



Verified Carbon Standard

“WIND PROJECT IN MAHARASHTRA, INDIA BY KAYATHAR AND JATH”

Document Prepared by

NSL Wind Power Company (Kayathar) Pvt. Ltd

Project title	Wind Project in Maharashtra, India by Kayathar and Jath.
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Prepared by	NSL Wind Power Company (Kayathar) Pvt. Ltd. Mr. A. Rajnikant Head – Wind Projects & Operations Road No. 12, Banjara Hills #8-2-684/2/A, NSL ICON, Hyderabad, Telangana – 500 034. India. Tel: 040 3051 4444 Fax: 040 2332 7919 E-mail: rajnikant.a@nslpower.com Website: www.nslpower.com

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PROJECT DETAILS

1.1 Summary Description of the Implementation Status of the Project

The project activity involves installation of 67.5 MW capacity wind power generation project out of which 37.5 MW by NSL Wind Power Company (Kayathar) Pvt. Ltd. (Project Proponent) and 30 MW capacity wind power generation project by Jath Wind Energy Private Limited. The project activity is generating clean electricity, which is exported to the Maharashtra State Electricity Distribution Company Limited (MSEDCL), which falls under the Northern, Eastern, Western and North-Eastern regional grids (NEWNE1) grid of India.

This activity involves total installation and operations of following WTGs.

Project Proponent ²	Number of WTG	Supplier of WTG	Rated Capacity	Total Installed Capacity	Location
NSL Wind Power Company (Kayathar) Pvt. Ltd.	25	ReGen Power Vensys V87	1.5 MW	37.5 MW	Taluka: Jath, District: Sangli, State: Maharashtra in India
Jath Wind Energy Private Limited	15	Inox Wind Ltd. WT- 2000 DF	2.0 MW	30.0 MW	Taluka: Jath, District: Sangli, State: Maharashtra in India
Total Project Capacity				67.5 MW	

The commissioning dates of the WTGs are listed in the [Appendix 2](#)

The electricity generated by the project activity was be displacing the grid electricity which would have been otherwise generated through sources dominated by fossil fuel- based power plants at NEWNE system. The project activity reduces the emission of GHG gases which would have been generated in the absence of the project activity and also help to reduce the supply demand gap in the state with contribution in the sustainable development. The project activity has been in operation since its date of commissioning. The first WTG was commissioned on 30-

¹Before April 2016, the Indian electricity system was divided into two grids, the NEWNE and Southern Grid. These are now integrated as a single "Indian Grid" covering all the states.

²The project activity is a bundled project of total capacity 67.5 MW developed by two project participants i.e., Jath Wind Energy Private Limited & NSL Wind Power Company (Kayathar) Pvt. Ltd. and the bundle has been represented by only one project proponent, i.e., NSL Wind Power Company (Kayathar) Pvt. Ltd.

March-2014. The date of commissioning of the WTGs are provided in the [Appendix Q2](#) of this report.

The project activity (i.e., total capacity of 67.5 MW) is exporting **121,427.61** MWh electricity to the grid. The project activity is contributing in GHG emission reduction of about **118,598** tCO_{2e} in this monitoring period (01-January-2023 to 29-March-2024: Inclusive of both the days).

1.2 Audit History

Audit type	Period	Program	Validation/verification body name	Number of years
Joint Validation/ Verification	30-March-2014 to 31-January-2016 (Inclusive of both the days)	VCS	LGAI Technological Center, S.A. (Applus)	01 year, 10 months, 02 days including the end date
Verification	01-February-2016 to 30-September-2017 (Inclusive of both the days)	VCS	Earthood Services Private Limited	01 year, 08 months, 00 days including the end date
Verification	01-October-2017 to 31-August-2018 (Inclusive of both the days)	VCS	Earthood Services Private Limited	00 year, 11 months, 00 days including the end date
Verification	01-September-2018 to 31-October-2019 (Inclusive of both the days)	VCS	Earthood Services Private Limited	01 year, 02 months, 00 days including the end date
Verification	01-November-2019 to 31-October-2020 (Inclusive of both the days)	VCS	LGAI Technological Center, S.A. (Applus)	01 year, 00 months, 00 days including the end date
Verification	01-November-2020 to 31-August-2021 (Inclusive of both the days)	VCS	LGAI Technological Center, S.A. (Applus)	00 year, 10 months, 00 days including the end date
Verification	01-September-2021 to 30-April-2022	<u>VCS</u>	VKU Certification Private Limited	00-year 8months 00 days including the end date
Verification	01-May-2022 to 31-December-2022	<u>VCS</u>	VKU Certification Private Limited	00-year 8 months 00 days including the end date

Verification	01-January-2023 to 29-March-2024	<u>VCS</u>	VKU Certification Private Limited	01-year 2 months 29 days including the end date
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1.3 Sectoral Scope and Project Type

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

Sectoral scope	NA
AFOLU project category	NA
Project activity type	NA

1.4 Project Proponent

Organization name	NSL Wind Power Company (Kayathar) Pvt. Ltd.
Contact person	A. Rajnikant.
Title	Head – Wind Projects & Operations
Address	Road No. 12, Banjara Hills, #8-2-684/2/A, NSL ICON Hyderabad, Telangana.
Telephone	+91-040-3051 4444
Email	rainikant.a@nslpower.com

1.5 Other Entities Involved in the Project

Organization name	NA
Role in the project	NA
Contact person	NA
Title	NA
Address	NA
Telephone	NA
Email	NA

1.6 Project Start Date

Project start date	30-March-2014
Justification	The start date of the project activity has been considered as 30-March-2014, which is the day on commissioning of the

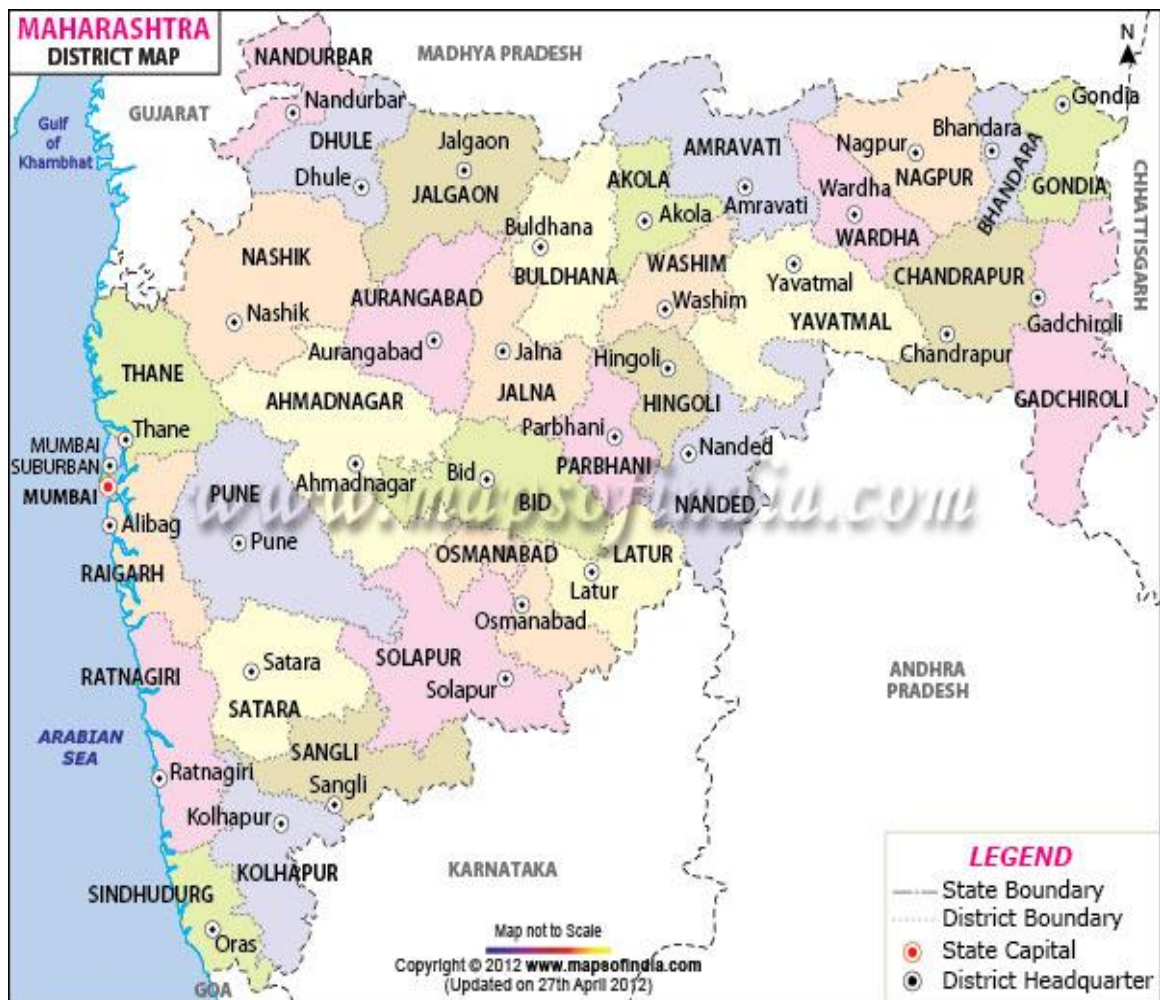
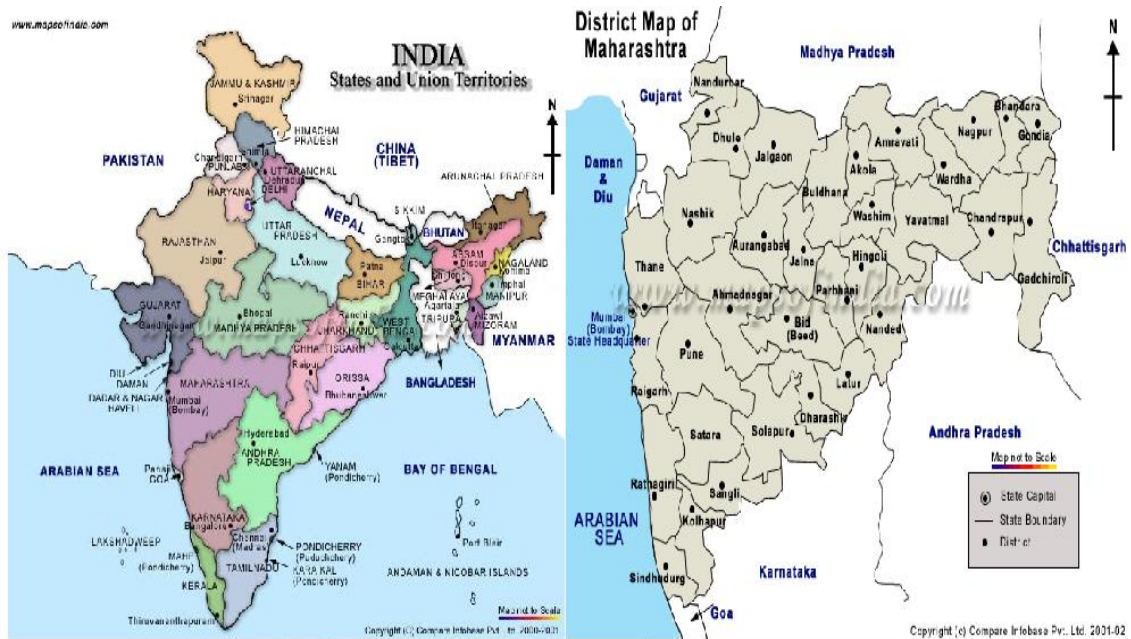
	<p>first machine [1st set of nine machines (WTG IDs: NSL P1-332, NSL P1-408, MVT-10, MVT-11, MVT-45, MVT-61, MVT-62, MVT-63 and MVT-05)] under the project.</p> <p>AS per VCS Standard version 4.6, Clause 3.8 The Project start date is the date on which the project began reducing or removing GHG emissions i.e., the commissioning date of the project.</p>
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1.7 Project Crediting Period

