



PROJECT CONCEPT NOTE

CARBON OFFSET UNIT (COU) PROJECT



Title under UCR:

NSL Satara Wind Project in Maharashtra India

Version 01

Date 15/05/2025

First COU Issuance Period: 06 years 09 months 26 days

Date: 06/03/2024 to 31/12/2030



Project Concept Note (PCN) CARBON OFFSET UNIT (CoU) PROJECT

BASIC INFORMATION

Title of the project activity	NSL Satara Wind Project in Maharashtra India
Scale of the project activity	Project
Completion date of the PCN	15/05/2025
Project participants	M/s NSL Wind Power Company (Satara) Pvt. Ltd.
Host Party	India
Applied methodologies and standardized baselines	<p>Applied Baseline Methodology: ACM0002: “Grid-connected electricity generation from renewable sources”, version 16.0.0¹ (Large-scale Consolidated Methodology)</p> <p>Standardized Methodology: Not Applicable.</p>
Sectoral scopes	01 Energy industries (Renewable/Non-Renewable Sources)
Estimated amount of total GHG emission reductions	<p>To be estimated during verification [An ex-ante estimate is 47,304 COUs per year]</p>

¹ This project is a VCS registered project with CDM Methodology version 16, hence same is followed under UCR. Further details explained under the section B.6.

SECTION A. Description of project activity

A.1. Purpose and general description of Carbon offset Unit (CoU) project activity >>

The project titled “**NSL Satara Wind Project in Maharashtra India**” is a grid connected operational wind power project located in Village Mann, Taluka Mann in the district of Satara in the state of Maharashtra, India. The project is an operational activity with continuous reduction of GHG under Voluntary Standard; currently being applied under “Universal Carbon Registry” (UCR).

Purpose of the project activity:

The project activity is developed and operated by “NSL Wind Power Company (Satara) Pvt. Ltd.” (part of NSL Group); hereinafter called as project proponent or PP, engaged in the capacity of an Independent Power Producer (IPP) focusing on developing green power projects in India. The project activity is defined as the installation and operation of total 20 Wind Turbine Generators (WTGs) having individual capacity of 1.5 MW; manufactured and supplied by ReGen Power, model V87. Thus, the total aggregated installed capacity is 30 MW, is operational in Village Mann, Taluka Man in the district of Satara in the state of Maharashtra, India

The project activity harnesses kinetic energy of wind (renewable source) to generate electricity. It is capable to generate around 52,560 MWh of annualized average green electricity, which is estimated based on an operational utilization factor of 20% with efficient utilization of the available wind energy through adoption of an efficient and modern technology. The power generated by this project activity has been supplied to Maharashtra state electricity grid, which is a part of Indian Grid system. Thus, the project activity contributes to emission reductions which would have otherwise caused due to the consumption of grid electricity which is predominantly fossil fuel based. Also, the project activity helps reducing the demand-supply gap in the state and also helps in contributing to the sustainable development attributes in the project region.

The details along with commissioning period are as follows:

Capacity (MW)	Details (Nos., Type & Make)	Commissioning Date
30	20 WTGs @1.5 MW, ReGen V87 model	06 March 2014 The first WTG has been commissioned on 06 March 2014 which is start date of operation the project activity. The project activity has been fully commissioned & running successfully. As on 31 March 2014, the project participant has completed commissioning of all 20 WECs.

The project is a green field project activity harnessing clean energy from wind. The project activity replaces anthropogenic emissions of greenhouse gases (GHGs) from the atmosphere, by displacing the equivalent amount of electricity generation through the operation of existing fuel mix in the grid comprising mainly fossil fuel-based power plants.

The power generated by the operation of wind turbines is emission free. In the absence of the project activity the equivalent amount of electricity would have been generated from the connected/ new power plants to the NEWNE grid, which are/will be predominantly based on fossil fuels. As the project activity is a green field facility, the baseline scenario is the same as the conditions existing prior to the project initiation. Please refer to Section 2.4 (Baseline Scenario)

Hence, project activity is displacing the estimated annual net electricity generation i.e., 52,560 MWh from the grid, which otherwise would have been generated from fossil fuel based thermal power plant and exported to the national grid. The project activity doesn't involve any GHG emission sources. The estimated annual average CO₂e emission reduction by the project activity is expected to be 47,304 tCO₂e; whereas actual emission reduction achieved during the first CoU period shall be submitted as a part of first monitoring and verification.

