



Verification Report for

Project : 3.75 MW Bundled Wind Power Project by GARL, Gujarat.
UCR Project ID : 374

Name of Verifier	SQAC Certification Pvt. Ltd.
Date of Issue	November 03, 2023
Project Proponent	M/s. Gokul Agro Resources Limited (GARL).
Work carried by	Mr. Santosh Nair
Work reviewed by	Mr. Praful Shinganapurkar

Summary:

SQAC Certification Pvt. Ltd. has performed verification of the “3.75 MW Bundled Wind Power Project by GARL, Gujarat” which generates electrical power using wind energy which is generated from windmills from Abdasa / Kutch & Porbandar districts of Gujarat, there by displacing non-renewable fossil resources resulting to sustainable, economic and environmental development.

The project activity meets the following UN SDG's:



Verification for the period: **01/01/2013 to 31/12/2022** (10 Years 00 Months)

In our opinion, the total GHG emission reductions over the crediting / verification period stated in the Project Concept Note (PCN) / Monitoring Report (MR), submitted to SQAC are found to be correct and in line with the UCR guidelines.



The GHG emission reductions were calculated on the basis of UCR Protocols which draws reference from, UCR Protocol Standard Baseline Emission Factor for Indian Grid, UNFCCC Methodology Category AMS-I.D. Small-scale Methodology Grid connected renewable electricity generation, Ver 18.0 The verification was done remotely by way of video calls / verification, phone calls and submission of documents for verification through emails.

SQAC is able to certify that the emission reductions from the 3.75 MW Bundled Wind Power Project by GARL, Gujarat, India (UCR ID – 374) for the period **01/01/2013 to 31/12/2022 (10 Years 00 Months)** amounts to **50,734 CoUs (50,734 tCO₂eq)**

Detailed Verification Report:

Purpose:

The main purpose of the project activity is the implementation and operation of three (3) wind turbine generators (WTGs) of Suzlon make with each having a capacity of 1250 kWh (total 3.75 MWh installed capacity) by M/s Gokul Agro Resources Limited (GARL, Project Proponent or PP).

WTG ID	Survey No	Village	Taluka/District	State/Country
V05	34/2	Motisindhodi	Abdasa,/ Kutch	Gujarat/India
M16	114p	Kadoli		
ADO-33	289/8P/p1	Ratanpar	Porbandar	

The generated electricity from the WTG's are connected to the state electric utility grids of Gujarat, India. The commissioning date of the first WTG in the bundle is considered as the start date of the project activity and is recorded as 18/07/2006.

The bundled wind power projects are operational activities with continuous reduction of GHGs, currently being applied for voluntary carbon offset units (CoUs) under "Universal Carbon Registry" (UCR). In the absence of the project activity, electricity would have been delivered to the grid by the operation of fossil fuel-based grid-connected power plants and by the addition of new fossil fuel-based generation sources in the grid.

The electricity produced by the project is directly contributing to climate change mitigation by reducing the anthropogenic emissions of greenhouse gases (GHGs, i.e., CO₂) into the atmosphere by displacing an equivalent amount of power at grid. In wind energy-based power generation, the kinetic energy of the wind is being converted to mechanical energy and subsequently to electric energy. The kinetic energy is converted into mechanical energy. The wind blade supplies the mechanical energy to the generator thereby producing electricity.

The project activity has displaced/avoided an estimated annual net electricity generation i.e., 56,377 MWh from the Indian grid system, which otherwise would have been generated by the operation of fossil fuel-based grid-connected power plant. The estimated CO₂ emission reductions by the project activity for this monitored period is 50,734 tCO₂eq,





Scope:

The scope covers verification of emission reductions from the project - 3.75 MW Bundled Wind Power Project by GARL, Gujarat, India (UCR ID – 374).

Criteria:

Verification criteria is as per the requirements of UCR Standard.

Description of project:

The project activity incorporates installation of three (3) numbers of 1250KW WTGs of Suzlon Energy Limited. The project activity is using clean renewable wind energy to produce electricity. The WTGs are connected through substation through 33 KV overhead transmission lines. The applied technology is considered to be one of the most environmentally friendly technologies available as the operation of the wind power plants do not emit any GHGs or any other harmful gases unlike the operation of conventional power plants.

