring period: 0	Number of trainings and Employment generated through project
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Table 2 – Product Vintages

		Amount Achieved
Start Dates	End Dates	
		SDG 13
01/05/2024	31/08/2024	66,811 tCO ₂ e(GSVER)

¹ It is to be noted that the employment numbers are not cumulative (unlike ERs) and the year-wise bifurcation is given in Table 2 for both employment & training.

SECTION A. DESCRIPTION OF PROJECT

A.1. General description of project

The project activity generates power using renewable energy source (wind energy) and sell the power generated to the Indian National grid.

The project activity replaces anthropogenic emissions of greenhouse gases of 66,811 tCO₂e, thereon displacing 71,802.78 MWh amount of electricity in current Monitoring Period from the generation-mix of power plants connected to the INDIAN GRID, which is mainly dominated by thermal/ fossil fuel-based power plant.

The total installed capacity of the current project activity is 100.8 MW; which involves operation of 48 WTGs of 2.1 MW capacity each, in the state of Rajasthan in India.

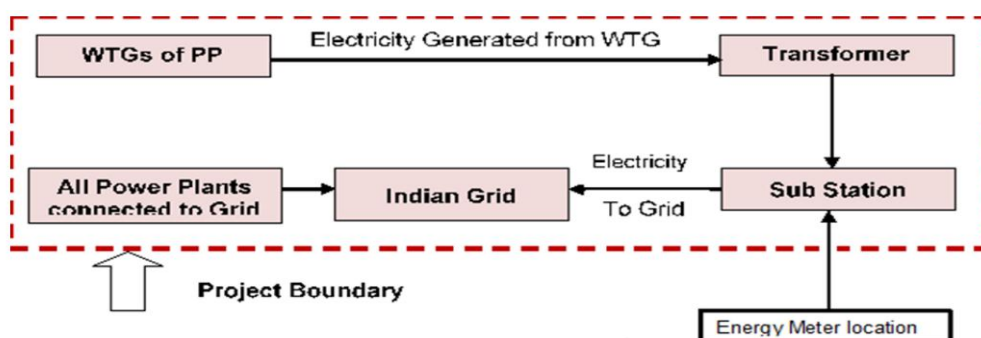
Project Investor	Project Type	Total Project Capacity	State	Usage
ReNew Wind Energy (Rajasthan 3) Private Limited	Wind	100.8 MW	Rajasthan	Sale to Indian Grid

The project activity start date is 21/08/2014, which is date of signing of supply contract with Suzlon Energy Limited.

The project activity is a new facility (Greenfield) and the project activity generates electricity by the utilization of renewable wind energy and further selling the generated energy to the Indian Grid. In this process there is no consumption of any fossil fuel and hence the project does not lead to any greenhouse gas emissions. Thus, electricity is generated through sustainable means without causing any negative impact on the environment.

The project is registered in UNFCCC CDM project activity as a CPA (CPA 12 of PoA 9416). The project is not claiming VERs for the same vintage in another standard other than GS. Also, there is no double counting with national climate policies or programs. Renew Power Synergy Private Limited has the sole rights to carbon credits generated from the project activity. Furthermore, the GHG emissions reductions from the project activity are not accounted for within the relevant system of the host country/ regulator or any voluntary mechanism.

The project boundary includes the WTGs, sub-stations, grid and all power plants connected to grid. The project activity evacuates power to the Indian grid². Therefore, the entire Indian grid and all connected power plants have been considered in the project boundary for the project activity.



The monitoring period of this monitoring report is 01/05/2024 to 31/08/2024.

² During registration under UNFCCC CDM mechanism, the project activity was connected to NEWNE Grid of India. Later on, all regional grids were synchronized and formed Unified Indian Grid

The details regarding GHG emission sources are as mentioned below –

The details regarding GHG emission sources are as mentioned below				
Source		GHGs	Included?	Justification/Explanation
Baseline	Grid Connected Electricity Generation	CO ₂	Yes	Main emission source
		CH ₄	No	Minor emission source
		N ₂ O	No	Minor emission source
Project	Greenfield Wind Power Project Activity	CO ₂	No	No CO ₂ emissions are emitted from the project
		CH ₄	No	Project activity does not emit CH ₄
		N ₂ O	No	Project activity does not emit N ₂ O

A.2. Location of project

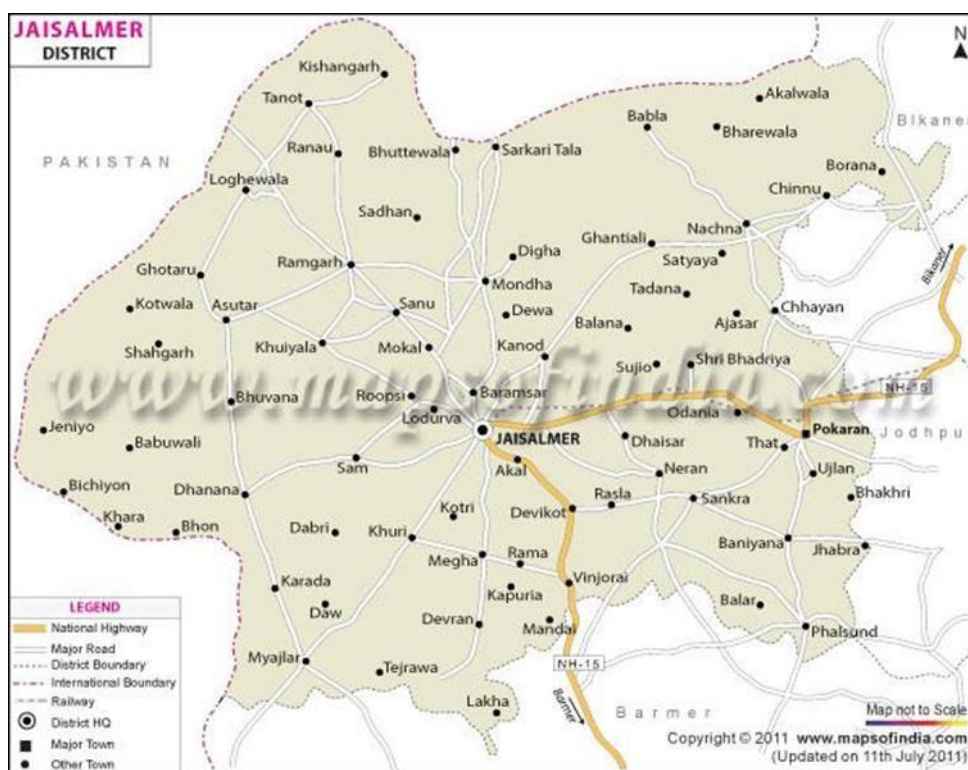
Host Country: India

State: Rajasthan

District: Jaisalmer

Village: Bheeksar, Karada & Surrounding area

The location of the project activity has been highlighted in the map shown below:



The WTG location details is shown below:

Model: S97X, HBT_120Mtr			
Sr. No	WTG Name	Longitude(N)	Latitude(E)
1	BSD-001	71.38866	26.6132
2	BSD-004	71.39865	26.59866
3	BSD-005	71.40195	26.5938
4	BSD-006	71.40533	26.58895
5	BSD-058	71.40438	26.6061
6	BSD-061	71.40525	26.62209
7	VJI-067	71.31178	26.59331
8	VJI-068	71.31698	26.58629
9	VJI-073	71.33412	26.57749
10	VJI-074	71.32871	26.58481
11	VJI-075	71.32664	26.58877
12	VJI-077	71.31767	26.5976
13	VJI-078	71.31436	26.60744
14	VJI-104	71.32333	26.61446
15	VJI-105	71.32517	26.60927
16	VJI-106	71.32862	26.60561
17	VJI-107	71.3361	26.5978
18	VJI-108	71.33888	26.5909
19	VJI-112	71.35836	26.58953
20	VJI-114	71.34996	26.60213
21	VJI-470	71.3318	26.58132

22	VJI-471	71.33367	26.60363
23	VJI-472	71.35699	26.594
24	VJI-473	71.33719	26.57401

Model: S97x,Tubular_90Mtr			
Sl. No.	WTG Name	Longitude(N)	Latitude(E)
1	BSD-002	71.39061	26.60759
2	BSD-003	71.39532	26.60349
3	BSD-059	71.40199	26.61055
4	BSD-060	71.39864	26.61543
5	BSD-063	71.41186	26.6128
6	BSD-064	71.41499	26.60883
7	BSD-118	71.43018	26.61004
8	BSD-121	71.41767	26.62741
9	BSD-124	71.4306	26.62622
10	BSD-125	71.43605	26.61917
11	BSD-126	71.43986	26.61493
12	VJI-019	71.21193	26.62336
13	VJI-022	71.22678	26.61785
14	VJI-028	71.24541	26.61831
15	VJI-029	71.2423	26.62229
16	VJI-030	71.23867	26.62902
17	VJI-036	71.23923	26.64592
18	VJI-037	71.24236	26.64233
19	VJI-045	71.27376	26.59475
20	VJI-052	71.25334	26.64588
21	VJI-061	71.27402	26.64395
22	VJI-062	71.27649	26.63885
23	VJI-063	71.28321	26.6328
24	VJI-111	71.36176	26.58498