Since the project activity will generate electricity through wind energy, a clean renewable energy source it will not cause any negative impact on the environment and thereby contributes to climate change mitigation efforts.

A.2 Do no harm or Impact test of the project activity>>

There are social, environmental, economic and technological benefits which contribute to sustainable development. Ministry of Environment and Forests, has stipulated economic, social, Environment and technological well-being as the four indicators of sustainable development. The project contributes to sustainable development using the following ways:

1. Social benefits:

The project helped in generating employment opportunities during the construction and operation phases. There are local people who are currently employed under the project. The project activity has led to development in infrastructure in the region like development of roads and also promotes business with improved power generation.

2. Environmental benefits:

The project is a clean technology investment in the region, which would not have been taken place in the absence of the carbon benefits, being availed by the project activity. The project activity also helps reducing the demand supply gap in the state.

By nature, the wind energy does not emit toxic substances or contaminants into the air as compared to the project baseline being established (i.e. Grid), which can be very damaging to the environment and to human beings. Toxic substances can acidify land and water ecosystems, and corrode buildings. Air contaminants can trigger heart disease, cancer and respiratory diseases like asthma. It is a very clean energy source, which does not release any pollution or produce any waste during operation. Thus, wind project has zero negative impacts, while adding many environmental benefits.

3. Economic benefits:

Wind energy projects provide many economic benefits to neighbouring communities: jobs, a new source of revenue for farmers and ranchers in the form of land lease payments, and an increased local tax base. Wind projects can also attract tourists who want to see wind farms in person. Locally owned community wind projects create even more of an economic opportunity for those involved. The following sections describe some of the potential economic impacts of wind development.

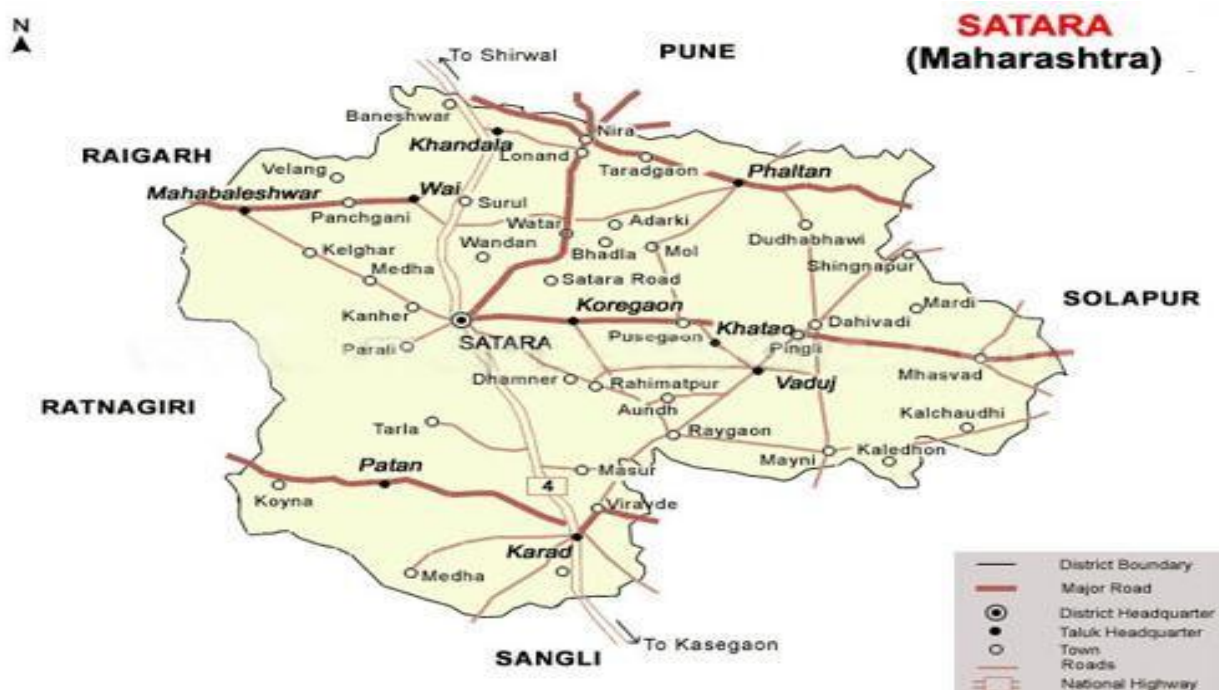
4. Technical benefits:

Project being a wind energy projects the technology itself is a clean and green; it has helped promoting clean technology drive in the state and also contributing to the national clean energy and thus addressing the concern of energy security in the country.