Crediting period	<p><input type="checkbox"/> Seven years, twice renewable</p> <p><input checked="" type="checkbox"/> Ten years, fixed</p> <p><input type="checkbox"/> Other</p>
Start and end date of first or fixed crediting period	<p>Type of crediting period: Renewal</p> <p>Start date of the crediting period: 30-March-2014</p> <p>End date of the crediting period : 29-March-2024</p> <p>As per latest VCS standard version 4.6 where Appendix 3 states that “Registered VCS projects and projects that request registration with the VCS Program on or before 31-December-2019 remain eligible under the VCS Program for the entirety of their crediting periods” The Project completed validation before 31-December-2019 i.e. on <u>29-August-2018</u> and chose to use the crediting period requirements under VCS version 3.</p>

1.8 Project Location

Project activity is located in the Jath Taluka, Sangli district of Maharashtra State, India. The location maps are included below.



The details of geo-coordinates are as follows:

Location of 15 WTGs from INOX (By: “Jath Wind Energy Private Limited”):

S. No.	WTG No.	UTM (Universal Transverse Mercator) format		DD-MM-SS (Degree/minutes/Seconds) format		Location
		Easting (m)	Northing (m)	Latitude N	Longitude E	
1	MV T-5	533120	1889212	17° 5' 13.4"	75° 18' 40.67"	Village : Valsang Teshil : Jath District : Sangli
2	MV T-11	531602	1889817	17° 5' 33.16"	75° 17' 49.33"	Village : Karajangi Teshil : Jath District : Sangli
3	MV T-10	531476	1889319	17° 5' 16.96"	75° 17' 45.03"	Village : Karajangi Teshil : Jath District : Sangli
4	MV T-61	535796	1883332	17° 2' 1.9"	75° 20' 10.86"	Village : Shedyal Teshil : Jath District : Sangli
5	MV2 T-42	530238	1879946	17° 0' 12.01"	75° 17' 2.68"	Village : Ravalgundawadi Teshil : Jath District : Sangli
6	MV T-45	533218	1889748	17° 5' 30.83"	75° 18' 44"	Village : Karajangi Teshil : Jath District : Sangli
7	MV2 T - 17	531346	1879175	16° 59' 46.87"	75° 17' 40.12"	Village : Ravalgundawadi Teshil : Jath District : Sangli
8	MV2 T-2	532993	1880588	17° 0' 32.77"	75° 18' 35.9"	Village : Muchandi Teshil : Jath District : Sangli
9	MV2 T-15	530784	1879320	16° 59' 51.61"	75° 17' 21.12"	Village : Ravalgundawadi Teshil : Jath District : Sangli
10	MV2 T-41	530175	1879560	16° 59' 59.45"	75° 17' 0.54"	Village : Ravalgundawadi Teshil : Jath District : Sangli
11	MV2 T-28	532352	1875997	16° 58' 3.4"	75° 18' 13.98"	Village : Ravalgundawadi Teshil : Jath District : Sangli

12	MV2 T-3	533289	1880081	17° 0' 16.25"	75°18' 45.88"	Village : Muchandi Teshil : Jath District : Sangli
13	MV T-62	534857	1882341	17° 1' 29.71"	75°19' 39.04"	Village : Muchandi Teshil : Jath District : Sangli
14	MV T-63	534898	1882806	17° 1' 44.84"	75°19' 40.45"	Village : Muchandi Teshil : Jath District : Sangli
15	MV2 T-37	531281	1880464	17° 0' 28.81"	75° 17' 37.99"	Village : Muchandi Teshil : Jath District : Sangli

Location of 25 WTGs from ReGen Power (By NSL Wind Power Company (Kayathar) Pvt. Ltd.):

S. No.	WTG No.	UTM (Universal Transverse Mercator) format		DD-MM-SS (Degree/minutes/Seconds) format		Location
		Easting (m)	Northing (m)	Latitude N	Longitude E	
1	NSL P1-332	524859	1894452	17° 8' 4.29"	75°14' 1.35"	Village : Wayphal Teshil : Jath District : Sangli
2	NSL P1-408	525895	1895627	17° 8' 42"	75°14' 36.46"	Village : Wayphal Teshil : Jath District : Sangli
3	NSL P1-186	526238	1894037	17° 7' 50.73"	75°14' 48.01"	Village : Banali Teshil : Jath District : Sangli
4	NSL P1-331	524784	1894116	17° 7' 53.36"	75°13' 58.8"	Village : Banali Teshil : Jath District : Sangli
5	NSL P1-179A	525198	1895440	17° 8' 36.43"	75°14' 12.87"	Village : Banali Teshil : Jath District : Sangli
6	NSL P1-179	525260	1895102	17° 8' 25.43"	75°14' 14.95"	Village : Banali Teshil : Jath District : Sangli
7	NSL P1-310	525023	1894815	17° 8' 16.1"	75°14' 6.92"	Village : Banali Teshil : Jath District : Sangli

8	NSL P1-1001	527255	1898405	17° 10' 12.83"	75°15' 22.62"	Village : Wayphal Teshil : Jath District : Sangli
9	NSL P1-1000	527255	1898405	17° 10' 25.2"	75°15' 26.4"	Village : Wayphal Teshil : Jath District : Sangli
10	NSL P1-1028	527971	1897996	17° 9' 59.49"	75°15' 46.84"	Village : Wayphal Teshil : Jath District : Sangli
11	NSL P1-95	528098	1897567	17° 9' 45.52"	75°15' 51.12"	Village : Wayphal Teshil : Jath District : Sangli
12	NSL P1-930	527308	1899768	17° 10' 57.18"	75°15' 24.47"	Village : Wayphal Teshil : Jath District : Sangli
13	NSL P1-229	527201	1894912	17° 8' 19.16"	75°15' 20.64"	Village : Wayphal Teshil : Jath District : Sangli
14	NSL P1-929	527156	1899108	17° 10' 35.71"	75°15' 19.303"	Village : Wayphal Teshil : Jath District : Sangli
15	NSL P1-276	527115	1895607	17° 8' 41.79"	75°15' 17.76"	Village : WayphalTeshil : Jath District : Sangli
16	NSL P1-1034	527184	1897750	17° 9' 51.51"	75°15' 20.19"	Village : Wayphal Teshil : Jath District : Sangli
17	NSL P1-1078/1	526377	1896547	17° 9' 12.41"	75°14' 52.82"	Village : Wayphal Teshil : Jath District : Sangli
18	NSL P1-169A	524926	1896003	17° 8' 54.76"	75°14' 3.68"	Village : Banali Teshil : Jath District : Sangli
19	NSL P1-169B	524882	1896306	17° 9' 4.62"	75°14' 2.21"	Village : Banali Teshil : Jath District : Sangli
20	NSL P1-252A	525005	1893004	17° 7' 17.16"	75°14' 6.23"	Village : Banali Teshil : Jath District : Sangli

21	NSL P1-252B	525073	1892655	17° 7' 5.81"	75°14' 8.52"	Village : Banali Teshil : Jath District : Sangli
22	NSL P1-407	525915	1895958	17° 8' 53.25"	75°14' 37.16"	Village : Wayphal Teshil : Jath District : Sangli
23	NSL P1-216	528475	1896022	17° 8' 55.23"	75°16' 3.81"	Village : Wayphal Teshil : Jath District : Sangli
24	NSL P1-236	526679	1894772	17° 8' 14.63"	75°15' 2.96"	Village : Wayphal Teshil : Jath District : Sangli
25	NSL P1-171,172	530643	1887491	17° 4' 17.52"	75°17' 16.76"	Village : Valsang Teshil : Jath District : Sangli

1.9 Title and Reference of Methodology

Type (methodology, tool or module).	Reference ID, if applicable	Title	Version
I – Renewable Energy Projects	ACM0002	Large scale Consolidated Methodology Grid connected electricity generation from renewable sources".	16.0 ³ .
Tool	...	Tool to calculate the emission factor for an electricity system —	Version 5.0 ⁴
Tool	...	Tool for the demonstration and assessment of additionality	Version 07.0.0 ⁵

1.10 Double Counting and Participation under Other GHG Programs

1.10.1 No Double Issuance

Is the project receiving or seeking credit for reductions and removals from a project activity under another GHG program?

☐ Yes ☒ No

³ <https://cdm.unfccc.int/UserManagement/FileStorage/OX6IERWMG92J7V3B80TKFSL1QZH5PA>

⁴ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-07-v5.0.pdf>

⁵ [am-tool-01-v7.0.0.pdf \(unfccc.int\)](#)

1.10.2 Registration in Other GHG Programs

Is the project registered or seeking registration under any other GHG programs?

☐ Yes ☒ No

The project may have been eligible to participate in different mechanism such as REC etc. to create another form of GHG related environmental credits; however, project has never been applied under any such mechanism other yet.

However, both the sub-projects seeking registration under CDM and both the sub-projects are listed as part of CDM project individually as follows:

Project developer	Project Title under CDM	Current status
Jath Wind Energy Private Limited	Wind Power Project by M/s Jath Wind Energy Private Limited in Maharashtra, India.	Under validation https://cdm.unfccc.int/Projects/Validation/DB/1JU4YW3E0JCGD1JXRBXP6R5J1CIBV6/view.html
NSL Wind Power Company (Kayathar) Pvt. Ltd.	Kayathar Wind Power Project in Maharashtra, India.	Under validation https://cdm.unfccc.int/Projects/Validation/DB/MG4859IX02P81CP1ALZXH05Q9H01K2/view.html

However, as can be checked from the CDM website the projects were not taken ahead under CDM beyond the initial public listing. Hence, the project is no longer valid under CDM, have been continuously been verified under VCS since beginning. Thus, the PP declares that Net GHG emission reductions or removals generated by the Project will not be used for compliance with an emissions trading program or to meet binding limits on GHG emissions in any Emissions Trading Program or other binding limits in any specific monitoring period under two mechanisms.