A.3. Reference of applied methodology

Title: Grid-connected electricity generation from renewable sources

Reference: The project activity meets the eligibility criteria of large scale project as it is more than 15 MW

Methodology: ACM0002: Grid-connected electricity generation from renewable sources - Version 20.0³

³ <https://cdm.unfccc.int/methodologies/DB/XP2LKUSA61DKUQC0PIWPGWDN8ED5PG>

Type I: Energy industries (renewable / non-renewable sources)

Category: Approved Consolidated Methodology (ACM0002)

Tools referred with above methodology and applicable for project activity are:

- Tool to calculate the emission factor for an electricity system⁴- Version 07.0 (EB 100, Annex 04)
- Tool for the demonstration and assessment of additionality⁵- Version 07.0.0 (EB 70, Annex 08).
- Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period, Version 03.0.1⁶

A.4. Crediting period of project

The Crediting Period of this project activity is from 31/03/2016 to 30/03/2021(both days are included) for First Crediting Period and 31/03/2021 to 30/03/2026(both days are included) for Second Crediting Period.

SECTION B. IMPLEMENTATION OF PROJECT

B.1. Description of implemented project

Technical specifications of WTG model: Suzlon Energy Limited make S97/2.1 MW⁷

S.N.	Parameter	Specification/ Value with unit
1	Rated power	2100 kW
2	Rotor diameter	97 m
3	Hub height	90 m and 120 m
4	Turbine type	Asynchronous 3 phase induction generator with slip rings operated with rotor circuit inverter system
5	Power regulation	Electric blade pitch control
6	Cut in wind speed	3.5 m/s
7	Rated wind speed	11 m/s
8	Cut out wind speed	20 m/s
9	Operational range of rot. speed	11.8-17.7
10	Orientation	Up-wind
11	No. of blades	3
12	Blade material	E-glass reinforced Epoxy, Vacuum-injected
13	Gear box type	1 planetary stage, 2 helical stages
14	Generator type	Asynchronous 3-phase induction generator with slip rings operated with rotor circuit inverter system
15	Braking	Hydraulic disc brake, activated by hydraulic pressure (active brake)
16	Output voltage	690 V
17	Tower	Welded steel plate and hybrid tower (partially)
18	Useful life	20 years

⁴ <http://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-07-v7.0.pdf>

⁵ <http://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v7.0.0.pdf>

⁶ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-11-v3.0.1.pdf>

⁷ <https://www.suzlon.com/s97-wind-turbine.php/thank-you>

Since commissioning, the power plant is in running condition and the major breakdowns occurred in current monitoring period are mentioned in the Appendix 2. Since the duration for this monitoring period is only of 4 months thus there has been no any scheduled maintenance

Also, the technical lifetime of the all WTGs involved in the project activity is 20 years⁸ and the earliest start date of commercial operation of the WTGs is 11/09/2015. Thus, considering end of project lifetime will be on 10/09/2035 which is well within the end date of crediting period.

There is no change in project design which is envisaged in PDD.

The commissioning date of WTGs of this project activity is given below:

Sr. No	WTG Name	Commissioning Date
1	BSD-001	18/12/2015
2	BSD-004	07/11/2015
3	BSD-005	07/11/2015
4	BSD-006	18/12/2015
5	BSD-058	18/12/2015
6	BSD-061	18/12/2015
7	VJI-067	11/09/2015
8	VJI-068	07/11/2015
9	VJI-073	30/09/2015
10	VJI-074	30/09/2015
11	VJI-075	30/09/2015
12	VJI-077	11/09/2015
13	VJI-078	11/09/2015
14	VJI-104	11/09/2015
15	VJI-105	11/09/2015
16	VJI-106	11/09/2015
17	VJI-107	30/09/2015
18	VJI-108	07/11/2015
19	VJI-112	30/09/2015
20	VJI-114	07/11/2015
21	VJI-470	30/09/2015
22	VJI-471	30/09/2015
23	VJI-472	30/09/2015
24	VJI-473	07/11/2015

Sl. No.	WTG Name	Commissioning Date
1	BSD-002	22/03/2016

⁸ As per the registered GS-PDD and the technical specification of the WTG.

2	BSD-003	22/03/2016
3	BSD-059	22/03/2016
4	BSD-060	22/03/2016
5	BSD-063	22/03/2016
6	BSD-064	22/03/2016
7	BSD-118	22/03/2016
8	BSD-121	22/03/2016
9	BSD-124	22/03/2016
10	BSD-125	22/03/2016
11	BSD-126	22/03/2016
12	VJI-019	22/03/2016
13	VJI-022	22/03/2016
14	VJI-028	22/03/2016
15	VJI-029	22/03/2016
16	VJI-030	22/03/2016
17	VJI-036	22/03/2016
18	VJI-037	22/03/2016
19	VJI-045	22/03/2016
20	VJI-052	22/03/2016
21	VJI-061	22/03/2016
22	VJI-062	22/03/2016
23	VJI-063	22/03/2016
24	VJI-111	22/03/2016

B.1.1 Forward Action Requests

The following Forward Action Request has been raised for the previous MP:

VVB shall conduct a physical site visit in the next verification in accordance to RULE UPDATE-Applicability of minimum site visit requirements by VVB dated 16/08/2021.

B.2. Post-Design Certification changes

Not Applicable during the current monitoring period. There are no post-design certification changes for this project.

B.2.1. Temporary deviations from the approved Monitoring & Reporting Plan, methodology or standardized baseline

Not Applicable during the current monitoring period. There are no temporary deviations in the monitoring & reporting plan, methodology or standardized baseline of the project.

B.2.2. Corrections

Not Applicable during the current monitoring period. There are no corrections.

B.2.3. Changes to start date of crediting period

Not Applicable during the current monitoring period. There is no change in start date of crediting period.

B.2.4. Permanent changes from the Design Certified monitoring plan, applied

methodology or applied standardized baseline

Not Applicable during the current monitoring period. There are no permanent changes from the design certified monitoring plan, applied methodology or applied standardized baseline of this project.

B.2.5. Changes to project design of approved project

Not Applicable during the current monitoring period. There are no changes to project design of the approved project.

SECTION C. DESCRIPTION OF MONITORING SYSTEM APPLIED BY THE PROJECT

The monitoring team includes PD (Project Developer)'s employees and O&M contractor's representatives.

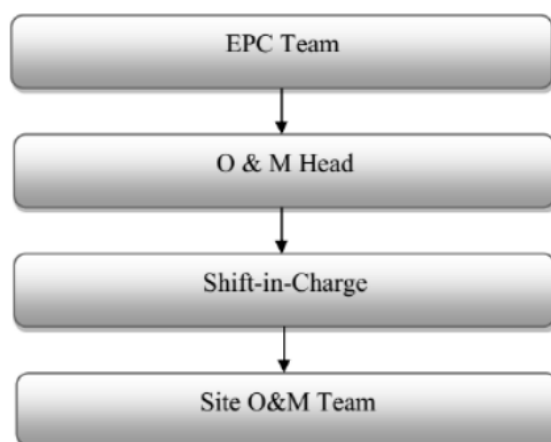
Meter readings is taken jointly at the appointed date by PD's representative, Suzlon Energy Ltd. official and State Discom official. The same is reported as Joint Meter Reports (JMR). The same is reported to the O&M team and the complied reports are generated in the form of monthly report on generation and consumption.

Net electricity supplied by the project activity to the grid is cross-checked with records for sold electricity by invoices raised for the payment purpose.

One metering system is there at the substation/yard and another at the WTG site. If the variation between the two meter readings is significant for the monthly recording of data, the meters would be reset and calibrated. The measurement is taken from the energy meter located in the substation/yard. Meter reading is carried out in every calendar month.

The accuracy of monitoring parameter is ensured by adhering to the calibration and testing procedure as set in the power purchase agreement. The project adheres to all mandatory regulatory and statutory requirements at the state as well as national level. The energy meters installed are tri-vector meters of 0.2% accuracy class.

The operational and management structure implemented by PD and O&M contractor is as follows:



In some cases, if a particular feeder/ substation has other WTGs not part of this project activity connected through same electricity meter, apportioning is used. Even otherwise, to get WTG/ project owner wise electricity supplied to grid, apportioning is required and is carried out as below.