A.3. Location of project activity >>

The project sites are located at in the Mann village, in the district Satara, state of Maharashtra.

The representative location map is included below:



The details of geo-coordinated are provided below:

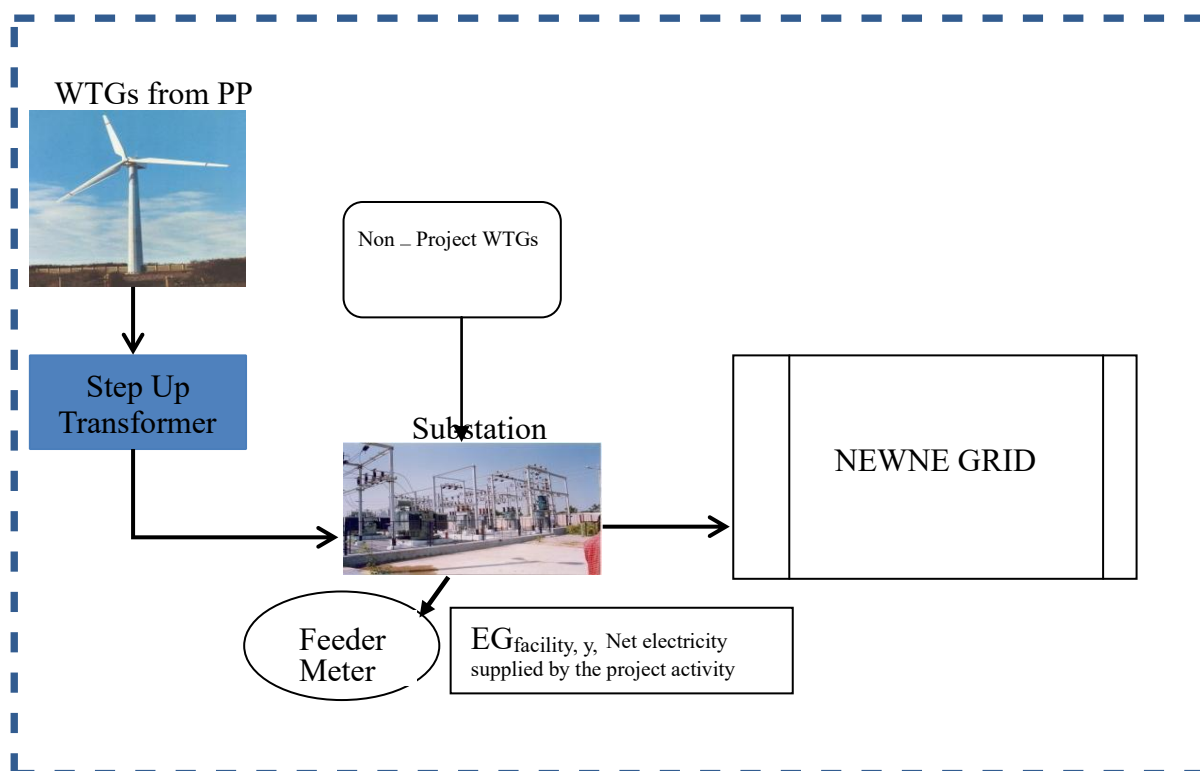
S. No.	WTG Ref. No.	Date of Commissioning	Geo-Coordinates			
			UTM (Universal Transverse Mercator) format		DD-MM-SS (Degree/minutes/Seconds) format	
			Easting(m)	Northing (m)	Latitude (N)	Longitude (E)
1.	NSL-1	06/03/2014	469336	1934816	17°29 ' 57.52''	74° 42 ' 40.12''
2.	NSL-2		469066	1934960	17° 30 ' 2.19''	74° 42 ' 30.96''
3.	NSL-10		467591	1935712	17° 30 ' 26.58''	74° 41 ' 40.90''
4.	NSL-11		467555	1935467	17° 30 ' 18.61''	74° 41 ' 39.69''
5.	NSL-12		467395	1935210	17° 30 ' 10.24''	74° 41 ' 34.28''
6.	NSL-13		467477	1935008	17° 30 ' 3.67''	74° 41 ' 37.07''
7.	NSL-14		467616	1934769	17° 29 ' 55.90''	74° 41 ' 41.80''
8.	NSL-15		467758	1934607	17° 29 ' 50.64''	74° 41 ' 46.62''
9.	NSL-3	30/03/2014	468573	1934832	17° 29 ' 58.01''	74° 42 ' 14.25''
10.	NSL-6		468893	1934421	17° 29 ' 44.64''	74° 42 ' 25.13''
11.	NSL-7		468559	1934585	17° 29 ' 49.97''	74° 42 ' 13.79''
12.	NSL-20		466692	1936734	17° 30 ' 59.79''	74° 41 ' 10.36''
13.	NSL-22		466784	1937215	17° 31 ' 15.45''	74° 41 ' 13.45''
14.	NSL-17	31/03/2014	467652	1937233	17° 31 ' 16.08''	74° 41 ' 42.89''
15.	NSL-23		466388	1937239	17° 31 ' 16.21''	74° 41 ' 0.02''
16.	NSL-26		465839	1937687	17° 31 ' 30.76''	74° 40 ' 41.37''
17.	NSL-28		465767	1938105	17° 31 ' 44.36''	74° 40 ' 38.91''
18.	NSL-34		464907	1938830	17° 32 ' 7.90''	74° 40 ' 9.7''
19.	NSL-36		464416	1939096	17° 32 ' 16.53''	74° 39 ' 53.02''
20.	NSL-37		464263	1939245	17° 32 ' 21.37''	74° 39 ' 47.83''