The host country (i.e., India) of the project activity is a non- Annex 1 country; hence, the project does not have any compliance driven emission trading program or other binding limits.

The project has not sought or received any other form of GHG related environmental credit including renewable energy certificates (REC or iREC), during this monitoring period and declaration has been submitted to the VVB.

1.11 Double Claiming, Other Forms of Credit, and Scope 3 Emissions

1.11.1 No Double Claiming with Emissions Trading Programs or Binding Emission Limits

Are project reductions and removals or project activities also included in an emissions trading program or binding emission limit? See the VCS Program Definitions for definitions of emissions trading program and binding emission limit.

☐ Yes ☒ No

1.11.2 No Double Claiming with Other Forms of Environmental Credit

Has the project activity sought, received, or is planning to receive credit from another GHG-related environmental credit system? See the VCS Program Definitions for definition of GHG-related environmental credit system.

☐ Yes ☒ No

1.11.3 Supply Chain (Scope 3) Emissions

Do the project activities affect the emissions footprint of any product(s) (goods or services) that are part of a supply chain?

☐ Yes ☒ No

If yes:

Is the project proponent(s) or authorized representative a buyer or seller of the product(s) (goods or services) that are part of a supply chain?

☐ Yes ☒ No

If yes:

Has the project proponent(s) or authorized representative posted a public statement on their website saying, "Carbon credits may be issued through the Verified Carbon Standard project [project ID] for the greenhouse gas emission reductions or removals associated with [project proponent or authorized representative organization name(s)] [name of product(s) whose emissions footprint is changed by the project activities]."

☐ Yes ☒ No

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1.12 Sustainable Development Contributions

The electricity generated by the project activity is displacing the grid electricity which would have been otherwise generated through sources dominated by fossil fuel-based power plants at NEWNE grid now Unified Indian Grid.

Thus, the project activity reduces the emission of GHG gases and also helps to reduce the supply demand gap in the state with contribution in the sustainable development. The project contributes in achieving nationally stated sustainable development priorities like providing direct & indirect employment generation during construction & operation phase. Also, helps in country energy security by generating electricity from renewable source etc. Since the project is continuation of activity as per the registered PD, it is a regulatory surplus activity. The green energy target of the Govt of India does not include green energy generated from wind turbines from private parties.

This project aims to achieve multiple well-being goals:

- **Social well-being:** It focuses on enhancing local employment opportunities in the rural area surrounding the project and empowers vulnerable sections of the community residing in the project area.
- **Economic well-being:** The project was create small business opportunities during both the construction and operation phases, benefiting local stakeholders like bankers, suppliers, manufacturers, and contractors.
- **Environmental well-being:** The project contributes to sustainable development by generating eco-friendly power. Additionally, it aids in reducing greenhouse gas (GHG) emissions and other pollutants such as sulfur dioxide (SO_x), nitrogen oxides (NO_x), particulate matter (PM), etc.
- **Technological well-being:** It helps increase the share of renewable energy power generation in the region and promotes the adoption of clean, renewable, and efficient technologies.

Table 1: Sustainable Development Contributions

The project is wind power project, it has generated **121,427.61 MWh** electricity and avoided **118,598 tCO₂e** in the atmosphere during the current monitoring period. So, the project will contribute to the sustainable development and it is fulfilling SDG 07 and SDG 13.

Row number	SDG Target	SDG Indicator	Net Impact on SDG Indicator	Current Project Contributions	Contributions Over Project Lifetime
1)	7.2	7.2.1 Renewable energy share in the total final energy consumption	Implemented Renewable Energy grid connected project to increase the RE share in total grid mix	121,427.61 MWh delivered to the grid during the current monitoring period.	About $(38,819.85^6 + 83,330.46^7 + 121,427.61^8 = 243,577.92)$ MWh renewable electricity has supplied to Indian grid that helps to increase the renewable energy share in the energy mix. ⁹

⁶ Contribution to the last i.e., 7th monitoring period 01-September-2021 to 30-April-2022 (Inclusive of both the days)

⁷ Contribution to the last i.e., (8th) monitoring period 01-May-2022 to 31-December-2022 (Inclusive of both the days)

⁸ Contribution to the current (9th) monitoring period 01-January-2023 to 29-March-2024 (Inclusive of both the days)

⁹ As per VERRA's guidelines to claim SDGs for contributions Over Project Lifetime "The cumulative impact should be calculated by summing the current project contributions with all impacts included in previously approved VCS monitoring reports or Sustainable Development Contribution Reports, PP has only claimed the SDGs in last 7th & 8th verification hence in this Monitoring period, PP is only applying values of last verification along with current monitoring period.

2)	8.5	8.5.1 Employment generation from the project activity	Implemented Renewable energy power generation project activity has generated direct and indirect employment	More than 10 numbers of people got direct employment.	Project is eligible to generate this SDG benefits. However, project is not claiming this SDG benefit Hence not quantifying the same here.
3)	13.2	13.2.1 Tonnes of greenhouse gas emissions avoided or removed	Implemented activities to increase avoidance of emissions	118,598 tCO ₂ has been prevented by the project activity during the current monitoring period.	Prevented the release of (37,914¹⁰ + 81,388¹¹ + 118,598¹² = 237,900) tCO ₂ into the atmosphere during the current & last monitoring period. ¹³

1.13 Commercially Sensitive Information

There is no commercially sensitive information applicable for the current monitoring period

¹⁰ Contribution to the last i.e., 7th monitoring period 01-September-2021 to 30-April-2022 (Inclusive of both the days)

¹¹Contribution to the last i.e., (8th) monitoring period 01-May-2022 to 31-December-2022 (Inclusive of both the days)

¹² Contribution to the current (9th) monitoring period 01-January-2023 to 29-March-2024 (Inclusive of both the days)

¹³ As per VERRA's guidelines to claim SDGs for contributions Over Project Lifetime "The cumulative impact should be calculated by summing the current project contributions with all impacts included in previously approved VCS monitoring reports or Sustainable Development Contribution Reports, PP has only claimed the SDGs in last 7th & 8th verification hence in this Monitoring period, PP is only applying values of last verification along with current monitoring period.

2 SAFEGUARDS AND STAKEHOLDER ENGAGEMENT

2.1 Stakeholder Engagement and Consultation

2.1.1 Stakeholder Identification

Stakeholder Identification	<p>At the time of validation, the stakeholders were identified. NSL identified the following local stakeholders to be associated with the project activities, directly or indirectly. The typical groups of the stakeholders identified are</p> <ul style="list-style-type: none"> • Local villagers • Local Gram Panchayat Members • Employees of NSL Wind Power Company (Kayathar) Pvt. Ltd, and Jath Wind Energy Pvt. Ltd
Legal or customary tenure/access rights	<p>There is not any legal or customary tenure/access rights to territories and resources, including collective and conflicting rights, held by stakeholders, indigenous people (IPs), local communities (LCs), and customary rights holders.</p>
Stakeholder diversity and changes over time	<p>The social, economic, and cultural diversity within stakeholder groups remained stable over time. Interactions between groups were consistent, and there were no significant changes in the composition of each group observed during the monitoring period.</p>
Expected changes in well-being	<p>In the baseline scenario, there are no alterations to the well-being or other characteristics of stakeholders. This includes the preservation of ecosystem services that stakeholders deem important.</p> <p>There are no changes in well-being and other stakeholder characteristics including changes to ecosystem services identified as important to stakeholders, recorded during the current monitoring period.</p> <p>The operation & maintenance staff and other workers are</p>

	<p>housed in the plant premises itself. Their quality of life is expected to improve. Some of the local villagers who can qualify for the job are getting preference. It is desirable to impart skill development training to eligible youths so that they can find jobs in wind project.</p>
Location of stakeholders	<p>Project activity is located in the Jath Taluka, Sangli district of Maharashtra State, India. The majority of identified stakeholders also reside here in this area.</p> <p>Stakeholders, which include local communities, indigenous peoples, and customary rights holders, are primarily located within the project area and its immediate vicinity. Areas beyond the project boundary that do not experience indirect impacts, such as environmental changes or socio-economic shifts, are not considered due to the nature of the wind project.</p> <p>As the project does not involve forest land, there are no legal or customary tenure/access rights over territories and resources, including collective and conflicting rights held by stakeholders, indigenous peoples, local communities, or customary rights holders that need to be considered. While "Indigenous Peoples" is a term without a universal definition, in India they are officially categorized as Scheduled Tribes under the Fifth Schedule of the Constitution. However, since the project site in Sangli, Maharashtra is not a Scheduled Area, no specific indigenous peoples or local communities have been identified within the project's implementation boundaries.</p>
Location of resources	<p>Since wind projects usually occupy small physical footprints, stakeholders' territories and resources typically do not directly overlap with the project area. However, stakeholders may have customary access to land or resources located in nearby regions. These territories might encompass agricultural lands, grazing areas, or culturally significant sites. Recognizing and respecting these territories are crucial for ensuring effective stakeholder engagement and project planning.</p>