The details along with commissioning period are as follows:

WTG ID	WTG No	Commissioning Date	Survey No	Village	Taluka/District
V05	SEL/1250/05-06/0156	18/07/2006	34/2	Motisindhodi	Abdasa,/ Kutch
M16	SEL/1250/06-07/0224	22/12/2006	114p	Kadoli	
ADO-33	SEL/1250/11-12/2441	09/08/2012	289/8P/p1	Ratanpar	Porbandar






Total GHG emission reductions achieved or net anthropogenic GHG removals by sinks achieved in this monitoring period:

Summary of the Project Activity and ERs Generated for the Monitoring Period	
Start date of this Monitoring Period	01/01/2013
Carbon credits s (CoUs) claimed up to	31/12/2022
Total ERs generated (tCO _{2eq})	50,734 (expressed as CoUs)
Project Emission (tCO _{2eq})	0
Leakage (tCO _{2eq})	0

United Nations Sustainable Development Goals:

The project activity generates electrical power using wind energy, which is generated from windmills, thereby displacing non-renewable fossil resources resulting to sustainable, economic and environmental development. In the absence of the project activity equivalent amount of power generation would have taken place through fossil fuel dominated power generating stations. Thus, the renewable energy generation from project activity will result in reduction of the greenhouse gas emissions. Positive contribution of the project to the following Sustainable Development Goals:

- SDG13: Climate Action
- SDG 7: Affordable and Clean Energy
- SDG 8: Decent Work and Economic Growth

Development Goals	Targeted SDG	Target Indicator (SDG Indicator)
<p>13 CLIMATE ACTION</p>  <p>SDG 13: Climate Action</p>	<p>13.2: Integrate climate change measures into national policies, strategies and planning</p> <p>Target: 50734 tCO₂ avoided during this MR period.</p>	<p>13.2.1: Number of countries that have communicated establishment or operationalization of an integrated policy/ strategy/ plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other)</p>
<p>7 AFFORDABLE AND CLEAN ENERGY</p>  <p>SDG 7: Affordable and Clean Energy</p>	<p>7.2: By 2030, increase substantially the share of renewable energy in the global energy mix</p> <p>Target: 56377 MWh supplied during this MR period from wind energy.</p>	<p>7.2.1: Renewable energy share in the total final energy consumption</p>
<p>8 DECENT WORK AND ECONOMIC GROWTH</p>  <p>SDG 8: Decent Work and Economic Growth</p>	<p>8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value</p> <p>Target: Training, O&M staff</p>	<p>8.5.1: Average hourly earnings of female and male employees, by occupation, age and persons with disabilities</p>