A.4. Technologies/measures >>

The project activity employs state-of-art horizontal axis wind turbines. The WTGs comprising the project activity generates clean power which is then exported to the nearest receiving station of NEWNW grid at Satara. The WTGs are grid connected and houses the metering, switchgear and other protection equipment. Representation of the same is provided below.

Technical details:

Single Line Diagram of the project:



Further Technical Specification details given under the appendix 1.

A.5. Parties and project participants >>

Party (Host)	Participants
India	<p><u>Project Developer/Proponent:</u> NSL Wind Power Company (Satara) Private Limited</p> <p><u>Authorized Representative:</u> NSL Renewable Power Private Limited</p> <p>Contact details: Mr. Rajnikant. A rajnikant.a@nslpower.com Address: 8 - 2-684/2/A, 4th Floor, Road.No.12, Banjara Hills, Hyderabad - 500034, Telangana, India</p>

A.6. Baseline Emissions>>

The baseline scenario identified at the PCN stage of the project activity is:

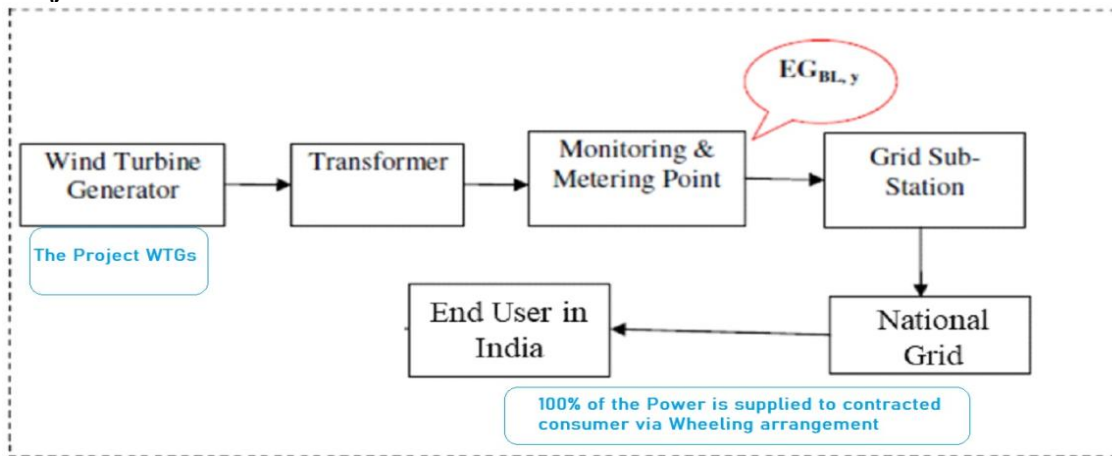
- Grid

In the absence of the project activity, the equivalent amount of electricity would have been generated from fossil fuel-based power plants and exported to the regional grid as national grid is predominantly sourcing from fossil fuel-based power plants. Thus, the project activity contributes to emission reductions which would have otherwise caused due to the consumption of grid electricity which is predominantly fossil fuel based.