2.1.2 Stakeholder Consultation and Ongoing Communication

Ongoing consultation	<p>During the current monitoring period, the project proponent has actively engaged and consulted with stakeholders, adhering to the validated communication strategy. The proponent has established an Input/Grievance Register at the project site, strategically located both at the administrative office within the plant premises and at the main entrance (Main Gate) of the plant. These locations ensure easy accessibility for local stakeholders to provide feedback on the project. All local stakeholders were made aware of this grievance redressal mechanism during the Local Stakeholder Consultation (LSC) Meeting held at the time of project validation. Furthermore, complementing the grievance register, the proponent has installed a comment/suggestion box at the main gate of the plant, offering stakeholders an additional channel to submit their feedback, comments, or suggestions regarding the project.</p>
Date(s) of stakeholder consultation	<p>The stakeholder meeting was conducted on 06-February-2014 at the Project Site in Jath Taluka, Sangli district, Maharashtra. All the stakeholders were informed about the agenda, venue and date of the meeting through News Paper advertisement dated 23-January-2014 had been published in order to invite a broad range of stakeholders that may have direct or indirect access to the project or any of its concerns. Further, a project concept note, which gives a clear idea on the project activity including the measures taken under the project and the benefits achieved by the project, was also issued along with the notices as information to the concern stakeholder.</p> <p>An attendance record sheet was maintained for all the attendees and comments/feedback received from the stakeholders during the meeting were recorded and compiled in the minutes of meeting.</p>
Communication of monitored results	<p>Monitoring results were shared through the grievance register by documenting grievances, conducting investigations, and documenting resolutions.</p> <p>For ongoing communication, PP maintains a grievance register and a complaint box for stakeholder feedback and</p>

	utilizes stakeholder engagement platforms to ensure transparency and accountability.
Consultation records	<p>The results of stakeholder consultations were documented using a variety of methods, including meeting minutes, reports, surveys, and feedback forms.</p> <p>Upon receiving a comment or grievance, it must be acknowledged, and a copy is stored in the Grievance Register. The Grievance Redressal Officer (GRO) may decide to take action or, in cases where further suggestions or approval from the management is required, it shall be discussed and resolved during the monthly management meetings.</p> <p>Once a comment or grievance is received, it must be presented to the management during the monthly meeting, along with the action taken to resolve it. If any input or approval is required from the management, it shall be discussed and resolved during these monthly management meetings. The management may decide to further assess or conduct additional investigations if deemed necessary.</p>
Stakeholder input	<p>Concerns and responses as recorded during the meeting at the sites of the wind farm area:</p> <p>All the stakeholders were happy in knowing that the project activity in their locality is contributing to a global cause and they commended the NSL management for their initiatives in the areas of climate change and sustainable development. In particular, the stakeholders lauded the project promoters for the environment friendly power generation using wind.</p> <p>Local Population: The villagers expressed their pleasure with the setting up of the power project as it had provided the rural population with permanent employment opportunities. Indirect employment generated as result of the project activity was highlighted by the villagers. The increase in the land prices subsequent to the setting up of the project was a welcome boon for the villagers.</p> <p>In the meeting, the stakeholders were briefed about the project activity in the local language and were informed as to how power is generated using wind energy. They were</p>

	<p>then informed about global warming and its causes and the effects. Subsequently, they were introduced to the concept of Carbon Credits, Sustainable developments and associated socio-economical aspects of such projects. Also it was discussed as to how the project helps in mitigating Greenhouse Gas (GHG) emissions. The stakeholders were then invited to provide their comments on how the project activity had affected their lives and about their expectations, remarks etc. related to the project activity.</p> <p>There was no adverse comment received regarding the project activity; whereas all the queries or remarks were satisfactorily addressed during the meeting. The stakeholders were very observant and supportive to the project, the meeting was concluded on positive notes. All the documents related to stakeholders meeting have been made available for validation.</p> <p>Employees: The local population hired for the project activity are pleased with the employment opportunity available to them which was absent in the region prior to the commissioning of the plant.</p> <p>During current monitoring period any input received during the consultation will be thoroughly reviewed and analyzed to ensure that stakeholders' perspectives are duly considered. However, no inputs were received during the current monitoring period.</p>
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2.1.3 Free, Prior, and Informed Consent

Consent	<p>Consent from concerned parties, including Indigenous Peoples (IPs), local communities (LCs), and customary rights holders, was obtained through a transparent and inclusive process. This involved engaging in meaningful dialogue, providing relevant information in accessible formats, and addressing any concerns or questions raised. Agreements were reached through consensus-building, ensuring that all parties had the opportunity to express their views and negotiate terms. Transparency was maintained by documenting the process and agreements reached, and ensuring that all stakeholders understood the implications of their consent. There are no ongoing or</p>
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	unresolved conflicts, demonstrating that the project does not exacerbate or influence the outcomes of unresolved conflicts.
Outcome of FPIC	The Free, Prior, and Informed Consent (FPIC) process culminated in a transparent agreement between the project proponent and all concerned parties, including Indigenous Peoples (IPs), local communities (LCs), and customary rights holders. Before finalizing this agreement, the project provided comprehensive information about its scope, potential impacts, and mitigation measures in accessible formats and local languages during Local Stakeholder Consultation (LSC). It was ensured that the project did not encroach on any land, relocate people, or cause forced physical or economic displacement. All activities have been conducted in accordance with the terms outlined in the transparent agreement, ensuring the protection of the rights and interests of all stakeholders involved.

2.1.4 Grievance Redress Procedure

Grievances received	Resolution and outcome
No Grievance was recorded during current monitoring period,	<p>To maintain ongoing communication with stakeholders, a grievance register mechanism has been established, known as the "Grievance Register," located at the project site office and accessible to all stakeholders. Community members can visit the project site to share their complaints, feedback, or comments in this register. If the comments are deemed genuine, immediate action will be taken.</p> <p>A copy of the grievance register is retained at the project site. However, no feedback or grievances have been reported during this monitoring period, resulting in no applicable or relevant outcomes from this ongoing communication with local stakeholders.</p>

2.1.5 Public Comments

Summary of comments received	Actions taken
Provide a summary of each comment received in each row	<p>During the current monitoring period, no comments or grievances were registered, nor were any received outside of the designated public comment period. Consequently, no actions were necessitated, and the project design remained unaltered.</p> <p>Reaffirming its commitment to continuous stakeholder engagement, the project proponent has instituted a robust feedback mechanism. This includes maintaining a dedicated grievance register and a complaint/suggestion box, ensuring open channels for stakeholders to voice their concerns or provide input. This proactive approach underscores the proponent's dedication to effective communication and timely resolution of any potential issues.</p> <p>To date, no major comments or protests have been raised by the stakeholders, reflecting the project's broad acceptance and support from the local community. The stakeholders have wholeheartedly embraced the establishment of this project in the region, recognizing its potential benefits and aligning with their aspirations for sustainable development.</p> <p>The proponent's steadfast commitment to transparent and inclusive stakeholder engagement, coupled with the community's overwhelming endorsement, has fostered an environment of trust and collaboration, paving the way for the project's successful implementation and long-term sustainability.</p>

2.2 Risks to Stakeholders and the Environment

	Risk identified	Mitigation or preventative measure taken
Risks to stakeholder participation	No risk identified	Stakeholder participation in wind projects poses minimal risk due to the clean nature of wind energy production, which does not emit pollutants. This fosters positive community relationships and reduces potential health and environmental concerns, ensuring smoother project implementation and garnering support from the community. The project does not pose any risks to stakeholder participation. The PP is ensuring Open and transparent dialogue with the stakeholders. The women's participation in the consultation is being ensured.
Working conditions	No risk identified	Stakeholder participation in wind projects poses negligible risks when the systems are operational. Wind technology typically operates reliably with minimal maintenance requirements, ensuring consistent energy generation and stakeholder satisfaction. The project proponent has exhibited an unwavering commitment to maintaining exceptional operational standards, placing the utmost emphasis on safeguarding the well-being and security of every individual involved. Through a meticulous implementation of stringent safety protocols, comprehensive training initiatives, and the provision of

		<p>appropriate personal protective gear, the project has effectively mitigated any potential risks associated with the working environment.</p> <p>Moreover, the proponent's practices are resolutely aligned with fair employment principles, upholding internationally recognized human and labor rights, as well as labor standards. By prioritizing equitable remuneration, job stability, and opportunities for skill enhancement, the project has not only ensured the welfare of its personnel but has also made a significant contribution to the socio-economic progress of the region.</p> <p>It is evident that the working conditions within the project are exemplary, reflecting the proponent's steadfast dedication to fostering a secure, prosperous, and sustainable professional environment. This commitment has been consistently demonstrated through actions that prioritize the well-being and growth of the workforce, ultimately benefiting both the individuals involved and the broader community.</p>
Safety of women and girls	No risk identified	<p>Ensuring the safety of women and girls in the project involves comprehensive risk assessment and mitigation strategies. Measures such as well-lit areas, security patrols, gender-sensitive policies, and training on</p>

		<p>harassment prevention help mitigate risks, fostering a safe environment for all stakeholders and workers.</p> <p>The project proponent upholds an unwavering commitment to providing a secure and conducive professional environment for all individuals involved. Through stringent adherence to comprehensive safety protocols and strict compliance with pertinent Indian regulations, including The Factories Act, 1948 and The Sexual Harassment of Women at Workplace (Prevention, Prohibition, and Redressal) Act, 2013, the proponent has effectively mitigated potential risks to the safety and well-being of women and girls.</p> <p>Complementing these measures, the proponent champions extensive training initiatives and cultivates a culture of respect, equality, and empowerment. This holistic approach has fostered an inclusive work environment where every individual feels valued, protected, and empowered to contribute to the project's success without fear of harm or discrimination.</p> <p>Consequently, it can be affirmed with confidence that the project provides a safe, secure, and enabling workplace for women and girls, creating an environment that actively encourages and supports their participation, professional growth, and</p>
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		meaningful contributions.
Safety of minority and marginalized groups, including children	No risk identified	While wind projects generally entail minimal or no risks to minority and marginalized groups, comprehensive safety measures have been implemented. This includes ensuring safe access to project sites, implementing child protection policies, and addressing any potential social or economic impacts on marginalized communities, thereby safeguarding their well-being throughout project development and operation.
Pollutants (air, noise, discharges to water, generation of waste, release of hazardous materials)	No risk identified	The projects' lack of pollutants substantially reduces risks to stakeholders, including potential health hazards or environmental contamination. This inherent cleanliness fosters a safer environment for communities, minimizing concerns related to air and water quality, noise pollution, waste generation, and exposure to hazardous materials, ensuring overall safety and well-being.