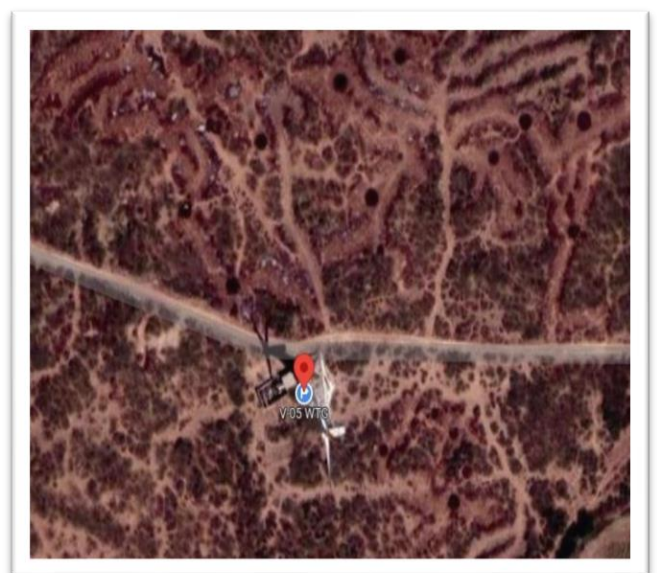
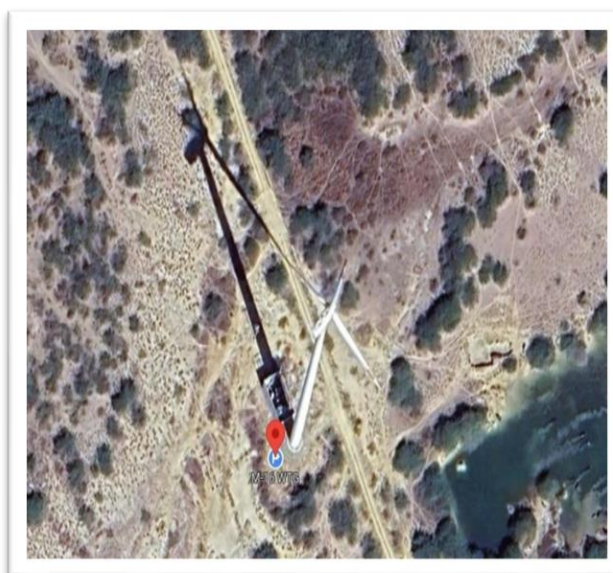
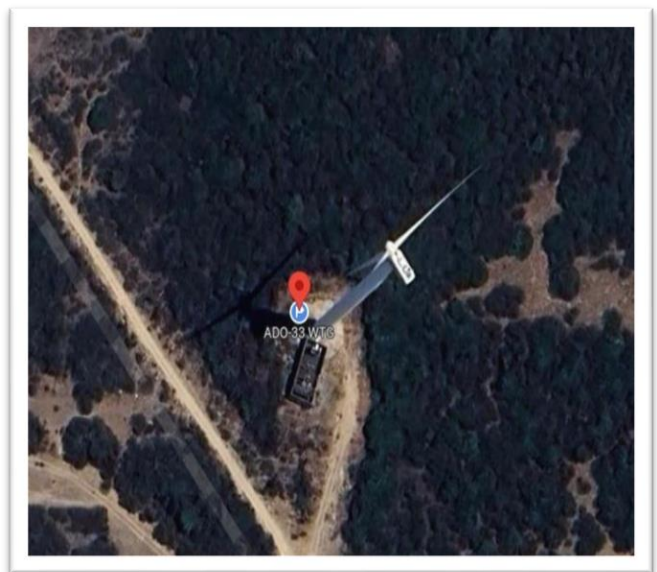


Location of project activity:

Country: India

WTG ID	Survey No	Village	Latitude/Longitude	Taluka/District	State/Country
V05	34/2	Motisindhodi	23°07'42.4"N/ 68°48'42.0"E	Abdasa,/ Kutch	Gujarat/India
M16	114p	Kadoli	23°03'34.5"N/ 68°49'53.1"E		
ADO-33	289/8P/p1	Ratanpar	21°35'29.0"N/ 69°39'27.6"E	Porbandar	

The representative location map is included below:



**Level of Assurance:**

The verification report is based on the information collected through interviews conducted over video calls / phone calls, supporting documents provided during the verification, Project Concept Note (PCN) / Monitoring Report (MR), submitted to SQAC. The verification opinion is assured provided the credibility of all the above.

Verification Methodology:

Review of the following documentation was done by SQAC Verifier, Mr. Santosh Nair, who is experienced in such projects.

- Project Concept Note (PCN)
- Monitoring Report (MR)
- Commissioning Report of all WTG's
- Calibration Certificates
- Joint Meter Readings
- Invoices
- Wheeling Agreement
- Data provided upon request of all the documents of the related projects.

Sampling:

Not applicable

Persons interviewed:

1. Mr. Hemal S. Sonigra – ISO Coordinator : Gokul Agro Resources Limited.
2. Mr. Dharmesh Gadia – Sr. Engineer, Section Leader : Gokul Agro Resources Limited.