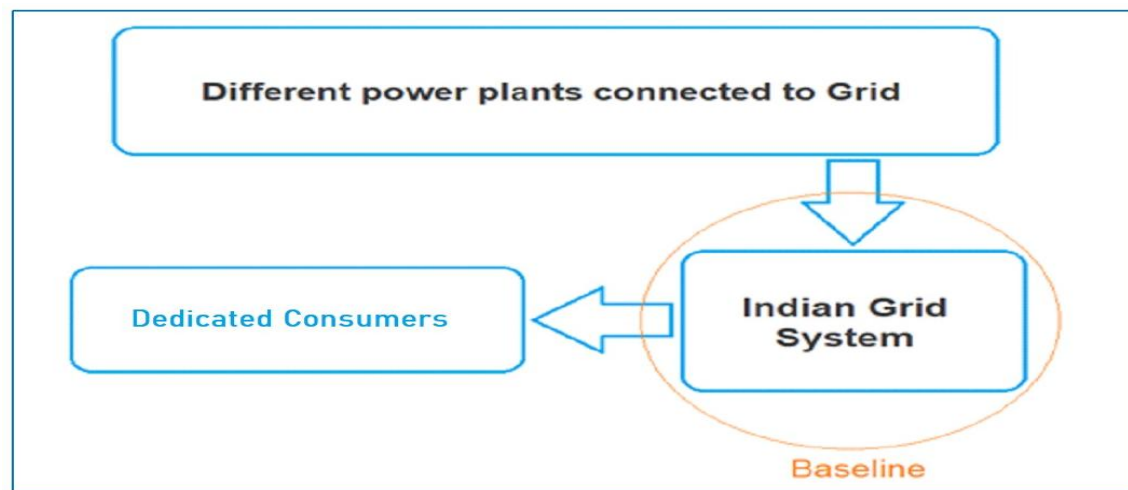
Hence, baseline scenario of the project activity is the grid-based electricity system, which is also the pre-project scenario.

Schematic diagram showing the baseline scenario:

Project Scenario:



Baseline Scenario:



A.7. Debundling>>

This project activity is not a debundled component of a project activity.

SECTION B. Application of methodologies and standardized baselines

B.1. References to methodologies and standardized baselines >>

SECTORAL SCOPE:

01, Energy industries (Renewable/Non-renewable sources)

TYPE:

I - Renewable Energy Projects

CATEGORY:

ACM0002, version 16

Note: The current available version of the methodology is version 22.0; however, PP had applied the version 16 of the methodology as the project is a VCS registered project under the VCS ID 1519 with the version 16 of the applied methodology. Hence, for UCR registration the same version (i.e. version 16.0) of the methodology has been considered for emission reduction calculation which is in consistency with VCS registration of the project.

B.2. Applicability of methodologies and standardized baselines >>

The project activity involves generation of grid connected electricity from the operation of a new wind power project. The project activity has installed capacity of 30 MW which will qualify for a project activity under Type-I of the Large-scale Consolidated Methodology. The project status is corresponding to the methodology ACM0002, version 16 and applicability of methodology is discussed below:

Applicability Criterion	Project Case
Para.03 of ACM0002, version 16.0: This methodology is applicable to grid-connected renewable power generation project activities that: (a) Install a Greenfield plant); (b) Involve a capacity addition to (an) existing plants; (c) Involve a retrofit of (an) existing operating plant(s)/units; or (d) Involve a rehabilitation of (an) existing plant(s)/unit(s); or (e) Involve a replacement of (an) existing plant(s)/units.	The project activity is the installation of a new Grid connected renewable (wind) power project activity at a site where no renewable power plant was operated prior to the implementation of the project activity (greenfield plant); Therefore, the project activity applicable under this methodology. Hence, the criterion is satisfied as per point (a)
Para.04 of ACM0002, version 16.0: The methodology is applicable under the following conditions: (a) The project activity may include renewable energy power plant/unit of one of the following types: hydro power plant/unit	<ul style="list-style-type: none">• The project is installing a wind power plant. Hence the criterion is satisfied as per Point (a) of Para 04 of ACM0002, version 16.0.• The project is not a capacity