2.3 Respect for Human Rights and Equity

2.3.1 Labor and Work

Discrimination and sexual harassment	<p>No instances of discrimination or sexual harassment have been reported or identified within the project. This is ensured through the implementation of comprehensive policies and training aimed at preventing and promptly addressing such issues.</p> <p>The project proponent demonstrates an unwavering commitment to fostering a respectful and inclusive workplace environment, adhering strictly to the provisions outlined in the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013. In</p>
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	<p>accordance with Chapter IV, Article 19 "Duties of Employer" clause (a), the proponent has implemented robust measures to ensure a secure working atmosphere, safeguarding all personnel from any potential harm or misconduct from individuals they may encounter within the professional setting.</p> <p>During the current monitoring period, no incidents of discrimination or sexual harassment have been reported or identified within the scope of the project's operations. This commendable record is a testament to the proponent's comprehensive policies and extensive training initiatives, which are designed to prevent and address such issues promptly and effectively, should they arise.</p> <p>The proponent's proactive approach and zero-tolerance stance towards any form of harassment or discrimination have cultivated an environment where every individual can thrive, contribute, and feel valued, without fear of prejudice or mistreatment. This commitment to upholding the highest standards of professional conduct and promoting a culture of mutual respect aligns with the project's broader goals of sustainable and responsible development.</p>
Management experience	<p>No new entities are involved in in project design or implementation. The initially engaged management is experienced enough to handle the implementation of the project activity.</p>
Gender equity in labor and work	<p>Equal opportunities for gender equity and fair pay are guaranteed through transparent hiring practices, non-discriminatory policies, and regular pay scale reviews to rectify any disparities. Ongoing training programs also foster gender inclusivity and address unconscious biases in the workforce. The Project Proponent ensures equal wage pay to its employees keeping them in line with the minimum wage criteria as per state labor laws.</p>
Human trafficking, forced labor, and child labor	<p>The project has implemented stringent ethical sourcing policies, which include the comprehensive vetting of suppliers and contractors to ensure compliance with labor laws and human rights standards. Regular audits and inspections are carried out to verify that the project's supply chain and workforce are free from human trafficking, forced labor, or child labor. The company policy restricts hiring of any such employee involved in such practices. The project remains under strict surveillance of the project proponent & the state DISCOM, any malpractice at the project implemented site will be immediately reported and strict actions will be taken. Since the date of project start date, PP has not encountered any such activity at the project site.</p>

2.3.2 Human Rights

The project proponent exhibits an unwavering dedication to recognizing, respecting, and actively promoting the protection of human rights, despite the absence of identified indigenous peoples, local communities, or customary rights holders within the project's scope. This commitment is exemplified through the proponent's proactive engagement with stakeholders, fostering ongoing communication channels and facilitating purposeful interactions throughout the project's lifecycle.

Complementing this approach, the project incorporates robust grievance redressal mechanisms, providing a platform for stakeholders to voice their concerns and lodge grievances effectively. Furthermore, the presence of a comment/feedback box reinforces the proponent's commitment to open communication, ensuring that stakeholders' voices are heard, acknowledged, and duly considered.

Through the implementation of these practices, the project aligns itself with applicable international human rights frameworks, including the United Nations Declaration on the Rights of Indigenous Peoples and the International Labour Organization (ILO) Convention 169 on Indigenous and Tribal Peoples. This alignment underscores the proponent's steadfast commitment to promoting the rights and safeguarding the welfare of indigenous peoples, local communities, and customary rights holders, even in contexts where they are not directly identified as stakeholders.

2.3.3 Indigenous Peoples and Cultural Heritage

Despite the absence of identified cultural heritage sites and any interference with conservation or preservation areas within the project activity, the project remains committed to preserving and protecting cultural heritage as an integral aspect of its activities. Proactive measures are taken, including thorough cultural heritage assessments during planning, strict protocols to minimize disturbances, and collaboration with local communities. By prioritizing cultural heritage preservation, the project upholds its commitment to responsible and sustainable development practices.

2.3.4 Property Rights

Disputes over rights to territories and resources	N/A
Respect for property rights	The project proponent remains vigilant in implementing ongoing measures to safeguard property rights, underpinned by a firm commitment. This principled approach extends to respecting customary rights and ensuring that compensation processes are conducted with utmost transparency and equity.

	<p>Furthermore, the proponent has established robust channels for regular consultations and maintains effective grievance mechanisms, enabling prompt addressal of any concerns that may arise. Notably, no incidents pertaining to property rights violations have been reported at the time of validation, during previous verifications, or throughout the current monitoring period.</p> <p>This exemplary track record is a testament to the proponent's unwavering dedication to ethical business practices and its steadfast adherence to the highest standards of integrity. By prioritizing open dialogue, upholding commitments, and fostering an environment of mutual respect, the project sets a commendable precedent for responsible development while safeguarding the rights and interests of all stakeholders involved.</p>
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2.3.5 Benefit Sharing

Summary of the benefit sharing plan	NA
Benefit sharing during the monitoring period	NA

2.4 Ecosystem Health

	Risk identified	Mitigation or preventative measure taken during the monitoring period
Impacts on biodiversity and ecosystems	No risk Identified	Throughout the monitoring period, no adverse effects on biodiversity or ecosystems were observed in the project. Wind projects are generally recognized as environmentally benign, with minimal impact on surrounding ecosystems.
Soil degradation and soil erosion	No risk Identified	Throughout the monitoring period, no instances of soil degradation or erosion were identified in the project area. Wind projects typically employ land management

		practices that minimize soil disturbance, ensuring the preservation of soil health and stability.
Water consumption and stress	No risk Identified	Throughout the monitoring period, no concerns regarding water consumption or stress were identified within the project. Wind installations generally have minimal water requirements, reducing strain on local water resources and ecosystems.
Usage of fertilizers	No risk Identified	Project is a renewable energy project activity and does not involve in any plantation. Therefore the is no risk associated with the usage of fertilizers.

2.4.1 Rare, Threatened, and Endangered species

Species or habitat	The Project is located in the Jath Taluka, in the district Sangli, state of Maharashtra, Country: India and there is no endangered species in the area where the project activity is implemented. There was no rare, threatened & endangered species found during the monitoring period, neither reported at the time of project registration.
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2.4.2 Introduction of species

Species introduced	Classification	Justification for use	Adverse effects and mitigation
N/A	N/A	N/A	N/A

Existing invasive species	Mitigation measures to prevent spread or continued existence of invasive species
N/A	N/A

2.4.3 Ecosystem conversion

Ecosystem conversion in wind projects is justified by the transition to renewable energy sources, mitigating climate change, reducing reliance on fossil fuels, and fostering sustainable development for future generations.

3 IMPLEMENTATION STATUS

3.1 Implementation Status of the Project Activity

The project activity consists of 40 WTGs implemented by the two project developers as listed in the registered PD. The project activity is a bundled project of total capacity 67.5 MW developed by two project participants and the bundle has been represented by only one project proponent, i.e., NSL Wind Power Company (Kayathar) Pvt. Ltd. The project WTGs has been bundled together as new project activity from the beginning and there is no any new instance applicable to the project activity at this stage.

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

- The project activity has been in operation since its date of commissioning. The first WTG was commissioned on 30-March-2014. The date of commissioning of the WTGs are provided in the [Appendix 02](#) of this report.
- There is no any major event of break down or non-operational phase during the monitoring period. However, there are some minor shutdowns and scheduled maintenance.
- 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:

The Technical Specifications of the WTGs are provided in the [Appendix 01](#) of this report.

The project activity has been in operation since its date of commissioning. No events have happened that may impact the GHG emission reductions or removals and monitoring during this monitoring period. There are no changes related to the project proponent or project observed. Project is implemented and operational as per the VCS Project description submitted.

During the current monitoring period, all the WTGs were operational. However, breakdown of **20,577.83 Hours** has occurred in this monitoring period due to non-availability of wind and some scheduled/unscheduled shutdown for the maintenance. This downtime is approx. 4.72% of total available hours of operation of the WTGs, during the current monitoring period. The PP has provided in [Appendix 04](#) of MR and evidences for the same to VVB. The project activity has supplied 121,427.61 MWh of electricity, and thus contributing to 118,598 tCO₂e GHG reductions.

For the current monitoring period estimated emission reduction is 143,668 tCO₂e, whereas actual emission reductions achieved are 118,598 tCO₂ (round down value), which is approximately -17.45% Lower than the estimated emission reductions. The Project is in continued operation for 9th periodic verification of 1st crediting period for which the monitoring period is from 01-January-2023 to 29-March-2024 (Inclusive of both the days). There has been downtime of equipment's, overhaul times or exchange of equipment's in the project activity during the current monitoring period. Scheduled and Unscheduled Breakdowns have occurred which have led to a shutdown of 20,577.83 hours in this monitoring period. The details have

been clearly described in the Appendix 04 of the monitoring report. More details about the commissioning status and the technical details of the project WTGs are referred under the Appendix 01 & Appendix 02.

3.2 Deviations

3.2.1 Methodology Deviations

No methodological deviation applied to the project activity during current verification and last verification.

3.2.2 Project Description Deviations

No project description deviation has been applied to the project activity during the previous & current monitoring period.

3.3 Grouped Projects

Not applicable as the project is not a grouped project.

3.4 Baseline Reassessment

Did the project undergo baseline reassessment during the monitoring period?

☐ Yes

☒ No

4 DATA AND PARAMETERS

4.1 Data and Parameters Available at Validation

Data / Parameter	EF _{grid,OMsimple,y}
Data unit	tCO ₂ e/MWh
Description	Operating margin CO ₂ emission factor of NEWNE grid
Source of data	Central Electricity Authority: CO ₂ Emission Database CEA CO ₂ Baseline database Version 10 ¹⁴
Value applied	0.9857
Justification of choice of data or description of measurement methods and procedures applied	The operating margin emission factor is a 3-year generation-weighted average data, based on the most recent data available on CEA database at the time of submission of the VCS-PDD to the DOE for validation. Data compiled in CEA CO ₂ CDM database is in line with the requirements Version 5.0 of “Tool to calculate the emission factor for an electricity system”.
Purpose of Data	Calculation of baseline emissions
Comments	This parameter is calculated ex ante and remains fixed during the crediting period.

Data / Parameter	EF _{grid,BM,y}
Data unit	tCO ₂ e/MWh
Description	Build margin CO ₂ emission factor of NEWNE grid
Source of data	Central Electricity Authority: CO ₂ Emission Database CEA CO ₂ Baseline database Version 10
Value applied	0.9495
Justification of choice of data or description of measurement methods and procedures applied	The build margin emission factor is the most recent data available from CEA CO ₂ Baseline database. Data compiled in CEA CO ₂ CDM database is in line with the requirements Version 5.0 of “Tool to calculate the emission factor for an electricity system”.
Purpose of Data	Calculation of baseline emissions
Comments	The build Margin would be calculated ex ante and fixed during the crediting period.

¹⁴ Microsoft Word - Final User Guide ver 10.0.doc (cea.nic.in)

Data / Parameter	$EF_{grid,CM,y}$
Data unit	tCO ₂ e/MWh
Description	Combined margin CO ₂ emission factor of NEWNE grid
Source of data	Central Electricity Authority: CO ₂ Emission Database CEA CO ₂ Baseline database Version 10
Value applied	0.9767
Justification of choice of data or description of measurement methods and procedures applied	<p>The combined margin emissions factor is calculated as follows:</p> $EF_{grid,CM,y} = EF_{grid,OM,y} \times w_{OM} + EF_{grid,BM,y} \times w_{BM}$ <p>The following default values should be used for w_{OM} and w_{BM}:</p> <p>For Wind power generation project activities: w_{OM} = 0.75 and w_{BM} = 0.25 for the selected crediting period</p> <p>Data compiled in CEA CO₂ CDM database is in line with the requirements Version 5.0 of “Tool to calculate the emission factor for an electricity system”.</p>
Purpose of Data	Calculation of baseline emissions
Comments	The Combined Margin would be calculated ex ante and fixed during the crediting period.