Apportioning of net electricity supplied is done with reference to the electricity generated from individual WTGs. Apportioning of net electricity supplied, as per the Joint Energy Meter Readings sheet, by each project owner is done based on the individual meter readings of each wind turbine. The apportioning is done by electricity purchaser jointly with the PD. The Monthly report on generation and consumption with electricity buyer is used to calculate actual net electricity supplied to the grid and on the basis of that GHG emission reductions by this project activity is calculated.

The net electricity exported to the grid by project activity is referred from Monthly report on generation and consumption readings. The main billing meter at substation/yard records total export, and total import by all the connected WTGs to the sub-station through a feeder. The electricity export and import by a WTG of the PD is then calculated by using the following formulae as given below. This is the billable reading against which the PD raises invoice to the state electricity board.

Scheduled maintenance for the project activity is carried out once in a year. The last scheduled maintenance was done on 17/02/2024 which lies in the previous periodic verification. For the current periodic verification from 01/05/2024 to 31/08/2024 no any scheduled maintenance activity has been done and thus the same has not been included in the Appendix 2 which mentions the major breakdown details. Also, no any unscheduled maintenance has been done for this short duration of 4 months.

Formula:

Net Generation of a WTG @ for credit:

$$\frac{(\text{kWh individual generation at WTG controller} \times \text{Total (Export kWh} - \text{Import kWh)} @ \text{EB at cumulative meter at feeder})}{(\text{Total Controller Generation of all projects connected on a feeder})}$$

Procedures for handling data uncertainty:

- a. In case main meter is faulty: In the event that the main metering system is not in the service as result of maintenance, repairs or testing, then the backup metering system shall be used during the period the main metering system is not in service and the provisions above shall apply to the reading of the backup metering system.
- b. In case both the meters are faulty: When the Main Metering System and/or Backup Metering System and/or any component thereof is found to be outside the acceptable limit of accuracy or otherwise not functioning properly, it shall be repaired, recalibrated or replaced as soon as possible by the state agency. The error observed during this calibration will be applied to all readings from last correct JMR / last meter calibration. State agency ensures that metering system is tested for accuracy at least once in a year and report is furnished along with joint meter reading.

Any meter seal(s) shall be broken only by the authorised officer of state agency in the presence of representative of Power Producers/ Developers, whenever the Main Metering System or the backup metering system is to be inspected, tested, adjusted, repaired or replaced.

In case, the monitoring period starts mid- month, the reading for that month will be apportioned based on the daily electricity export data give by the O&M contractor. This will be also checked with the average daily export arrived from that month's JMR and the conservative of the two will be used for the emission reduction calculation.

Apportioning Procedure

Procedure for apportioning of electricity:

C In case the start/end dates of monitoring period do not match with the start/end dates of Joint Meter Reading Sheets / Generation reports, following apportioning procedure will be applied for the first and the last monitoring period within a particular crediting period:

Apportioning will be carried out based on ratio of generation data recorded using LCS installed at the each WTG. The emission reductions of that particular period (between the start/end date of monitoring period and the end/start of the billing period) will be calculated based on percentage generation of that particular period at WTG using LCS data multiplied with the total units generated in the month as per the Joint Meter Reading Sheets / Generation report issued. The calculation formula has been furnished below:

Generation from all project WTGs for the period $y1 = EG_{WTGcontroller,i,y1}$
 Generation from all project WTGs for the period $y2 = EG_{WTGcontroller,i,y2}$

Net energy supplied used for calculation of emission reduction for the monitoring period $y1$, i.e $EG_{facility,y1} =$

$$N \sum_{i=1} ((EG_{export,i,y2} - EG_{import,i,y2}) * (EG_{WTGcontroller,i,y1} / EG_{WTGcontroller,i,y2}))$$

Where:

$y1$ = No. of days within a billing period up to which generation is considered for emission reduction calculation

$y2$ = No. of days in the billing period

N = No. of feeders to which project WTGs are connected to.

D In case if there are project and non-project WTGs connected to a particular feeder i , the quantity of net electricity supplied by the project to the grid connected to that particular feeder will be calculated based on the formula specified below:

Total generation from the project connected to the feeder i in period $y = EG_{WTGcontroller,i,y}$

Total generation from all project and non-project plants connected to the feeder i in period y = $EG_{All_controller,i,y}$

Quantity of net electricity exported by all (project and non-project) projects connected to feeder i to the grid in period y = $EG_{export,i,y}$

Quantity of net electricity imported by all (project and non-project) projects connected to feeder i to the grid in period y = $EG_{import,i,y}$

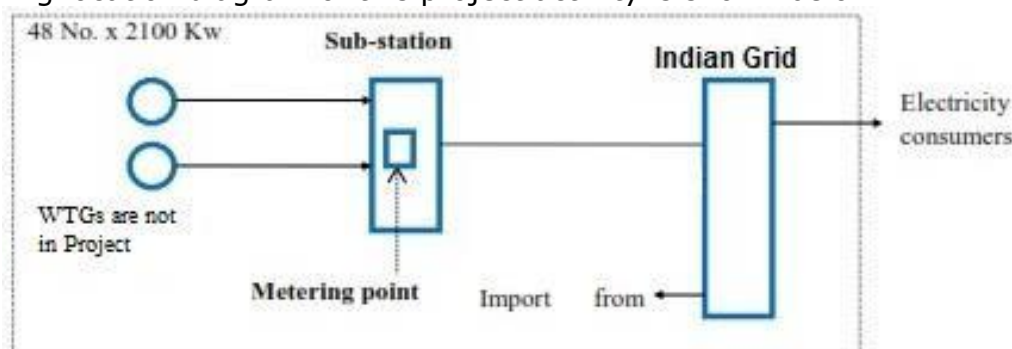
Net electricity supplied by the project connected to feeder i to the grid in period y = $EG_{facility,y}$

$$N \sum_{i=1} ((EG_{export,i,y} - EG_{import,i,y}) * (EG_{WTGcontroller,i,y} / EG_{All_controller,i,y}))$$

Where: N = No. of feeders to which project activity is connected to.

E In cases where both scenarios mentioned above exist at the same time (i.e. both project and non-project plants connected to the same feeder(s) and the start/end date of the monitoring periods do not match with those of the JMR readings), firstly the apportioning as per point # 2 above will be applied for the billing period y2 to estimate the Net electricity supplied by the project WTGs connected to feeder Z to the grid in period y2. Then this value would replace $(EG_{export,y2} - EG_{import,y2})$ in the formula specified under point # 1 above to arrive at the Net energy export used for calculation of emission reduction for the monitoring period y1.

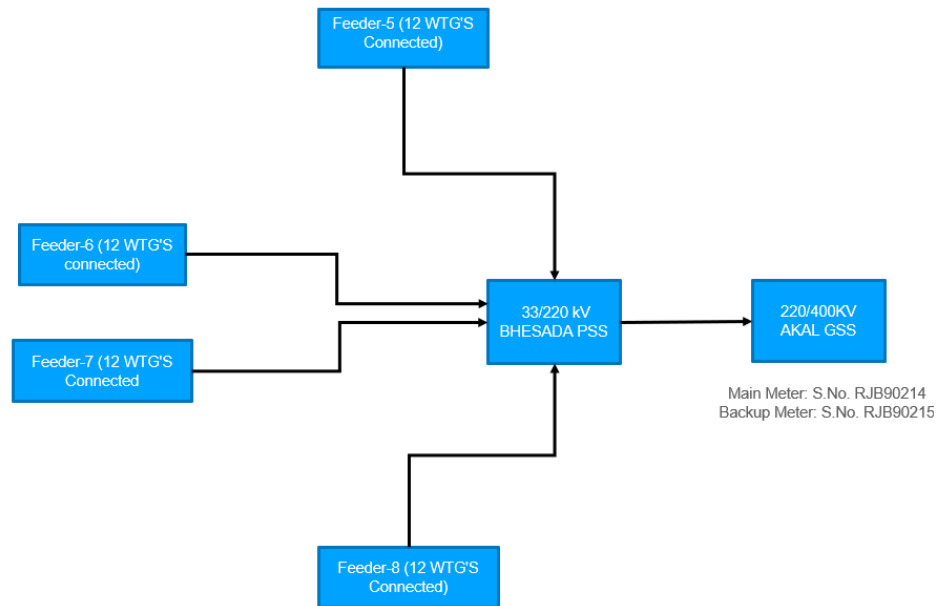
The metering location diagram of this project activity is shown below:



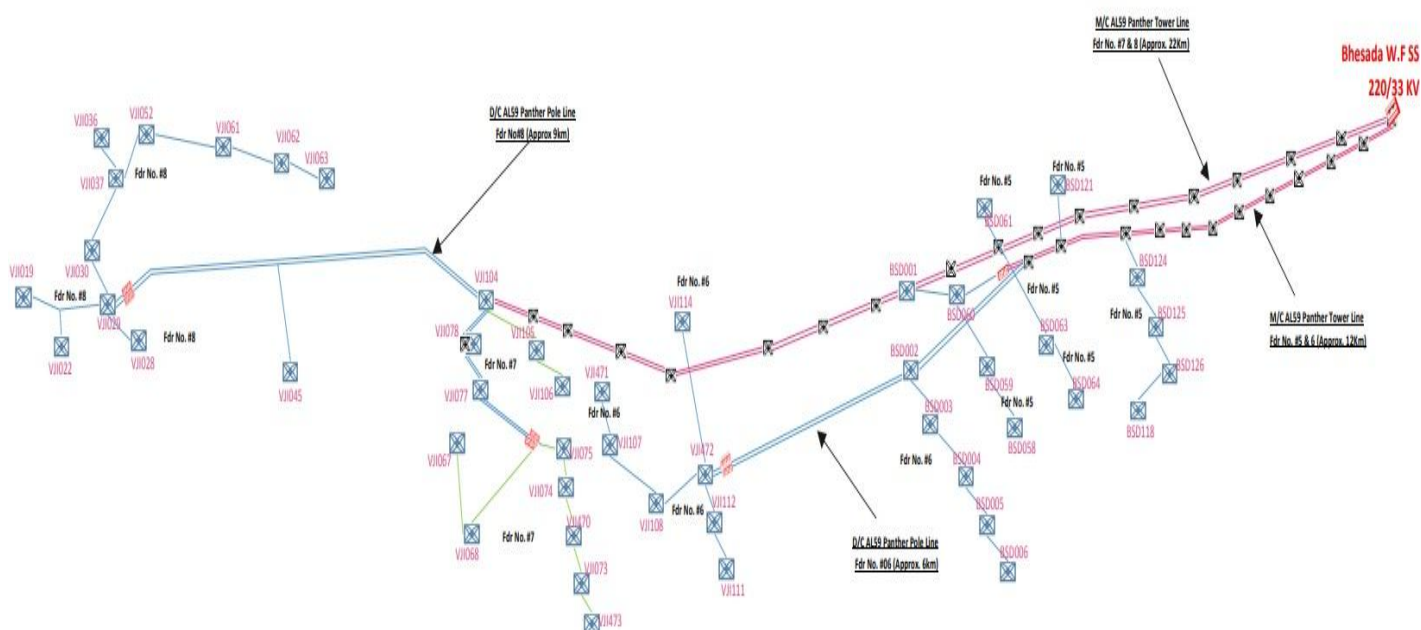
SCADA System Integration

The project has a fully integrated SCADA (Supervisory Control and Data Acquisition) system to manage the entire 100.8 MW wind farm. This system provides comprehensive coverage and control for all 48 Wind Turbine Generators (WTGs), each with a capacity of 2.1 MW, as well as all associated feeders located in Rajasthan, India.

This integration allows for real-time monitoring, remote control, and data acquisition from all critical components. Operators can remotely control the start-up, shutdown, and operational parameters of each individual WTG and feeder. This capability ensures efficient and reliable operation of the entire facility, enabling prompt response to operational changes and maintenance requirements from a centralized control location.



Fdr No.	WTGs ID	MW of WTG	No. of WTG	Total MW	33kV Line Length (C-km)			
					M/C AL59 Panther	D/C AL59 Panther	S/C AL59 Panther	S/C AL59 Dog
Fdr#05	BSD001 BSD058 BSD059 BSD060 BSD061 BSD063 BSD064 BSD121 BSD118 BSD126 BSD125 BSD124	2.1	12	25.2	12.1	0	9.3	-
Fdr#06	VJI471 VJI107 VJI108 VJI114 VJI472 VJI112 VJI111 BSD002 BSD003 BSD004 BSD005 BSD006	2.1	12	25.2		6.1	8.2	-
Fdr#07	VJI068 VJI067 VJI077 VJI078 VJI104 VJI105 VJI106 VJI473 VJI073 VJI470 VJI074 VJI075	2.1	12	25.2	21.6	3.4	-	6.1
Fdr#08	VJI019 VJI022 VJI028 VJI029 VJI030 VJI037 VJI036 VJI061 VJI052 VJI045 VJI063 VJI062	2.1	12	25.2		8.9	13.2	-
Total			48	100.8	33.7	18.4	30.7	6.1



SECTION D. DATA AND PARAMETERS

D.1. Data and parameters fixed ex ante or at renewal of crediting period

SDG 13 (Indicators 13.2.1)

Data/parameter	EF_{grid,OM,y}
Unit	tCO ₂ /MWh
Description	Operating Margin CO ₂ emission factor in year y
Source of data	Calculated from CEA database, Version 17, October 2021 ⁹
Value(s) applied	0.9522
Choice of data or Measurement methods and procedures	Calculated as per "Tool to calculate the emission factor for an electricity system, version 07" as per the latest data available for the most three recent years 2018-19, 2019-20 and 2020-21. The data is obtained from "CO ₂ Baseline Database for Indian Power Sector" version 17, published by the Central Electricity Authority, Ministry of Power, Government of India.
Purpose of data	For the calculation of the Baseline Emission
Additional comment	This parameter is fixed ex-ante for the entire crediting period.

Data/parameter	EF_{grid,BM,y}
Unit	tCO ₂ /MWh
Description	Build Margin CO ₂ emission factor in year y
Source of data	Calculated from CEA database, Version 17, October 2021 ¹⁰

⁹ https://cea.nic.in/wp-content/uploads/tpe_cc/2022/02/User_Guide_ver_17_2021.pdf

¹⁰ https://cea.nic.in/wp-content/uploads/tpe_cc/2022/02/User_Guide_ver_17_2021.pdf

Value(s) applied	0.8653
Choice of data or Measurement methods and procedures	Calculated as per "Tool to calculate the emission factor for an electricity system, version 07" as per the latest data available for the most recent year 2020-21. The data is obtained from "CO ₂ Baseline Database for Indian Power Sector" version 17, published by the Central Electricity Authority, Ministry of Power, Government of India.
Purpose of data	For the calculation of the Baseline Emission
Additional comment	This parameter is fixed ex-ante for the entire crediting period.

Data/parameter	EF_{grid,CM,y}
Unit	tCO ₂ /MWh
Description	Combined Margin CO ₂ emission factor in year y
Source of data	Calculated from CEA database, Version 17, October 2021 ¹¹
Value(s) applied	0.9305
Choice of data or Measurement methods and procedures	The combined margin emissions factor is calculated as follows: $EF_{grid,CM,y} = EF_{grid,OM,y} * W_{OM} + EF_{grid,BM,y} * W_{BM}$ Where: EF_{grid,BM,y}= Build margin CO₂ emission factor in year y (tCO₂/MWh) EF_{grid,OM,y}= Operating margin CO₂ emission factor in year y (tCO₂/MWh) W_{OM} = Weighting of operating margin emissions factor (%) = 75% W_{BM}= Weighting of build margin emissions factor (%) = 25%
Purpose of data	For the calculation of the Baseline Emission
Additional comment	This parameter is fixed ex-ante for the entire crediting period.

D.2 Data and parameters monitored

SDG 13 (Indicators 13.2.1)

Data / Parameter	ER_y
Unit	tCO ₂ e/year
Description	Emission reductions achieved per year
Source of data	ER Sheet
Value(s) applied	66,811 ¹² (for the current monitoring period)

¹¹ https://cea.nic.in/wp-content/uploads/tpe_cc/2022/02/User_Guide_ver_17_2021.pdf

¹² This value is calculated by deducting per day emission reductions for 2 days from the actual emission reductions achieved.

Measurement methods and procedures	The baseline emissions are the product of electrical energy baseline $EG_{\text{facility},y}$ expressed in MWh of electricity produced by the renewable generating unit multiplied by an emission factor.
Monitoring frequency	As per monitoring period
QA/QC procedures	Not Applicable
Purpose of data	To Monitor the SDG 13 Indicator
Additional comment	Data will be archived in paper & electronic form for two years after the end of crediting period or of the last issuance of VERs for this project activity, whichever occurs later.