Applicability Criterion	Project Case
<p>with or without a run-of-river reservoir, wind power plant/unit, geothermal power plant/unit, solar power plant/unit, wave power plant/unit or tidal power plant/unit;</p> <p>(b) In the case of capacity additions, retrofits or replacements (except for wind, solar, wave or tidal power capacity addition projects the existing plant started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion or retrofit of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity.</p>	<p>additions, retrofits or replacements. Hence this criterion Point (b) of Para 04 of ACM0002, version 16.0 is not applicable.</p>
<p>Para.05 of ACM0002, version 16.0: In case of hydro power plants: One of the following conditions must apply:</p> <p>a) The project activity is implemented in an existing single or multiple reservoirs, with no change in the volume of any of reservoirs; or</p> <p>b) The project activity is implemented in an existing single or multiple reservoirs, where the volume of any of reservoirs is increased and the power density of each reservoir, as per the definitions given in the project emissions section, is greater than 4 W/m²; or</p> <p>c) The project activity results in new single or multiple reservoirs and the power density Calculated using equation (3), is greater than 4 W/m² or</p> <p>d) The project activity is an integrated hydro power project involving multiple reservoirs, where the power density for any of the reservoirs, calculated using equation (3), is lower than or equal to 4 W/m², all of the following conditions shall apply:</p> <p>I. The power density calculated using the total installed capacity of the integrated project, as per equation (4) is greater than 4 W/m²;</p>	<p>The project is a wind power project; hence none of the conditions discussed under Para.05 of ACM0002, version 16.0 are applicable for the project activity.</p>

Applicability Criterion	Project Case
<p>II. Water flow between reservoirs is not used by any other hydropower unit which is not a part of the project activity.</p> <p>III. Installed capacity of the power plant(s) with power density lower than or equal to 4 W/m² shall be:</p> <ul style="list-style-type: none"> a) Lower than or equal to 15 MW; and b) Less than 10 per cent of the total installed capacity of integrated hydro power project. 	
<p>Para.06, 07. 08 of ACM0002, version 16.0: Para 06: In the case of integrated hydro power projects, project participant shall: Para 07: Demonstrate that water flow from upstream power plants/units spill directly to the downstream reservoir and that collectively constitute to the generation capacity of the integrated hydro power project; or</p> <p>Para 08: Provide an analysis of the water balance covering the water fed to power units, with all possible combinations of reservoirs and without the construction of reservoirs. The purpose of water balance is to demonstrate the requirement of specific combination of reservoirs constructed under CDM project activity for the optimization of power output. This demonstration has to be carried out in the specific scenario of water availability in different seasons to optimize the water flow at the inlet of power units. Therefore, this water balance will take into account seasonal flows from river, tributaries (if any), and rainfall for minimum five years prior to implementation of CDM project activity.</p>	<p>The project is a wind power project, hence none of the conditions discussed under Para.06, 07 & 08 of ACM0002, version 16.0 is not applicable for the project activity.</p>
<p>Para.09 of ACM0002, version 16.0: The methodology is not applicable to:</p> <ul style="list-style-type: none"> a) Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site; b) Biomass fired power plants. 	<p>The project is a wind power project, hence none of the conditions discussed under Para.09 of ACM0002, version 16.0 is applicable for the project activity.</p>
<p>Para.10 of ACM0002, version 16.0: In the case of retrofits, rehabilitations, replacements, or capacity additions, this methodology is only applicable if the most plausible baseline scenario, as a result of the identification of baseline scenario, is “the continuation of the current situation, i.e. to use the power generation equipment that was already in use prior to the implementation of the project</p>	<p>The project is not of retrofits, rehabilitations, replacements, or capacity additions. Hence the condition discussed under Para.10 of ACM0002, version 16.0 is not applicable for the project activity.</p>

Applicability Criterion	Project Case
activity and undertaking business as usual maintenance”	

Conclusions: The project activity was a Greenfield wind power project of 30 MW when it was commissioned, which is greater than 15 MW. The project proposed to export the power generated to the Maharashtra state electricity grid. Thus, methodology is applicable.

B.3. Applicability of double counting emission reductions >>

There is no double accounting of emission reductions in the project activity due to the following reasons:

- Project is uniquely identifiable based on its location coordinates,
- Project has dedicated commissioning certificate and connection point,
- Project is associated with energy meters which are dedicated to the generation/feeding point with the grid.