4.2 Data and Parameters Monitored

Data / Parameter	$EG_{facility,y}$
Data unit	MWh
Description	Quantity of Net Electricity exported to the grid by the project WTGs (i.e., total 40 WTGs) to the grid during the year y.
Source of data	Calculated
Description of measurement methods and procedures to be applied	<p>This parameter is calculated based on the measured parameters those are continuously measured and monthly recorded.</p> <p>Metering at common metering point:</p> <p>The electricity generated by the project activity WTGs along with non-project WTGs are metered at feeder-wise common metering point. The metering point consists of a main meter& check meter, having accuracy of 0.2s.</p> <p>The meters measures parameters like export & import for all the</p>

connected WTGs. The export reading for a given metering point for a given billing month is obtained by subtracting initial reading (taken in previous month) from the final reading (taken in billing month). The difference is multiplied by the applicable meter multiplication factor. Similar procedure is followed to arrive the import reading.

The monitoring & measurement¹⁵ of electricity at project metering point is being done on continuous basis; while recording is being done on monthly basis as Joint Meter Reading by the representatives of State Utility & PP.

Calculation of net electricity export to the grid by project activity WTG:

The export & import by the project activity WTG connected to the metering point is calculated by apportioning of the electricity at feeder level by the state utility. The apportioning of the electricity is based on the controller reading of project activity WTG, controller reading for all WTGs connected at the given metering point and the electricity reading (export, import etc) recorded by the main meter at the given metering point on monthly basis. It gives monthly values of export & import for project activity WTG. The net export for any given month by the project activity WTG to the grid is then obtained by subtracting import from export.

Thus:

$$EG_{\text{facility},y} = \sum EG_{\text{JMR, project, export}} - \sum EG_{\text{JMR, project, import}}$$

(Here $EG_{\text{JMR, project, export}}$ & $EG_{\text{JMR, project, import}}$ signifies values related to all WTGs included in the project activity, i.e. WTGs from both the participants - NSL Wind Power Company (Kayathar) Pvt. Ltd. & Jath Wind Energy Private Limited)

The value of the monthly net electricity delivered to the Grid by the project activity WTG is aggregated annually to get quantity of net electricity supplied by the project plant/unit to the grid in year y i.e.

$$(EG_{\text{facility},y}).$$

¹⁵ The meters are capable of measuring the electricity parameters (export, import etc.) on real time basis. It complies the hourly measurement requirement as per the monitoring methodology. Details of meter calibration is provided in Appendix 3 of the MR. Please refer ER sheet for detailed calculation.

	Note: The apportioning of the electricity is the responsibility of the state utility & same is beyond the control of the PP.
Frequency of monitoring/recording	Monthly recording.
Value monitored	121,427.61
Monitoring equipment	Not applicable as the parameter is calculated
QA/QC procedures to be applied	The quantity of net electricity supplied will be cross-verified from the invoices raised on MSEDCL by the project participant. QA/QC procedures will be as implemented by DISCOM pursuant to the provisions of the power purchase agreement and there will be no additional QA/QC procedures.
Purpose of the data	Used to calculate baseline emissions
Calculation method	Calculation method is described in detail in section 4.1.
Comments	Date will be archived for crediting period plus two years after the end of Crediting period.

Data / Parameter	EG _{JMR, Project, export, y}
Data unit	MWh
Description	Quantity of Electricity exported by the Project WTGs connected to the feeder i to the grid during the year y.
Source of data	Monthly statements/credit notes issued by Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL).
Description of measurement methods and procedures to be applied	Quantity of electricity export would be calculated using the apportioning procedure as described in section 4.31.
Frequency of monitoring/recording	Monthly recording
Value monitored	121,616.91
Monitoring equipment	Calculated parameter, hence no monitoring equipment is required.
QA/QC procedures to be applied	The value is calculated and can be cross checked from the invoices raised on the state utility. The monitoring frequency of the data parameter will be on monthly basis.

Purpose of the data	Used to calculate baseline emissions
Calculation method	Calculation method is described in section 4.3
Comments	Date will be archived for crediting period plus two years after the end of Crediting period

Data / Parameter	EG_{JMR, Project, import,y}
Data unit	MWh
Description	Quantity electricity imported by the Project WTGs connected to the feeder i from the grid during the year y.
Source of data	Monthly statements/credit notes issued by Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL).
Description of measurement methods and procedures to be applied	Quantity of electricity import would be calculated using the apportioning procedure as described in section 4.3.
Frequency of monitoring/recording	Monthly recording
Value monitored	189.30
Monitoring equipment	No monitoring equipment is required
QA/QC procedures to be applied	The value is calculated and can be cross checked from the invoices raised on the state utility. The monitoring frequency of the data parameter will be on monthly basis.
Purpose of the data	Used to calculate baseline emissions
Calculation method	Calculation method is described in section 4.3.
Comments	Date will be archived for crediting period plus two years after the end of Crediting period

Data / Parameter	EG_{Controller, gen}
Data unit	MWh
Description	Quantity electricity generated by the project activity WTGs recorded at respective controller meters
Source of data	Monthly operating logs recorded in electronic format by O&M contractor

Description of measurement methods and procedures to be applied	The value is recorded continuously by the online monitoring station. This reading can also be seen in the electronic panel installed inside the WTG tower. The LCS meter (Controller meter) do not require calibration as the energy readings of electricity generated at the LCS meter is cross verified by the energy calculated by inverting system; installed in the WEGs. In case there is any mismatch in the energy values recorded by the Panel meter and the energy values calculated by the inverting system; the machine will stop working and generate the error report. The operations and maintenance staff will attend to the problem immediately in order to identify and correct the error.
Frequency of monitoring/recording	Continuous monitoring and Monthly recording
Value monitored	126,817.23
Monitoring equipment	LCS meter (Controller Meter)
QA/QC procedures to be applied	This data parameter will be logged electronically on a monthly basis by O&M contractor on its online portal. The value of this parameter shall be compared with the value of $EG_{PJ,y}$ and the conservative approach would be taken by the PP for estimating the net electricity supplied value for the calculation of emission reduction.
Purpose of the data	Used to calculate baseline emissions
Calculation method	Not applicable
Comments	Date will be archived for crediting period plus two years after the end of Crediting period

4.3 Monitoring Plan

As per approved monitoring methodology ACM0002 / Version 16.0¹⁶, **'Net electricity generation from the project activity'** is required to be monitored.

As the emission reductions from the project are determined by the number of units exported to the grid by the project activity it is mandatory to have a monitoring system in place and ensure that the project activity produces and supplies the rated power at the stipulated norms.

The purpose of the monitoring plan is to define the organizational structure of the monitoring team, monitoring practices, QA and QC procedures and archiving procedures. The monitoring

¹⁶ <https://cdm.unfccc.int/UserManagement/FileStorage/0X6IERWMG92J7V3B8OTKFSL1QZH5PA>

plan will ensure that the emission reductions from the project activity are reported accurately and transparently.

Since the baseline methodology is based on ex-ante determination of the baseline, the monitoring of operating margin emission factor and build margin emission factor is not required. Further, wind-based electricity generation is not associated with any kind of leakages. Hence, the sole parameter for monitoring is the electricity generated by the project and supplied to the grid.

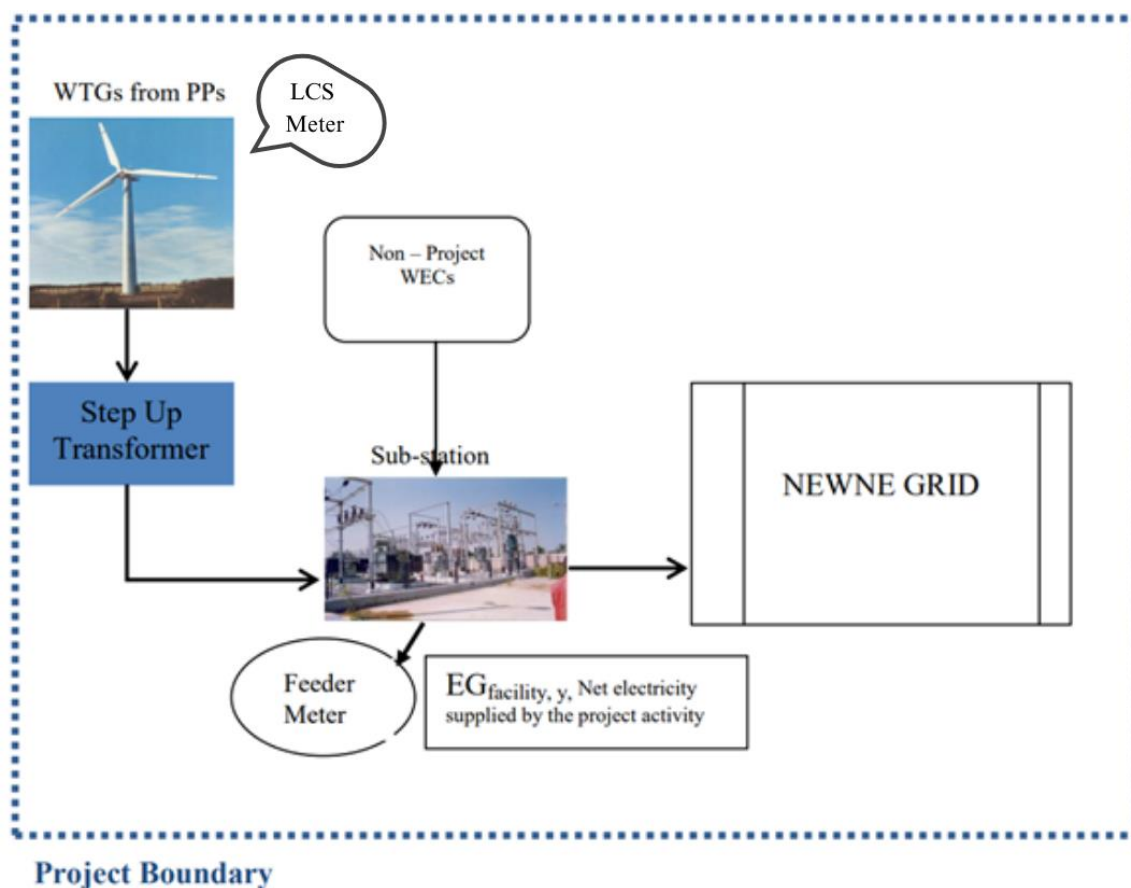
Monitoring at common metering point:

Quantity of electricity generated and supplied to the grid by the all the WTGs (project activity WTGs and non-project WTGs) connected to the particular feeder will be measured through the energy meters (Main Meter and Check Meter) installed at the substation. The meter readings at the substations are taken jointly by the representatives of Project participant representative and Maharashtra State Electricity Distribution Company Limited (MSEDCL) representative and recorded in the JMR.