SDG 7 (Indicators 7.2.1)

Data / Parameter	EG_{facility,y}												
Unit	MWh/year												
Description	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y in MWh												
Source of data	Monthly report on generation provided by Suzlon Energy Ltd.												
Value(s) applied	71,802.78 ¹³ (for the current monitoring period)												
Measurement methods and procedures	The JMR is usually taken once in month for the bulk/ revenue meter at the common substation/yard. Based on the JMR a monthly report on generation and consumption is prepared by the Suzlon Energy Ltd. By using these data, net export by the WTGs in the project will be calculated (as in some case net export is not explicitly reported in JMR). Measurement by: electricity meters (bulk, WTG controller/ CMS) Recording: Electronic and paper Recording Frequency: Continuous monitoring and monthly recording Responsibility: The operators/ O&M team is responsible for measurement Calibration Testing Frequency: Annually Accuracy class of meters: 0.2s/ 0.5s (as per state regulation) Archiving: Crediting Period + 2 years The meter details are provided below: <table><tr><th>Meter No.</th><th>Meter Type</th><th>Make</th><th>Accuracy Class</th></tr><tr><td>RJB90214</td><td>Main Meter</td><td>Secure</td><td>0.2</td></tr><tr><td>RJB90215</td><td>Checkmeter</td><td>Secure</td><td>0.2</td></tr></table> Meter calibration details have been provided in Annexure 1 of Monitoring Report.	Meter No.	Meter Type	Make	Accuracy Class	RJB90214	Main Meter	Secure	0.2	RJB90215	Checkmeter	Secure	0.2
Meter No.	Meter Type	Make	Accuracy Class										
RJB90214	Main Meter	Secure	0.2										
RJB90215	Checkmeter	Secure	0.2										

¹³ This value is calculated by deducting per day net electricity generation for 2 days from the actual net electricity generation achieved.

Monitoring frequency	Continuous monitoring and monthly recording
QA/QC procedures	Cross check measurement results with records for sold electricity – where electricity sale is applicable
Purpose of data	To Monitor the SDG 7 Indicator
Additional comment	Data will be archived in paper & electronic form for two years after the end of crediting period or of the last issuance of VERs for this project activity, whichever occurs later.

SDG 8 (Indicators 8.5.1)

Data / Parameter	Number of employment generation			
Unit	Number			
Description	Number of people employed directly due to the project activity			
Source of data	Plant records or the training records for all the employees/Letter from O&M contractor for employment generation/ VVB interview with employees, local stakeholders etc			
Value(s) applied	The total number of employment opportunities created till date is 42. However, the total number of employment opportunities created during the entire monitoring period: 0			
	Further, below is the breakup of employment generated during the monitoring period.			
	Year	Skilled	Unskilled	Total
	2024	0	0	0
Measurement methods and procedures	The Project Developer has relevant policies in place, that are in conjunction with implementation of the equal wages, no discrimination and minimum wages being followed at site. Since for the current monitoring period no additional employments are generated, so number of men/women employed is zero which means that there is no any violation of the parameters that need to be measured with respect to this SDG.			
	The total number of persons working in the plant can be checked from the daily attendance sheet available at site. This parameter also monitors number of men/women employed by the project activity. The project activity ensures that "equal pay for work of equal value" for both men and women and there is no any discrimination against women. "The employment covers number of men and number of women employed by the project activity. The job is of type temporary/permanent or skilled/unskilled, etc. Also it is ensured that peoples gets equal payment for equal work. The payment is based on work and no any gender inequality for payment for work of equal value".			

	The average hourly earnings of a person is calculated by considering 8 hours per day working as per Indian standards and is depicted below. Hourly Wage calculation of New Employee: A person is getting a monthly salary of INR37,503; then his hourly earnings is calculated as follows: Hourly Income = $37,503 / (30 \times 8) = \text{INR } 156.3$. The hourly wages can be checked from the notification from the order published by the Chief Labour Commissioner (Central)¹⁴. As per the notification from Chief Labour Commissioner, for semi-skilled workers working in B Category of cities, the daily wage is 625, and accordingly the average hourly earnings come out to be INR 78.12. Thus, it can be justified that, PD is providing the employees/workers with salary/wages higher than the minimum wages as determined by the minimum wages order published by Chief Labour Commissioner (Central). The same can be checked from the salary slips provided.
Monitoring frequency	Monthly monitoring and annual compilation
QA/QC procedures	The number of persons employed is mentioned in the plant register, which can be crossed checked with attendance register. Average hourly earnings of the employees/workers can be checked and calculated from the salary slips.
Purpose of data	To Monitor the SDG 8 Indicator
Additional comment	-

SDG 8 (Indicators 8.6.1)

Data / Parameter	Quality of Employment
Unit	-
Description	Number of trainings provided per year
Source of data	Plant records or the training records for all the employees / VVB interview with employees, etc.
Value(s) applied	During the current monitoring period, a total of 33 trainings were conducted.
Measurement methods and procedures	Together with the technology supplier, the Project organize training for the staff on the technology and the monitoring of the plant operation, and the emergency and safety procedures.
Monitoring frequency	Annual

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<https://clc.gov.in/clc/min-wages>

QA/QC procedures	The training records for all the employees
Purpose of data	To Monitor the SDG 8 Indicator
Additional comment	-

D.3. Comparison of monitored parameters with last monitoring period

Data/Parameter	Value obtained in this monitoring period	Value obtained last monitoring period
NA	NA	NA

This section is Not Applicable since no community service activities are involved in this project activity.

D.4. Implementation of sampling plan

There is no sampling plan used for this project activity.

SECTION E. CALCULATION OF SDG IMPACTS

E.1. Calculation of baseline value or estimation of baseline situation of each SDG Impact

1– SDG 7– Affordable and Clean Energy (Contribution to Climate Security & Sustainable Development)– As there is no affordable and clean energy generation in baseline scenario, SDG 7 value is zero.

2– SDG 8– Decent Work and Economic Growth– As there is no employment in baseline scenario, SDG 8 value is zero.

3– SDG 13– Climate Action– For the current monitoring period, the emission reductions contributed by the project activity (ER_y) is calculated as follows:

Emission Reduction:

$$BE_y = EG_{\text{facility},y} * EF_{\text{grid,CM}, y}$$

Where:

BE_y	=	Baseline emissions in year y (t CO ₂)
$EG_{\text{facility},y}$	=	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y in MWh
$EF_{\text{grid,CM},y}$	=	Combined margin CO ₂ emission factor for grid connected power generation in year y

$$\begin{aligned} BE_y &= 72,989.60 \text{ MWh} \times 0.9305 \text{ tCO}_2\text{e} \\ &= 67,916 \text{ tCO}_2\text{e} \text{ (Round Down Value)} \end{aligned}$$

$$ER_y = BE_y - PE_y$$

Where:

ER_y = Emission reductions in year y (t CO₂e)

BE_y = Baseline emissions in year y (t CO₂e)

PE_y = Project emissions in year y (t CO₂e)

Therefore, $ER_y = 67,916 - 0$
 $= 67,916 \text{ tCO}_2\text{e}$

Calculation for deduction of Actual Emission Reductions after breakdown days deduction -

Actual Emission Reduction Achieved (tCO ₂ e)	67,916
Total Number of Days in this monitoring Period	123
Total Equivalent Days of breakdown	2
Per Day Emission Reduction Achieved (tCO ₂ e)	552.16
Actual Emission Reduction Achieved (tCO ₂ e) after deducting the emission reductions in Breakdown days -	66,811.00

E.2. Calculation of project value or estimation of project situation of each SDG Impact

SDG 7: Affordable and Clean Energy

For the current monitoring period, the clean energy generation contributed by the project activity is 72,989.60 MWh.

Calculation for deduction of Actual Net Electricity after breakdown days deduction -

Actual Net Electricity Generated (MWh)	72,989.60
Total Number of Days in this monitoring Period	123
Total Equivalent Days of breakdown	2
Per Day Net Electricity Generated (MWh)	593.41
Actual Net Electricity Generated (MWh) after deducting the generation in Breakdown days -	71,802.78

SDG 8: Decent Work and Economic Growth

The project leads to employment opportunities which would not have been possible in the baseline scenario. During the current monitoring period, the project activity provided employment to 0 people.

Also, project activity improves the quality of employment by giving training to employees. During the current monitoring period, 33 training has been conducted.

SDG 13: Climate Action

As per clause 5.4.1.33 of the methodology ACM0002; version 20.0, 'For all renewable energy power generation project activities, emissions due to the use of fossil fuels for the backup generator can be neglected'. Hence, the SDG 13 value of the project estimate is zero as it is a renewable energy project.

E.3. Calculation of leakage

Not Applicable.