B.4. Project boundary, sources and greenhouse gases (GHGs)>>

As per applicable methodology ACM0002, version 16.0, Para 21: “*The spatial extent of the project boundary includes the project power plant and all power plants connected physically to the electricity system that the project power plant is connected to.*”

Therefore, the project boundary includes all the 20 numbers of WTGs along with the WTGs of the other project participant connected to the sub-station, which is further connected to the network of the NEWNE grid, i.e. the project boundary also includes the NEWNE grid. Thus, the project boundary further includes all the power plants physically connected to the NEWNE grid.

Source		Gas	Included?	Justification/Explanation
Baseline	Grid connected fossil fuel-based electricity generation	CO ₂	Yes	Main emission source
		CH ₄	No	Minor emission source
		N ₂ O	No	Minor emission source
		Other	No	No other GHG emissions were emitted from the project
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
		Other	No	No other emissions are emitted from the project

B.5. Establishment and description of baseline scenario >>

This section provides details of emission displacement rates/coefficients/factors established by the applicable methodology selected for the project.

As the project activity is a new grid connected renewable powers project, hence the baseline scenario for the project activity according to ACM0002, Version 16.0; Para 23 is:

“If the project activity is the installation of a Greenfield power plant, the baseline scenario is electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the “Tool to calculate the emission factor for an electricity system”.

In the absence of the project activity, the equivalent amount of power would have been generated by the operation of grid-connected fossil fuel-based power plants and by the addition of new fossil fuel-based generation sources into the grid. The power produced at grid from the other conventional sources which are predominantly fossil fuel based. Hence, the baseline for the project activity is the equivalent amount of power produced at the Indian grid.

A "grid emission factor" refers to a CO₂ emission factor (tCO₂/MWh) which will be associated with each unit of electricity provided by an electricity system. The UCR recommends an emission factor of 0.9 tCO₂/MWh for the 2014- 2020 years as a fairly conservative estimate for Indian projects not previously verified under any GHG program. Also, for the vintage 2021-22, the combined margin emission factor calculated from CEA database in India results into higher emission than the default value. Hence, the same emission factor has been considered to calculate the emission reduction under conservative approach.

Net GHG Emission Reductions and Removals

$$\text{Thus, } ER_y = BE_y - PE_y - LE_y$$

Where:

ER_y = Emission reductions in year y (tCO₂/y)

BE_y = Baseline Emissions in year y (t CO₂/y)

PE_y = Project emissions in year y (tCO₂/y)

LE_y = Leakage emissions in year y (tCO₂/y)

Baseline Emissions

Baseline emissions include only CO₂ emissions from electricity generation in 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:

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

Where:

BE_y	=	Baseline emissions in year y (t CO ₂)
$EG_{BL,y}$	=	Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the UCR project activity in year y (MWh)
$EF_{grid,y}$	=	UCR recommended emission factor of 0.90 tCO ₂ /MWh has been considered. (Reference: General Project Eligibility Criteria and Guidance, UCR Standard, page 4)

Project Emissions

As per ACM0002, version 16, only emission associated with the fossil fuel combustion, emission from operation of geo-thermal power plants due to release of non-condensable gases, emission from water reservoir of wind should be accounted for the project emission. Since the project activity is a wind power project, project emission for renewable energy plant is nil.

Thus, $PE_y = 0$.

Leakage

As per ACM0002, version 16, 'If the energy generating equipment is transferred from another activity, leakage is to be considered.' In the project activity, there is no transfer of energy generating equipment and therefore the leakage from the project activity is considered as zero.

Hence, $LE_y = 0$

The actual emission reduction achieved during the first CoU period shall be submitted as a part of first monitoring and verification. However, for the purpose of an ex-ante estimation, following calculation has been submitted:

Estimated annual baseline emission reductions (BE_y):
 $= 52,560 \text{ MWh/year} \times 0.9 \text{ tCO}_2/\text{MWh}$
 $= 47,304 \text{ tCO}_2/\text{year}$ (i.e., 47,304 CoUs/year)

B.6. Prior History>>

The first WTG under the project was commissioned on 6th March 2014 and the project is under continuous operation since then. The entire project was fully commissioned as on 31st March 2014.