The metering equipment is duly approved, tested and sealed by MSEDCL. The metering equipment (consisting of the Main Meter and the Check Meter) is identical in make and technical standards and is of 0.2s accuracy class. They comply with the requirements of the Electricity Rules.

The MSEDCL carries out the calibration¹⁷, periodical testing, sealing and maintenance of meters in the presence of PPs representative. The frequency of meter testing is once in 3 years. All meters are tested only at the Metering Point.

¹⁷Details of meter calibration are provided in Appendix 3 of the MR. Please refer ER sheet for detailed calculation.



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Metering Equipment and Metering Arrangement Information and Emergency preparedness:

- The meters are two-way meter and measure the electricity import and export and give the net electricity.
- As per the Power Purchase Agreement entered into with the electricity distribution utility, there will be two meters, one main meter and one backup meter. Both meters would be two-way export import meters that measure both export and import of electricity and provide net electricity exported to the grid.
- In case the meters are found to operate outside the permissible limits (As per technical standards it is 0.2% accuracy class), the meters will be either replaced immediately or calibrated. Whenever a main meter goes defective, the consumption recorded by the backup meter will be referred.

¹⁸ The As per CEA database version 13 (released in June 2018) In previous years before April 2016, the Indian electricity system was divided into two grids, the NEWNE and Southern Grid. These are now integrated as a single "Indian Grid" covering all the states. Thus, the project activity earlier was considered under Southern Grid which is now referred as Indian Grid.

- If main as well as back up metering system becomes defective, the details of the malfunctioning along with date and time and snaps shot parameters along with load survey will be retrieved from the main meter. The exact nature of the malfunctioning will be determined after analysing the data so retrieved and the consumption recorded by the main meter will be adjusted accordingly.
- The main meter readings are apportioned based upon the LCS meter readings from the individual WTGs to compute net electricity supplied from individual WTGs. The LCS meter readings of project activity WTGs are archived electronically on continuous basis. Joint meter reading at the DISCOM substation is noted each month. Therefore, cumulative LCS meter reading for each month is used for purpose of allocation of net electricity supplied to the grid from the project activity.
- Both main and check meters will be **calibrated once in 3 years**.

For INOX Machines Project proponents have signed “Operation and Maintenance” contracts with the suppliers, i.e., INOX Wind Limited to operate the wind mills for a period of ten years from the date of commissioning of each WTG and for the ReGen Machines PP has carried inhouse Operation and Maintenance. The performance of the mills, safety in operation and scheduled /breakdown maintenance are organized and monitored by the contractor. The technology providers will monitor the generation of the WTG daily on a regular basis and will maintain a log book recording daily generation details for each WTG comprising the project, as metered at the wind farm.

Apportioning Procedure followed:

The allocation of the net electricity supplied to the grid by the project activity is done based on the joint meter readings taken at the DISCOM substation & LCS meter readings of individual WTGs. Apportioning procedure is applied is explained in below:

$EG_{JMR, Export}$ = Electricity exported by all the WTGs (project WTGs & non-project WTGs), as recorded by the main meter at the substation

$EG_{JMR, Import}$ = Electricity imported by all the WTGs (project WTGs & non-project WTGs), as recorded by the main meter at the substation

$EG_{Controller, gen}$ = Electricity exported by a project WTG, as measured at the controller

$EG_{Controller, gen, total}$ = Electricity exported by all the WTGs (project activity & non project activity) connected to the main meter at the substation, measured at the controller of each WTG

$\sum EG_{Controller, gen}$ = Summation of electricity generated by the project activity WTGs recorded at respective LCS meters.

$EG_{JMR, Project, export}$ = Electricity exported by a WTG to the grid, calculated

$EG_{JMR, Project, import}$ = Electricity imported by a WTG from the grid, calculated.

Electricity exported by each WTG is apportioned on the basis of electricity exported recorded at the controller of each WTG and the electricity exported at the main meter and mentioned in the JMR. The export multiplication factor is calculated as follows-

$$\text{Export Multiplication Factor} = \text{EG}_{\text{JMR, Export}} \div \text{EG}_{\text{Controller, gen, total}} \dots\dots\dots (1)$$

Thus, the energy exported by a WTG to the grid is given by the equation-

$$\text{EG}_{\text{JMR, NSL, export}} = \text{Export Multiplication factor} \times \sum \text{EG}_{\text{Controller, gen}} \dots\dots\dots (2)$$

As the controller meter doesn't record import, the apportioning of energy imported by each WTG is also done on the basis of electricity exported recorded at the controller of each WTG and the electricity imported at the main meter and mentioned in the JMR. The import multiplication factor is calculated as follows-

$$\text{Import Multiplication Factor} = \text{EG}_{\text{JMR, Import}} \div \text{EG}_{\text{Controller, gen, total}} \dots\dots\dots (3)$$

Thus the energy imported by a WTG to the grid is given by the equation-

$$\text{EG}_{\text{JMR, Project, import}} = \text{Import Multiplication factor} \times \sum \text{EG}_{\text{Controller, gen}} \dots\dots\dots (4)$$

The net electricity exported by the WTGs of the project is given by the equation-

$$\text{EG}_{\text{facility, y}} = \sum \text{EG}_{\text{JMR, Project, export}} - \sum \text{EG}_{\text{JMR, Project, import}} \dots\dots\dots (5)$$

$$\sum \text{EG}_{\text{JMR, NSL, export}} = \text{EG}_{\text{JMR, Project, export, y}}$$

$$\sum \text{EG}_{\text{JMR, NSL, import}} = \text{EG}_{\text{JMR, Project, import, y}}$$

Based on the above calculation, a monthly statement/credit note is prepared and signed by the representatives of PP and endorsed by the state utility (MSEDCL). The statement mentions the total electricity exported to grid, total electricity imported from the grid and the net electricity supplied. The net electricity supplied is calculated as the difference of the total electricity exported to grid and total electricity imported from the grid by the project activity.

Upon receipt of the "Monthly Statement/credit note", Project participant generates invoices on sale of electricity and sends to respective district level MSEDCL office and MSEDCL makes payments against the invoices. The value of net electricity supplied can be cross checked with the monthly invoices.

The operational and management structure implemented for data monitoring is as follows:

VCS PROJECT COORDINATOR



ASSISTANT ENGINEER (AE)



OPERATOR

The day-to-day operation of the WTGs at the ground level is looked after by the operator. The operator reports to the Assistant Engineer (AE) - Wind Farm, who is responsible for collecting the required information from the operator. The AE – Wind Farm records the generation daily for each service connection point and reports the cumulative generation to the Management. VCS Project coordinator will be responsible for assessment of emission reduction achieved every year and documentation of the same.

Personnel training: The training for operating and maintaining the plant will be provided by the technology suppliers.

Data collection and archiving:

The daily data at the site is collected in electronic form. Monthly data is collected and maintained in hard copies. The project proponent shall keep complete and accurate records of all the data as a part of monitoring for at least a period of 2 years after the end of the crediting period or the last issuance of VCU for the project activity, whichever occurs later.

NOTE:

As per the monitoring plan, the monitoring parameters $EG_{JMR, project, export, y}$, $EG_{JMR, project, import, y}$ and $EG_{facility, y}$ to be calculated based on the generation data of other project activities connected to the same substation. Since the generation data of other project activities is only available with the O&M contractor, apportioning cannot be done by PP and hence the other parameters $EG_{JMR, Export}$, $EG_{JMR, Import}$ and $EG_{Controller, gen, total}$ is not included in section 4.2 of the PD.

Thus, the monitoring plan is complete, accurate and in line with actual metering and monitoring arrangement finalized by DISCOM in consultation with State Electricity Regulatory Commission.

5 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS

5.1 Baseline Emissions

According to the methodology and VCS PD, Emission reductions are calculated as follows:

$$ER_y = BE_y - PE_y$$

Where:

ER_y	=	Emission reductions in year y (tCO _{2e})
BE_y	=	Baseline emissions in year y (tCO ₂)
PE_y	=	Project emissions in year y (tCO _{2e})

Baseline Emissions:

Baseline emissions include only CO₂ emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity. The methodology assumes that all project electricity generation above baseline levels would have been generated by existing grid-connected power plants and the addition of new grid-connected power plants.

The baseline emissions are to be calculated as follows

$$BE_y = EG_{PJ,y} \times EF_{grid,CM,y}$$

Where:

BE_y	=	Baseline emissions in year y (tCO ₂)
$EG_{PJ,y}$	=	Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the project activity in year y (MWh)
$EF_{grid,CM,y}$	=	Combined margin CO ₂ emission factor for grid connected power generation in year y calculated using the latest version of the "Tool to calculate the emission factor for an electricity system" (tCO ₂ /MWh)

If the project activity is the installation of a new grid-connected renewable power plant/unit at a site where no renewable power plant was operated prior to the implementation of the project activity, then:

$$EG_{PJ,y} = EG_{facility,y}$$

Where:

$EG_{PJ,y}$ = Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the project activity in year y (MWh/yr)

$EG_{facility,y}$ = Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh/yr)

$$\begin{aligned} BE_y &= 121,427.61 * 0.9767 \\ &= 118,598 \text{ tCO}_2\text{e (rounded down Value)} \end{aligned}$$

5.2 Project Emissions

As per applied methodology ACM0002 version 16, paragraph 35 (page 12). For most renewable energy power generation project activities & the proposed project activity is a wind power project hence there are no project emissions considered.