E.4. Calculation of net benefits or direct calculation for each SDG Impact

SD G	SDG Impact	Baseline estimate	Project estimate	Net benefit
13	Climate Action	66,811 tCO ₂ e (GSVER)	-	66,811 tCO ₂ e (GSVER)
7	Affordable and Clean Energy	-	71,802.78 MWh	71,802.78 MWh
8	Decent Work and Economic Growth	-	The total number of employment opportunities created till date is 42. However, the total number of employment opportunities created during the entire monitoring period: 0 No. of trainings conducted: 33	The total number of employment opportunities created till date is 42. However, the total number of employment opportunities created during the entire monitoring period: 0 No. of trainings conducted: 33

E.5. Comparison of actual SDG Impacts with estimates in approved PDD

SDG	Values estimated in ex antecalculation of approved PDD for this monitoring period	Actual values ¹⁵ achieved during this monitoring period
13	63,435 tCO ₂ e	66,811 tCO ₂ e
7	68,174.35 MWh	71,802.78 MWh
8	1 training and employment to 4 people	The total number of employment opportunities created till date is 42. However, the total number of employment opportunities created during the entire monitoring period: 0

¹⁵ Whenever emission reductions are capped, both the original and capped values used for calculations must be transparently reported. Use brackets to denote original values.

		No. of trainings conducted: 33
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E.5.1. Explanation of calculation of value estimated ex ante calculation of approved PDD for this monitoring period

SDG 7: Affordable and Clean Energy

The annual estimated power generation for the project activity is 202,306 MWh, thus considering number of days covered during present monitoring period to be 123, the estimated power generation will be 68,174.35 MWh.

SDG 8: Decent Work and Economic Growth

The project leads to employment opportunities which would not have been possible in the baseline scenario. The project will provide employment to at least 10 persons per year. Taking the number of days in monitoring period 123, the estimated number of employments is 4 persons.

Also, project activity improves the quality of employment by giving training to employee. Thus, minimum 1 training per year will be conducted by the project activity. Taking the number of days in monitoring period 123, the estimated number of training is 1.

SDG 13: Climate Action

The annual estimated emission reduction for the project activity is 188,245 tCO₂e, thus considering number of days covered during the present monitoring period to be 123 days, the estimated emission reduction contributing towards SDG 13 will be 63,435 tCO₂e.

E.6. Remarks on increase in achieved SDG Impacts from estimated value in approved PDD

SDG 7 and SDG 13:

The total of 5.32% increase in electricity generation and 5.32% higher emission reduction is due to higher-than-expected wind speeds on certain days. Wind power generation depends on wind conditions, which can vary naturally, and power producers cannot control this variability.

Since the 4 months in the current monitoring period lie in the high wind season, the actual generation is 5.32% higher. In the previous periodic verification from 01/01/2024 to 30/04/2024 the actual generation was 37.5% lower than the estimated value as the same lied in the low wind season. Also, the actual PLF achieved during this monitoring period was 14.32% which is very less than the PLF assumptions made at the time of registration of the project activity that is 22.91%¹⁶.

¹⁶ Mentioned in table B.5.1 at page 20 of the registered CPA -DD (CPA 9416-P1-0012-CP1) of the project activity, <https://cdm.unfccc.int/UserManagement/FileStorage/Y8U571S3NIP02GRLFZWBXQKC4AV6DE>

Although the actual emission reductions are 5.32% higher than the estimated emission reductions, Actual PLF achieved during the current monitoring period is 24.53%. Considering this value, the IRR of the project activity becomes 14.13% which is still below the benchmark value of 17.21% as per the registered GS-PDD.

SDG 8:

Number of training is higher than what was envisaged during PDD registered.

SECTION F. SAFEGUARDS REPORTING

Environmental Safeguard

Data / Parameter	Noise and Shadow Flickering
Unit	-
Description	The noise and shadow produced due to operation of wind power plant respect to nearest residential spot
Source of data	Grievance Register
Value(s) applied	0
Measurement methods and procedures	Manual
Monitoring frequency	Once in First Monitoring Period
QA/QC procedures	-
Purpose of data	Analysis of safeguarding principle
Additional comment	-

Data / Parameter	Waste Oil Disposal
Unit	m ³
Description	Waste oil due to operation and Construction work of plant
Source of data	Plant Log Book
Value(s) applied	0 ¹⁷
Measurement methods and procedures	Manual
Monitoring frequency	Once in a Monitoring Period
QA/QC procedures	-
Purpose of data	Analysis of safeguarding principle
Additional comment	-

SECTION G. STAKEHOLDER INPUTS AND LEGAL DISPUTES

G.1. List all Inputs and Grievances which have been received via the Continuous Input and Grievance Mechanism together with their respective

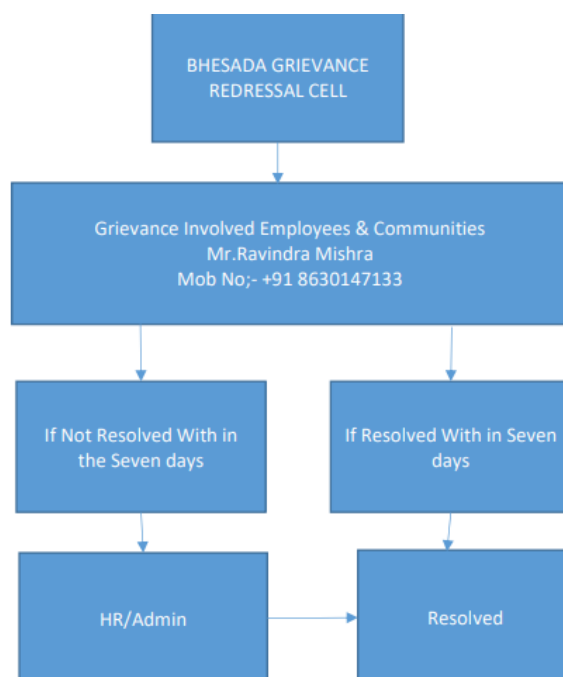
¹⁷ There is no waste oil disposal in this project activity in current monitoring period as the transformer oil is refined and reused.

responses/mitigations.

As a part of continuous feedback from stakeholders, the grievances register is placed at site and is being continuously monitored and if any comments are received, they are addressed through the grievance cell. So, the below mentioned methods are being followed at site for ongoing stakeholder consultation -

1. Grievance register is placed at the site office and is accessible to everyone.
2. A QR-Code is displayed at the project site for access to the Online Grievance Portal¹⁸ is accessible to all the Stakeholders at the Project Site.
3. A dedicated committee is formulated to handle the grievances at top priority. Grievances of the stakeholders can also be recorder in the form of Telephonic Conversation if received on numbers +91 8630147133 and +91 8005543138 are properly addressed.

The figure below illustrates the grievance redressal committee implemented at the project site



G.2. Report on any stakeholder mitigations that were agreed to be monitored.

Not Applicable.

G.3. Provide details of any legal contest that has arisen with the project during the monitoring period

Not Applicable.

¹⁸ The OR Code is clearly displayed on a Notice Board at the site office which is accessible to all the stakeholders, Also username and password is clearly mentioned (Username – safety.concerns@renew.com, Password – 123456) , The Site Specific weblink is thus accessible to all as provided - [ReNew Power Limited Sign-On » Benchmark Gensuite Home](#).

Appendix 1
I
Calibration
Details

Meter No.	Meter Type	Make	Accuracy Class	Date of Calibration	Validity of Calibration	Delay in Calibration
RJB90214	Main Meter	Secure	0.2	04/04/2024	03/04/2025	No delay
RJB90215	Check meter	Secure	0.2	04/04/2024	03/04/2025	No delay

Appendix 2

Breakdown Details

Date	Capacity (MW)	Loc No	B/d Description	Total BD Hrs.	WTG Wise Total Hours	Deduction on No of Hours based on Weight of 1 WTG
11/08/2024	2.1	BSD 002	EXTL_WTG Forced Backdown	7	13	0.28
14/07/2024	2.1	BSD 002	DFIG Inverter Fault Shutdown	6		
17/06/2024	2.1	BSD 003	Pitch EmergencyRun	10.1	51.7	1.08
18/06/2024	2.1	BSD 003	Pitch EmergencyRun	10.1		
19/06/2024	2.1	BSD 003	Pitch EmergencyRun	17.3		
20/06/2024	2.1	BSD 003	Pitch EmergencyRun	14.2		
11/08/2024	2.1	BSD 004	EXTL_WTG Forced Backdown	6	21	0.43
16/05/2024	2.1	BSD 004	DFIG Inverter Fault Shutdown	14.2		
04/08/2024	2.1	BSD 005	EXTL_WTG Forced Backdown	6	22	0.45
11/08/2024	2.1	BSD 005	EXTL_WTG Forced Backdown	6		
09/06/2024	2.1	BSD 005	Elec_NacelleNotAligned_To_WindDirection	9.8		
13/08/2024	2.1	BSD 006	Elec_NacelleNotAligned_To_WindDirection	5	30	0.63
11/07/2024	2.1	BSD 006	Elec FB GeneratorFan	7		
11/07/2024	2.1	BSD 006	Temp PitchMotor1 HighStop	6		
12/07/2024	2.1	BSD 006	Pitch EmergencyRun	12		
04/08/2024	2.1	BSD 058	EXTL_WTG Forced Backdown	6	31	0.65
08/08/2024	2.1	BSD 058	Elec_NacelleNotAligned_To_WindDirection	6		
19/08/2024	2.1	BSD 058	Pitch EmergencyRun	11		
13/05/2024	2.1	BSD 058	Elec_NacelleNotAligned_To_WindDirection	8.4		
05/08/2024	2.1	BSD 059	BatteryVoltage Blade1 LowStop	6	6	0.12