The project was mainly invested based on carbon revenue; hence the project was initially submitted for registration under the Clean Development Mechanism (CDM); however, it was not registered. Subsequently, it was submitted for registration under the Verified Carbon Standard (VCS) mechanism and got registered as ([VCS ID 1519](#)) to secure position under voluntary platform. The crediting period of the project under VCS was started on 6th March 2014 and ends on 5th March 2024. The project has already claimed carbon credits under VCS for the period “6th March 2014 to 5th Mar 2024”. Thereafter, the project was considered under VCS mechanism till 5th March 2024. However, the project has not been further under VCS beyond 5th March 2024.

In continuation with the same, the UCR project has been considered crediting of GHG emission reductions from 6th March 2024. Hence, the first monitoring period considered under UCR is from 6th March 2024, thus there is no concern of double accounting of emission reductions.

B.7. Changes to start date of crediting period >>

Not applicable, this is the first submission of the PCN under UCR for initial registration. The start date of crediting under UCR is considered as 6th March 2024 as explained under the section B.6. However, if any change is considered the same will be addressed during the first verification.

B.8. Permanent changes from PCN monitoring plan, applied methodology or applied standardized baseline >>

Not applicable.

B.9. Monitoring period number and duration>>

Number	: 01 (First Monitoring Period)
Duration	: 06 Years, 09 months, 26 days 06/03/2024 to 31/12/2030 (inclusive of both dates)

B.8. Monitoring plan>>

Data and Parameters available at validation (ex-ante values):

Data / Parameter	UCR recommended emission factor
Data unit	tCO ₂ /MWh
Description	A "grid emission factor" refers to a CO ₂ emission factor (tCO ₂ /MWh) which will be associated with each unit of electricity provided by an electricity system. The UCR recommends an emission factor of 0.9 tCO ₂ /MWh for the 2014- 2020 years as a fairly conservative estimate for Indian projects not previously verified under any GHG program. Hence, the same emission factor has been considered to calculate the emission reduction under conservative approach.
Source of data	https://a23e347601d72166dcd6-16da518ed3035d35cf0439f1cdf449c9.ssl.cf2.rackcdn.com//Documents/UCRStandardNov2021updatedVer2_301121081557551620.pdf
Value applied	0.90
Measurement methods and procedures	-
Monitoring frequency	Ex-ante fixed parameter
Purpose of Data	For the calculation of Emission Factor of the grid
Additional Comment	The combined margin emission factor as per CEA database (current version 17, Year 2022) results into higher emission factor. Hence for 2021-22 vintage UCR default emission factor remains conservative.

Data and Parameters to be monitored (ex-post monitoring values):

Data / Parameter	EG _{BL,y}
Data unit	MWh / year
Description	Net electricity supplied to the grid by the project activity
Source of data	NSL records / MSEDCL records
Measurement procedures (if any):	<p>For the purpose of a simplified and reliable measurement method, PP has proposed the following procedure for the parameter:</p> <ul style="list-style-type: none">(i) If the JMR/Monthly credit notes etc. generated for the project WTGs provide net export quantity, the same will be directly considered for calculation.(ii) However, if the monthly statement does not directly provide “net electricity” units, then quantity of net electricity supplied to the grid shall be calculated using the parameters reflected in the monthly document, such as Export units, Import units and losses. <p>However, as per the practices observed during the ER accounting under VCS for the project, the monthly accounting procedure (as may be reflected in the monthly statement e.g., JMR and Invoices etc.) includes adjustment of transmission losses both for export and import</p>

	<p>parameters. Thus, PP decides to consider the same given practice for ER calculation, which is conservative.</p> <p>Thus the final formula to be used for net electricity calculation is as follows:</p> <p>Net Electricity = Export – 115% of Import – Transmission Losses (%) * Export.</p>
Measurement Frequency:	Monthly
Value applied:	<p>52,560</p> <p>(This is an annualized average value considered here for an ex-ante estimation only, whereas this is an ex-post parameter hence actual value shall be applied during monitoring and verification)</p>
QA/QC procedures applied:	<p>The quantity of net electricity supplied will be cross-verified from the invoices raised on MSEDCL by the project participant.</p> <p>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.</p>
Purpose of data:	The Data/Parameter is required to calculate the baseline emission.
Any comment:	All the data will be archived till a period of two years from the end of the crediting period.

Appendix 1:

Technical specification of the wind machine:

ReGen Powertech	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