Gujarat Energy Development Agency
 Sureplaza II - 2nd Floor, Sayajigunj, Vadodara - 390 005 Gujarat India.
 Ph.: (0265) 2363123, 2362058, 2361409 Fax : 0265-2363120
 E-mail : info@geda.org.in Website : www.geda.org.in

Ref No.: GEDA/PWF/SGWPL-GR&SL/Vanku/ 3189 Date: 14/9/2006

To,
 M/s Gokul Refoils & Solvents Ltd.
 State Highway no. 41,
 Near Sujapur Patia,
 Sidhpur-384 151

Sub: - Commissioning Certificate
 Ref:- Your application dated 17/6/2006 for setting up of 2.50 MW Wind farm at Vanku.

Dear Sir,

Please find enclosed herewith commissioning certificate in duplicate for your 2.50 MW wind farm on private land at Vanku, Ta:-Abdasa, Dist:-Kutch.

Please acknowledge the receipt.

Thanking You

Yours faithfully

(S.B. Bhatt)
 Director

Encl:- As above

C. C.: Mr. G. D. Bulchandani
 Jr. Technical Officer,
 Gujarat Energy Development Agency
 TUNA WIND FARM, At:- Tuna,
 Via:- Adipur, Ta:- Anjar, Dist:-Kutch
 Pin. No. 370 205

for reference and records please.

CERTIFIED TRUE COPY

[Signature]



Gujarat Energy Development Agency
 Sureplaza II - 2nd Floor, Sayajigunj, Vadodara - 390 005 Gujarat India.
 Ph.: (0265) 2363123, 2362058, 2361409 Fax : 0265-2363120
 E-mail : info@geda.org.in Website : www.geda.org.in

Ref No.: GEDA/PWF/SGWPL-GR&SL/Vanku/ 3190 Date: 14/9/2006

CERTIFICATE OF COMMISSIONING

This is to certify that M/s Gokul Refoils & Solvents Ltd, State Highway no. 41, Near Sujapur Patia, Sidhpur-384 151 have commissioned 2.500 MW capacity wind farm on 18/07/2006 and on 07/09/2006 as detailed below at location W-2 & W-3 as shown in micro siting drawing enclosed herewith.

Make of each Wind Turbine Generator (WTG) : SUZLON
 Capacity of each Wind Turbine Generator : 1.250 MW
 No. of Wind Turbine Generator/s : Two
 Total capacity of the Windfarm : 2.500 MW
 Site of installation : Survey no. 39 & 34/2p
 Village Vanku, Ta:-Abdasa,
 Dist:- Kutch
 WTG ID number : SEL/1250/06-07/0156 to 157

This windfarm is connected by 33 kV grid line to 66 kV capacity Vanku site sub-station at Vanku. The Vanku site sub station is connected to GETCO Kothara sub station.

Electricity generation report for the purpose of commissioning of windfarm

Sr. no.	WTG No.	Date	Time (Hrs.)		Meter (kwh)		
			From	To	Initial	Final	Difference
1	SEL/1250/06-06/0156	18.07.2006	13.00	14.00	0197	0247	0050
2	SEL/1250/06-06/0157	07.09.2006	19.00	19.30	0018	0078	0060
			Total:->		0110		

For Gujarat Energy Development Agency
 (S.B. Bhatt)
 DIRECTOR

Enclosed:- Annexure I Copy of approved micro siting drawing

CERTIFIED TRUE COPY

[Signature]



Gujarat Energy Development Agency
 Sureplaza II - 2nd Floor, Sayajigunj, Vadodara - 390 005 Gujarat India.
 Ph.: (0265) 2363123, 2362058, 2361409 Fax : 0265-2363120
 E-mail : info@geda.org.in Website : www.geda.org.in

Ref No.: GEDA/PWF/SGWPL-GR&SL/Kadoli/ 3188 Date: 31/8/2007

CERTIFICATE OF COMMISSIONING

This is to certify that M/s Gokul Refoils & Solvents Ltd, N. H. no. 41, Near Sujapur Patia, Sidhpur- 384151 have commissioned 2.50 MW capacity Wind farm on 22/12/2006 as detailed below at location W-13 & W-14 as shown in micro siting drawing enclosed here with.