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04/08/2024	2.1	BSD 060	EXTL_WTG Forced Backdown	6	52	1.07
13/07/2024	2.1	BSD 060	DFIG Inverter Fault Shutdown	8		
27/06/2024	2.1	BSD 060	Battery Charger3 Disconnected	11.5		
27/06/2024	2.1	BSD 060	Temp Brake Blade3 LowStop	7.8		
28/06/2024	2.1	BSD 060	Rep Pitch FreqConvPitch1 ErrStop	6.4		
08/05/2024	2.1	BSD 060	Pitch EmergencyRun	11.9	16	0.34
11/08/2024	2.1	BSD 061	EXTL_WTG Forced Backdown	8		
09/06/2024	2.1	BSD 061	BatteryVoltage Blade3 LowStop	8		
01/07/2024	2.1	BSD 063	Pitch EmergencyRun	9	29	0.61
01/07/2024	2.1	BSD 063	Rep Pitch EmergencyRun	6		
02/06/2024	2.1	BSD 063	Pitch FreqConvPitch1 ErrStop	6.6		
29/05/2024	2.1	BSD 063	Pitch EmergencyRun	7.9		
17/08/2024	2.1	BSD 118	Pitch Blade2 95degLimit Error	6	52	1.07
02/06/2024	2.1	BSD 118	Mech Rpm Encoder Proximity DiffStop	24		
03/06/2024	2.1	BSD 118	Mech Rpm Encoder Proximity DiffStop	13.1		
29/05/2024	2.1	BSD 118	Mech Rpm Encoder Proximity DiffStop	8.7		
04/08/2024	2.1	BSD 121	EXTL_WTG Forced Backdown	6	29	0.60
06/07/2024	2.1	BSD 121	Rep Pitch FreqConvPitch2 ErrStop	7		
07/07/2024	2.1	BSD 121	Rep Pitch FreqConvPitch2 ErrStop	10		
20/07/2024	2.1	BSD 121	Hyd GearOilLevel LowStop	6		
04/08/2024	2.1	BSD 124	EXTL_WTG Forced Backdown	6	11	0.24
17/08/2024	2.1	BSD 124	VCB Tripped	6		
29/05/2024	2.1	BSD 125	Pitch EmergencyRun	8.7	8.7	0.18
04/08/2024	2.1	BSD 126	EXTL_WTG Forced Backdown	6	40	0.84
22/08/2024	2.1	BSD 126	Customer Request	6		

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23/08/2024	2.1	BSD 126	Elec_NacelleNotAlig ned_To_WindDirecti on	7	70	1.46
18/05/2024	2.1	BSD 126	DFIG Inverter Fault Shutdown	7.2		
19/05/2024	2.1	BSD 126	DFIG Grid fault	14.1		
12/07/2024	2.1	VJI0 19	Pitch EmergencyRun	19		
09/06/2024	2.1	VJI0 19	EXTL_Grid Down from EB @ 400/440kv Line	12.7		
10/06/2024	2.1	VJI0 19	EXTL_Grid Down from EB @ 400/440kv Line	18.9		
25/06/2024	2.1	VJI0 19	INTL_Line Breakdown due to E/F	7.5		
26/06/2024	2.1	VJI0 19	INTL_Line Breakdown due to E/F	11.7	65	1.35
11/08/2024	2.1	VJI0 22	EXTL_WTG Forced Backdown	8		
11/07/2024	2.1	VJI0 22	BatteryVoltage Blade1 LowStop	6		
09/06/2024	2.1	VJI0 22	EXTL_Grid Down from EB @ 400/440kv Line	12.7		
10/06/2024	2.1	VJI0 22	EXTL_Grid Down from EB @ 400/440kv Line	18.9		
25/06/2024	2.1	VJI0 22	INTL_Line Breakdown due to E/F	7.5		
26/06/2024	2.1	VJI0 22	INTL_Line Breakdown due to E/F	11.7		
09/06/2024	2.1	VJI0 28	EXTL_Grid Down from EB @ 400/440kv Line	12.7	50.8	1.06
10/06/2024	2.1	VJI0 28	EXTL_Grid Down from EB @ 400/440kv Line	18.9		
25/06/2024	2.1	VJI0 28	INTL_Line Breakdown due to E/F	7.5		
26/06/2024	2.1	VJI0 28	INTL_Line Breakdown due to E/F	11.7		

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09/06/2024	2.1	VJI0 29	EXTL_Grid Down from EB @ 400/440kv Line	12.7	66.5	1.39
10/06/2024	2.1	VJI0 29	EXTL_Grid Down from EB @ 400/440kv Line	18.9		
25/06/2024	2.1	VJI0 29	INTL_Line Breakdown due to E/F	7.5		
26/06/2024	2.1	VJI0 29	INTL_Line Breakdown due to E/F	11.7		
16/05/2024	2.1	VJI0 29	Elec FB GearOil PumpHighLow	6.7		
16/05/2024	2.1	VJI0 29	Elec FB GearOil PumpHighLow	9		
09/06/2024	2.1	VJI0 30	EXTL_Grid Down from EB @ 400/440kv Line	12.7	51	1.06
10/06/2024	2.1	VJI0 30	EXTL_Grid Down from EB @ 400/440kv Line	18.9		
25/06/2024	2.1	VJI0 30	INTL_Line Breakdown due to E/F	7.5		
26/06/2024	2.1	VJI0 30	INTL_Line Breakdown due to E/F	11.7		
11/08/2024	2.1	VJI0 36	EXTL_WTG Forced Backdown	8		
09/06/2024	2.1	VJI0 36	EXTL_Grid Down from EB @ 400/440kv Line	12.7	59	1.23
10/06/2024	2.1	VJI0 36	EXTL_Grid Down from EB @ 400/440kv Line	18.9		
25/06/2024	2.1	VJI0 36	INTL_Line Breakdown due to E/F	7.5		
26/06/2024	2.1	VJI0 36	INTL_Line Breakdown due to E/F	11.7		
09/06/2024	2.1	VJI0 37	EXTL_Grid Down from EB @ 400/440kv Line	12.7		
10/06/2024	2.1	VJI0 37	EXTL_Grid Down from EB @ 400/440kv Line	18.9	60.6	1.26

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13/06/2024	2.1	VJI0 37	Pitch ResolverEncoderDiff 1Stop	9.8		
25/06/2024	2.1	VJI0 37	INTL_Line Breakdown due to E/F	7.5		
26/06/2024	2.1	VJI0 37	INTL_Line Breakdown due to E/F	11.7		
09/06/2024	2.1	VJI0 45	EXTL_Grid Down from EB @ 400/440kv Line	12.7	50.8	1.06
10/06/2024	2.1	VJI0 45	EXTL_Grid Down from EB @ 400/440kv Line	18.9		
25/06/2024	2.1	VJI0 45	INTL_Line Breakdown due to E/F	7.5		
26/06/2024	2.1	VJI0 45	INTL_Line Breakdown due to E/F	11.7		
09/06/2024	2.1	VJI0 52	EXTL_Grid Down from EB @ 400/440kv Line	12.7	50.8	1.06
10/06/2024	2.1	VJI0 52	EXTL_Grid Down from EB @ 400/440kv Line	18.9		
25/06/2024	2.1	VJI0 52	INTL_Line Breakdown due to E/F	7.5		
26/06/2024	2.1	VJI0 52	INTL_Line Breakdown due to E/F	11.7		
11/07/2024	2.1	VJI0 61	BatteryVoltage Blade3 LowStop	7	109	2.26
13/07/2024	2.1	VJI0 61	DFIG Inverter Fault Shutdown	16		
14/07/2024	2.1	VJI0 61	DFIG Inverter Fault Shutdown	8		
09/06/2024	2.1	VJI0 61	EXTL_Grid Down from EB @ 400/440kv Line	12.7		
10/06/2024	2.1	VJI0 61	EXTL_Grid Down from EB @ 400/440kv Line	18.9		
25/06/2024	2.1	VJI0 61	INTL_Line Breakdown due to E/F	7.5		