Therefore, the Project Emissions for the project activity is zero.

$$PE_y = 0 \text{ tCO}_2\text{e}$$

5.3 Leakage

As per applied methodology ACM0002 version 16, paragraph 60 (page 18). For the proposed project activity which is a wind power project there are no leakage emissions considered.

$$LE_y = 0 \text{ tCO}_2\text{e.}$$

5.4 Net GHG Emission Reductions and Removals

Emission reductions are calculated as follows: $ER_y = BE_y - PE_y - LE_y$

Where:

ER_y = Emission reductions in year y (tCO₂e/year)

BE_y = Baseline emissions in year y (tCO₂e/year)

PE_y = Project emissions in year y (tCO₂e /year)

Vintage period	Baseline emissions (tCO ₂ e)	Project emissions (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Reduction VCU (tCO ₂ e)	Removal VCU (tCO ₂ e)	Total VCUs (tCO ₂ e)
Year 2023 (01-January-2023 to 31-December-2023)	107,176	0	0	107,176	0	107,176
Year 2024 (01-January-2024 to 29-March-2024)	11,422	0	0	11,422	0	11,422
Total	118,598	0	0	118,598	0	118,598

The comparison of actual ER with estimated ERs as per registered:

MP Start Date	01-January-2023
MP End Date	29-March-2024
Number of days in the reporting period	454
Annual VCU as per registered VCS-PD (for 365 days)	115,504
Estimated VCU in VCS PD for the equivalent period of the current MP	143,668
Actual values achieved during this monitoring period	118,598
% change in actual VCUs with estimates in registered PD	-17.45%

For projects required to assess permanence risk: Since the project activity does not fall under the AFOLU (Agriculture, Forestry, and Other Land Use) or Geologic Carbon Storage (GCS) project

categories, it is not required to assess the permanence risk. Therefore, the following tables are not applicable.

i) Provide the requested information using the table below:

State the non-permanence risk rating (%)	NA
Has the non-permanence risk report been attached as either an appendix or a separate document?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
For ARR and IFM projects with harvesting, state, in tCO ₂ e, the Long-term Average (LTA).	NA
Has the LTA been updated based on monitored data, if applicable?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
State, in tCO ₂ e, the expected total GHG benefit to date.	NA
If a loss occurred (including a loss event or reversal), state the amount of tCO ₂ e lost:	NA

Vintage period	Baseline emissions (tCO ₂ e)	Project emissions (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Buffer pool allocation (tCO ₂ e)	Reductions VCU (tCO ₂ e)	Removals VCU (tCO ₂ e)	Total VCU issuance (tCO ₂ e)
DD-MMM-YYYY to 31-Dec-YYYY	NA	NA	NA	NA	NA	NA	NA
Total	NA	NA	NA	NA	NA	NA	NA

<u>Ex-ante emissions reductions /removals</u>	<u>Achieved emissions reductions/removals</u>	<u>Percent difference</u>	<u>Justification for the difference</u>
143,668	118,598	-17.45%	The actual emissions achieved in the current monitoring period are 17.45% lower than the estimated ex-ante as per the registered VCSPD. The difference due to low PLF during current monitoring period and due to some minor shutdowns.

			Please refer ER sheet for detailed PLF calculations
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APPENDIX 1: TECHNICAL SPECIFICATION

Technical Specification of WTGs:

1) WTGs supplied by ReGen Powertech

ReGenPowertech	VENSYS 87
POWER	
Rated power	1500 kW
Cut-in wind speed (10 min. mean)	3 m/s
Rated Wind Speed (10 min. mean)	approx. 12 m/s
Cut-out wind speed (10 min. mean)	22 m/s
Survival wind speed	52.5 m/s
Generator	Variable Speed, Multi-pole Synchronous with Permanent Magnet Excitation
ROTOR	
Diameter	87
Swept area	5942 sq. m
Speed range (variable)	9 to 17.3 rpm
TOWER AND FOUNDATION	
Hub height	85 m
Design	Tubular, Four sections
Foundation type	Floating foundation
CONTROL AND SAFETY SYSTEMS	
Control of output	Pitch Regulation
Speed control	Variable, Micro-controller based
Low Voltage Ride Through (LVRT)	3 seconds
Primary brake system	Aerodynamic Brake, Single Pitch Control/triple redundant
Pitch System	Electromechanical, Maintenance Free Toothed Belt Drive (Patented)
Remote Monitoring	VPN, Visualization via web-browser
TYPE CLASSES	
Wind turbine type class	GL III B

2) WTGs supplied by INOX Wind:

<ul style="list-style-type: none"> No. of WTGs¹⁹ - 15 	
INOX WIND - MODEL ²⁰ WT 2000 DF	
OPERATING DATA	
Rated power	2000 kW
Cut-in wind speed	3 m/s
Rated wind speed	11.5m/s
Cut-out wind speed	20 m/s
Survival wind speed	52.5 m/sec
Hub height	80 meters
Type class	TC IIIB
Rotor speed	15.9 RPM
Operational mode	Variable speed
Design Standards	Germanischer Lloyd
ROTOR	
Pitch system	Pitch control- electrical, variable speed inverters, power back up with ultra capacitor
Diameter	93 meters
Swept area	6785 sq meters
Blade material type	Epoxy glass fibre
GENERATOR	
Type	Double fed induction generator
Rated power	2000 kW
Rated voltage	690 V AC, 3 Phase
Frequency	50 Hz
Cooling system	Water Cooled
Insulation	Class H
BRAKING SYSTEM	

¹⁹Arrangement of project activity & monitoring points is detailed in the Project Boundary diagram under section B.3

²⁰<http://www.inoxwind.com/technical-data.html>

Aerodynamic brake	Full span independent blade pitching
Mechanical brake	Disc brakes
DRIVE TRAIN	
Drive train	Patented integral drive train with rotor shaft and drive train as single unit
Rated drive torque	1280 kNm
Maximum static torque	2235 kNm
Type of gearing	Two planetary and one parallel shaft gear
Transmission ratio	1: ~ 114.7
Gear lubrication	Forced lubrication
Connection gear / generator	Flexible coupling
YAW SYSTEM	
Type	Driven by 4 gear motors
Bearings	Slide bearings
TOWER	
Type	Conical tubular steel tower
Tower Height	78 meters
Corrosion protection	Protective paint
Average Lifetime	20 years (Reference – CA letter & Technology Provider Specification)

Voltage generated at the hub and transformer details INOX machines.

- Hub - 440Volt
- Generator output - 690Volt
- Transformer- 690 Volt/33KV

Voltage generated at the hub and transformer details ReGen machines.

- Hub – 440 Volt
- Generator output - 620Volt
- Transformer- 620Volt/33KV

APPENDIX 2: COMMISSIONING DATES OF THE WTGS

WTG ID ref.	Date of Commissioning
NSL Wind Power Company (Kayathar) Pvt. Ltd.	
NSL P1-332	30/03/2014
NSL P1-408	30/03/2014
NSL P1-186	31/03/2014
NSL P1-331	31/03/2014
NSL P1-179A	31/03/2014
NSL P1-179	31/03/2014
NSL P1-310	31/03/2014
NSL P1-1001	31/03/2014
NSL P1-1000	31/03/2014
NSL P1-1028	31/03/2014
NSL P1-95	31/03/2014
NSL P1-930	31/03/2014
NSL P1-229	31/03/2014
NSL P1-929	31/03/2014
NSL P1-276	31/03/2014
NSL P1-1034	31/03/2014
NSL P1-1078/1	31/03/2014
NSL P1-169A	03/10/2015
NSL P1-169B	03/10/2015
NSL P1-252A	03/10/2015
NSL P1-252B	03/10/2015
NSL P1-407	03/10/2015
NSL P1-216	03/10/2015
NSL P1-236	03/10/2015
NSL P1-171,172	31/10/2015
Jath Wind Energy Private Limited	
MVT-10	30/03/2014
MVT-11	30/03/2014
MVT-45	30/03/2014
MVT-61	30/03/2014
MVT-62	30/03/2014
MVT-63	30/03/2014
MVT-05	30/03/2014
MV2T-2	31/03/2014
MV2T-41	31/03/2014
MV2T-28	31/03/2014
MV2T-42	31/03/2014
MV2T-15	31/03/2014
MV2T-17	31/03/2014
MV2T-3	31/03/2014
MV2T-37	31/10/2015

APPENDIX 3: ENERGY METER CALIBRATION DETAILS

Please note that no delay in meter calibration has happened during the current monitoring period. As per registered PD the frequency of meter calibration was "Once in three years".

The details of meter calibration are provided below.

Note: Please note that meter calibration is not under purview of PP. MSEDCL (Maharashtra State Electricity Distribution Company Limited) is the sole authority to conduct the meter calibration and as per CEA order dated 17-March-2006; It is evident that "all the meters shall be tested once in five years." It is to note that during this monitoring period calibrated meter replacement occurred for Feeder 03 Check meter and Feeder 04 Main and Check meter on 01-May-2022, the replacement/calibration of meters is solely the responsibility of state electricity authority i.e., Maharashtra State Electricity Distribution Company Limited.

For NSL Wind Power Company (Kayathar) Pvt. Ltd.:

Metering Points	Meter Details				Previous Calibration date	Due Date of Last calibration	Recent Calibration date	Due Date of Calibration
	Serial no	Make	Type	Accuracy class				
FEEDER No. 5	Main meter – HT01131245	WALLABY	MK6E	0.2s	20/09/2019	19/09/2022	03/02/2022	02/02/2025
	Check meter – HT01131246	WALLABY	MK6E	0.2s	20/09/2019	19/09/2022	03/02/2022	02/02/2025
FEEDER No.6	Main meter – HT01131248	WALLABY	MK6E	0.2s	20/09/2019	19/09/2022	03/02/2022	02/02/2025
	Check meter – HT01131249	WALLABY	MK6E	0.2s	20/09/2019	19/09/2022	03/02/2022	02/02/2025

For Jath Wind Energy Private Limited:									
Metering Points	Meter Details					Due Date of Last calibration	Recent Date of Calibration	Replacement/ Installation/Calibration Date	Due date
	Serial no	Make	Type	Accuracy class	Previous Date of Calibration				
FEEDER No. 3	Main meter – HT01140155	WALLABY	MK6E	0.2s	20/09/2019	19/09/2022	03/02/2022	Not Applicable	02/02/2025
	Old Check meter – HT01140156	WALLABY	MK6E	0.2s	20/09/2019	19/09/2022	03/02/2022	Meter has been replaced on 01/05/2022	NA Since meter has been replaced
	New Check meter – 02874789	Elster	A1800	0.2s	NA Since meter has been replaced on 01/05/2022	Not Applicable	NA Since meter has been replaced on 01/05/2022	01/05/2022	30/04/2025
FEEDER No. 4	Old Main meter – HT01140157	WALLABY	MK6E	0.2s	20/09/2019	19/09/2022	03/02/2022	Meter has been replaced on 01/05/2022	NA Since meter has been replaced
	Old Check meter – HT01140158	WALLABY	MK6E	0.2s	20/09/2019	19/09/2022	03/02/2022		
	New Main Meter - 02862952	Elster	A1800	0.2s	NA Since meter has been replaced on 01/05/2022	Not Applicable	NA Since meter has been replaced on 01/05/2022	01/05/2022	30/04/2025
	New Check Meter - 02862957	Elster	A1800	0.2s					

APPENDIX 4: BREAKDOWN DETAILS

Site	Start Date	End Date	Total no of Days	No. Of WTGs	Hours In a day	Total Hours for all the WTGs Ex-Ante	Total Production Hours	Total Breakdown Hours	Lull Hours
Jath	01-01-2023	29-03-2024	454	15	24	163440	157695.24	5744.76	0.00
Kayathar	01-01-2023	29-03-2024	454	25	24	272400	227587.82	14833.07	29979.91
Total						435840	385283.06	20577.83	29979.91
Percentage						100%	88.40%	4.72%	6.88%