Make of each Wind Turbine Generator (WTG) : SUZLON
 Capacity of each Wind Turbine Generator : 1.250 MW
 No. of Wind Turbine Generator/s : Two
 Total capacity of the Windfarm : 2.50 MW
 Site of installation : Survey no. 113/p & 114/p
 Village Kadoli, Ta:-Abdasa,
 Dist:- Kutch
 WTG ID number : SEL/1250/06-07/0224 &
 SEL/1250/06-07/0225

This windfarm is connected by 33 kV grid line to 66 kV capacity Vanku site sub-station at Vanku. The Vanku site sub station is connected to GETCO Kothara sub station.

Electricity generation report for the purpose of commissioning of windfarm

Sr. no.	WTG No.	Date	Time (Hrs.)		Meter (kWh)		
			From	To	Initial	Final	Difference
1	SEL/1250/06-07/0224	22.12.2006	15.45	16.25	013	101	088
2	SEL/1250/06-07/0225	22.12.2006	15.55	16.30	012	170	158
			Total:->		0146		

For Gujarat Energy Development Agency



(J.M. Acharya)
 DIRECTOR

Enclosed:- Annexure I Copy of approved micro siting drawing

CERTIFIED TRUE COPY



Gujarat Energy Development Agency
 (A Government of Gujarat Organisation)

4th Floor, Block No. 11 & 12, Udyogbharan, Sector - 11, Gandhinagar - 382 017, (Gujarat), India
 Ph : (079) 23257251-54 Fax : (079) 23257255/0791 23247097 E-mail: info@geda.org.in Website : www.geda.gujarat.gov.in

Ref:- GEDA/PWF/SGWPL-GRSL/Varvala/12-13/ 3346 Date: 31/8/2012

CERTIFICATE OF COMMISSIONING

This is to certify that M/s. Gokul Refoils & Solvent Limited, State Highway No. - 41, Nr. Sujapur Patia, Sidhpur - 384 151, Dist. Patan, Gujarat, have commissioned 2.50 MW capacity wind farm consisting of 2 (Two) number of new wind turbine generators as per the WTG ID no. and date of commissioning given below and location as shown in Micro siting drawing enclosed herewith.

Make of each Wind Turbine Generator (WTG) : SUZLON
 Capacity of each Wind Turbine Generator : 1250 kW
 No. of Wind Turbine Generator/s : 2 (Two)
 Total Capacity of Windfarm : 2.50 MW
 Site of Installation : Govt. leased land Survey no. 289/8p/1p at Village Ratanpar, Ta & Dist:-Porbandar.
 WTG ID number : SEL/1250/11-12/2441 &
 SEL/1250/11-12/2442

The wind farm is connected by 33 kV grid line to 33/66 kV, 2 x 30 MVA capacity Adodar (Tukda) Wind Farm site sub-station at Adodar (Tukda). The Adodar (Tukda) Wind Farm site sub-station is connected to GETCO's Chhaya substation.

Electricity generation report for the purpose of commissioning of wind farm

Sr. No.	WTG No.	Date	Time (Hrs.)		Meter (kWh)		
			From	To	Initial	Final	Difference
1	SEL/1250/11-12/2441	09.08.2012	19.15	20.30	000	485	485
2	SEL/1250/11-12/2442	10.08.2012	18.45	20.00	000	180	180
			Total:->		665		



(S.B. Patil)
 Dy. DIRECTOR

**M.O.M**

Date: 22/10/2016

MOM held at Vanku 66 KV S/S between SUZLON, GETCO & PGVCL on date 22/10/2016 for calibration of energy meter.

Today on date 22/10/2016, the calibration of energy meter of Main provided at 66 KV / 33 KV, TR 1 & TR 2 at 66 KV Vanku S/S is carried out by J.E. Lab, PGVCL Nakhtrana Division.