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26/06/2024	2.1	VJI0 61	INTL_Line Breakdown due to E/F	11.7		
15/05/2024	2.1	VJI0 61	EXTL_WTG Shut Down By OMS	8.2		
16/05/2024	2.1	VJI0 61	EXTL_WTG Shut Down By OMS	10.7		
17/05/2024	2.1	VJI0 61	EXTL_WTG Shut Down By OMS	8.2		
09/06/2024	2.1	VJI0 62	EXTL_Grid Down from EB @ 400/440kv Line	12.7	78.3	1.63
10/06/2024	2.1	VJI0 62	EXTL_Grid Down from EB @ 400/440kv Line	18.9		
25/06/2024	2.1	VJI0 62	INTL_Line Breakdown due to E/F	7.5		
26/06/2024	2.1	VJI0 62	INTL_Line Breakdown due to E/F	11.7		
15/05/2024	2.1	VJI0 62	EXTL_WTG Shut Down By OMS	8.2		
16/05/2024	2.1	VJI0 62	EXTL_WTG Shut Down By OMS	10.7		
17/05/2024	2.1	VJI0 62	EXTL_WTG Shut Down By OMS	8.6		
06/07/2024	2.1	VJI0 63	Elec FB GearOil PumpHighLow	12	102	2.12
09/06/2024	2.1	VJI0 63	EXTL_Grid Down from EB @ 400/440kv Line	12.7		
10/06/2024	2.1	VJI0 63	EXTL_Grid Down from EB @ 400/440kv Line	18.9		
25/06/2024	2.1	VJI0 63	INTL_Line Breakdown due to E/F	7.5		
26/06/2024	2.1	VJI0 63	INTL_Line Breakdown due to E/F	11.7		
15/05/2024	2.1	VJI0 63	EXTL_WTG Shut Down By OMS	8.2		
16/05/2024	2.1	VJI0 63	EXTL_WTG Shut Down By OMS	10.7		
17/05/2024	2.1	VJI0 63	EXTL_WTG Shut Down By OMS	8.1		
25/05/2024	2.1	VJI0 63	Elec FB GearOil PumpHighLow	12.4		
11/08/2024	2.1	VJI0 67	EXTL_WTG Forced Backdown	8	46	0.96

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09/06/2024	2.1	VJI0 67	EXTL_Grid Down from EB @ 400/440kv Line	12.7		
10/06/2024	2.1	VJI0 67	EXTL_Grid Down from EB @ 400/440kv Line	19		
14/05/2024	2.1	VJI0 67	Preventive Check	6.3		
04/08/2024	2.1	VJI0 68	EXTL_WTG Forced Backdown	7	38	0.80
09/06/2024	2.1	VJI0 68	EXTL_Grid Down from EB @ 400/440kv Line	12.7		
10/06/2024	2.1	VJI0 68	EXTL_Grid Down from EB @ 400/440kv Line	19		
09/06/2024	2.1	VJI0 73	EXTL_Grid Down from EB @ 400/440kv Line	12.7	47.2	0.98
10/06/2024	2.1	VJI0 73	EXTL_Grid Down from EB @ 400/440kv Line	19		
22/05/2024	2.1	VJI0 73	UPS Bypass Mode Active	7		
23/05/2024	2.1	VJI0 73	DFIG Inverter Fault Shutdown	8.5		
09/06/2024	2.1	VJI0 74	EXTL_Grid Down from EB @ 400/440kv Line	12.7	58.5	1.22
10/06/2024	2.1	VJI0 74	EXTL_Grid Down from EB @ 400/440kv Line	19		
17/06/2024	2.1	VJI0 74	Pitch EmergencyRun	6.3		
01/05/2024	2.1	VJI0 74	Elec TestAkkuPitch TimeOutStop	7.9		
26/05/2024	2.1	VJI0 74	DFIG Inverter Fault Shutdown	6		
27/05/2024	2.1	VJI0 74	Pitch EmergencyRun	6.6		
04/08/2024	2.1	VJI0 75	EXTL_WTG Forced Backdown	6	75	1.56
08/08/2024	2.1	VJI0 75	Elec FB Generator Heating	16		
09/06/2024	2.1	VJI0 75	EXTL_Grid Down from EB @ 400/440kv Line	12.7		

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10/06/2024	2.1	VJI0 75	EXTL_Grid Down from EB @ 400/440kv Line	19	45	0.94
09/05/2024	2.1	VJI0 75	Pitch EmergencyRun	7		
16/05/2024	2.1	VJI0 75	DFIG Inverter Fault Shutdown	14.6		
04/08/2024	2.1	VJI0 77	EXTL_WTG Forced Backdown	6		
13/07/2024	2.1	VJI0 77	BatteryVoltage Blade2 LowStop	8	38	0.78
09/06/2024	2.1	VJI0 77	EXTL_Grid Down from EB @ 400/440kv Line	12.7		
10/06/2024	2.1	VJI0 77	EXTL_Grid Down from EB @ 400/440kv Line	19		
11/08/2024	2.1	VJI0 78	EXTL_WTG Forced Backdown	6		
09/06/2024	2.1	VJI0 78	EXTL_Grid Down from EB @ 400/440kv Line	12.7	38	0.78
10/06/2024	2.1	VJI0 78	EXTL_Grid Down from EB @ 400/440kv Line	19		
04/08/2024	2.1	VJI1 04	EXTL_WTG Forced Backdown	6		
09/06/2024	2.1	VJI1 04	EXTL_Grid Down from EB @ 400/440kv Line	12.7		
10/06/2024	2.1	VJI1 04	EXTL_Grid Down from EB @ 400/440kv Line	19	31.7	0.66
09/06/2024	2.1	VJI1 05	EXTL_Grid Down from EB @ 400/440kv Line	12.7		
10/06/2024	2.1	VJI1 05	EXTL_Grid Down from EB @ 400/440kv Line	19		
16/07/2024	2.1	VJI1 06	Preventive Check	7		
20/07/2024	2.1	VJI1 06	Pitch EmergencyRun	12	82	1.70
22/07/2024	2.1	VJI1 06	Pitch EmergencyRun	9		
26/07/2024	2.1	VJI1 06	Pitch EmergencyRun	22		

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09/06/2024	2.1	VJI1 06	EXTL_Grid Down from EB @ 400/440kv Line	12.7		
10/06/2024	2.1	VJI1 06	EXTL_Grid Down from EB @ 400/440kv Line	19		
11/08/2024	2.1	VJI1 07	EXTL_WTG Forced Backdown	7	7	0.15
11/08/2024	2.1	VJI1 11	EXTL_WTG Forced Backdown	7	22	0.46
19/07/2024	2.1	VJI1 11	Preventive Check	15		
11/08/2024	2.1	VJI1 14	EXTL_WTG Forced Backdown	7	31	0.65
12/05/2024	2.1	VJI1 14	DFIG Inverter Fault Shutdown	11.1		
13/05/2024	2.1	VJI1 14	Temp PowerPanel HighStop	6.1		
29/05/2024	2.1	VJI1 14	Elec_NacelleNotAlig ned_To_WindDirect ion	6.6		
09/06/2024	2.1	VJI4 70	EXTL_Grid Down from EB @ 400/440kv Line	12.7	31.7	0.66
10/06/2024	2.1	VJI4 70	EXTL_Grid Down from EB @ 400/440kv Line	19		
11/08/2024	2.1	VJI4 71	EXTL_WTG Forced Backdown	7	7	0.15
11/08/2024	2.1	VJI4 72	EXTL_WTG Forced Backdown	8	14	0.29
27/08/2024	2.1	VJI4 72	DFIG Inverter RingLine 2 Shutdown	6		
11/08/2024	2.1	VJI4 73	EXTL_WTG Forced Backdown	8	59	1.23
14/07/2024	2.1	VJI4 73	DFIG Inverter Fault Shutdown	6		
08/06/2024	2.1	VJI4 73	DFIG Inverter Fault Shutdown	13.7		
09/06/2024	2.1	VJI4 73	EXTL_Grid Down from EB @ 400/440kv Line	12.7		
10/06/2024	2.1	VJI4 73	EXTL_Grid Down from EB @ 400/440kv Line	19		

Revision History

Version	Date	Remarks
1.1	14 October 2020	Hyperlinked section summary to enable quick access to key sections Improved clarity on Key Project Information Section for POA monitoring Forward action request section Improved Clarity on SDG contribution/SDG Impact term used throughout Clarity on safeguard reporting Clarity on design changes Leakage section added for VER/CER projects Addition of Comparison of monitored parameters with last monitoring period Provision of an accompanying Guide to help the user understand detailed rules and requirements
1.0	10 July 2017	Initial adoption