Details of meters:**Transformer 1:****Main meter**

Make: Secure Meters Ltd.
Sr. No. GJB00591
Type: E3M051, 3 PHASE, 4 WIRE
(MWH, MVARh, MVAh, MVA)
66 KV / 3/110 / 3, 150/1 A, 50 HZ,
POWER FACTOR -1 TO 1,
Ref. Temp. 27 deg centig.,
1600 Pulse/ Unit, Ib: 1 A, Imax: 2 A,
IEC: 60687,
CL: 0.5 S,
Year: 2005
Lab No. MDVSTP 0601002

Old Seal Details:**Main Meter**

TTB: 1394302-03(KRISHNA)
OPTICAL: 1394301(KRISHNA)
METER BOX: 1393396-97-98-99(KRISHNA)

New Seal Details:**Main Meter**

TTB: 3366707-08(SATYA)
OPTICAL: 3366706(SATYA)
METER BOX: 3366709-10-11-12(SATYA)

TEST RESULT:**Main Meter**

KWH % Error = WPL

Kanji Ram,
Manager-SGSL

V.H. Agarwal
J.E. GETCO

Bhavin Bava
J.E. Lab PGVCL, NAKHATRANA

Details of meters:**Transformer 2:****Main meter**

Make: Secure Meters Ltd.
Sr. No. GJB00592
Type: E3M051, 3 PHASE, 4 WIRE
(MWH, MVARh, MVAh, MVA)
66 KV / 3/110 / 3, 150/1 A, 50 HZ,
POWER FACTOR -1 TO 1,
Ref. Temp. 27 deg centig.,
1600 Pulse/ Unit, Ib: 1 A, Imax: 2 A,
IEC: 60687,
CL: 0.5S,
Year: 2005,
Lab No. MDVSTP 0601003

Old Seal Details:**Main meter**

TTB: 1394305-06(KRISHNA)
OPTICAL: 1394304(KRISHNA)
METER BOX: 1394307-08-09-10(KRISHNA)

New Seal Details:**Main Meter**

TTB: 3366714-15(SATYA)
OPTICAL: 3366713(SATYA)
METER BOX: 3366716-17-18-19(SATYA)

TEST RESULT:**Main Meter**

KWH % Error = WPL

Kanji Ram,

V.H. Agarwal

Bhavin Bava

Location: - 66kv Adodar SS (Suzlon SS). Taluka : Porbandar.
Dt. of MOM: - 29.01.2019
Subject: - Testing of ABT meter.

- Following persons remained present during the MOM.
- 1) Mr. D.D.Thumar (JE, Telecom, GETCO Gondal)
 - 2) Mr. V.A.Vyas (Meter Tester, City lab PGVCL Porbandar)
 - 3) Mr. C.B.Lakhani (JE, Colony GETCO Porbandar)
 - 4) Mr. B.P. Bheda (Kuchhadi Area BOP Head, Suzlon)

As per request of M/s Adodar (Suzlon SS) for testing of ABT meter of 66 KV Adodar - Chhaya line no.01 & 02 at 66 Kv Adodar substation ABT Meter is tested with MTE kit. ABT meter of 66 KV Adodar -Chhaya line no.01 (Tested on Dtd. 28.01.19) & no. 02 (Tested on Dtd. 29.01.19) is found OK in error test. Details of meters & seals are as under.

Location of ABT meter: - 66 KV Adodar-Chhaya line no.01 & 02.

Other Details

Sr.No.	Description	66kv Line no.01 ABT meter	66kv Line no.02 ABT Meter
1	Make	L & T	L & T
2	Serial no.	GJ-2483-A	GJ-2484-A
3	Model	ER300P	ER300P
4	Accuracy Class	0.2S for Active, 0.5S reactive	0.2S for Active, 0.5S reactive
5	CT Ratio	-/1 Amp	-/1 Amp
6	Year of Manufacture	FEB 2013	FEB 2013
7	Seal on meter TC- left side	4014515 Intech	4014523 Intech
8	Seal on meter TC- right side	4014516 Intech	4014524 Intech
9	New Seal on meter TC- left side	1237304 Krishna	1237306 Krishna
10	New Seal on meter TC- right side	1237305 Krishna	1237307 Krishna

Old seals of meter TC details verified, seals removed and scrapped.

1.	Mr. D.D.Thumar (JE, Telecom, GETCO Gondal)	
2.	Mr. V.A.Vyas (Meter Tester, City lab PGVCL Porbandar)	
3.	Mrs. C.B. Lakhani (JE, Colony GETCO Porbandar)	
4.	Mr. B.P. Bheda (Kuchhadi Area BOP Head, Suzlon)	

TEST CERTIFICATE

Issued by:

YADAV MEASUREMENTS PRIVATE LIMITED

Plot no. F-373-375 NICO Bhamashah Industrial Area,

Kaladwas, Udaipur-Rajasthan-313003, INDIA

Tel: 0091-294-2650127,28, Fax: 0091-294-2650129

Email: yadav.measurements@yadavmeasurements.com

website: www.yadavmeasurements.com

CIN number: U31509RJ2003PTC018450



Certificate No.: YMPL/336385/131102

ULR-TC65942200000181F

Page 1 of 6

1	Name and address of customer	Suzlon Global Services Limited, Village- Adodar, Near Rangbai Temple Distt-Porbandar, Gujarat-360575					
2	Reference	Service request form number	2021-22840				
		Date of receipt of EUT	27-Jan-2022				
		Condition of EUT on receipt	Satisfactory				
3	Test Certificate Details	Date of issue	28-Jan-2022				
		Date of Testing	27-Jan-2022				
4	Location of Testing	66KV Adodar Sub Station					
5	Name of Feeder	66KV Chhaya-Adodar Line-1					
6	Description of equipment under testing	Name	Electronic Trivector Meter				
		Sr.No.	GJ-2483-A				
		Make	Larsen & Toubro Limited				
		Type	3Phase 4Wire				
		Model	ER300P				
		Voltage	3x63.5 V(P-N)				
		Current	Ib: 1 A Imax: 1.2 A				
		Current Ratio	-/1A				
		Class	0.2S For Active 0.5S For Reactive				
		Meter constant	50 Impulse/Unit				
		Unit	Wh, VAh				
		Frequency	50Hz				
		Pre Test Measurement		51464.9 Wh	88894.3 VAh (L)	40313.4 VAh (H)	
		Post Measurement		51491.8 Wh	88702.3 VAh (L)	40316.9 VAh (H)	
7	Environmental conditions of measurements	Temperature	25.9-26.9°C				
		Relative Humidity	48-52%				
8	Witnessed by	Mr. Kanji Ram , Manager, Suzlon Global Services Limited					
		Mr. Nagajan Keshvala, Engineer, Samarth Engg., Adodar SS					



Date: 20/01/2018

MOM held at Vanku 66 KV S/S between SUZLON, GETCO, PGVCL, GEDA on date 20/01/2018 for calibration of energy meter.

Today on date 20/01/2018, the calibration of energy meter of Main provided at 66 KV / 33 KV, TR 1 & TR 2 at 66 KV Vanku S/S is carried out by J.E. Lab, PGVCL, Nakhatrana Division.

Details of meters:

Transformer 1:

Main meter
Make: Secure Meters Ltd.
Sr. No. GJB00591
Type: E3M051, 3 PHASE, 4 WIRE
(MWH, MVARh, MVAh, MVA)
66 KV / 3/110 / 3, 150/1 A, 50 HZ,
POWER FACTOR -1 TO 1,
Ref. Temp. 27 deg centig.,
1600 Pulse/ Unit, Ib: 1 A, Imax: 2 A,
IEC: 60687,
CL: 0.5 S,
Year: 2005
Lab No. MDVSTP 0601002

Old Seal Details:

Main Meter
TTB: 3366707-08(SATYA)
OPTICAL: 3366706(SATYA)
METER BOX: 3366709-10-11-12(SATYA)

New Seal Details:

Main Meter
TTB: 3762913-14(INTECH)
OPTICAL: 3762912(INTECH)
METER BOX: 3762915-16-17-18(INTECH)

TEST RESULT:

Main Meter
KWH % Error = WPL.

Kanji Ram, Manager-SGSL
Rajendra Gohil J.E. GETCO
Ravi Nair GEDA
Bhavin Bava J.E. Lab PGVCL, NAKHATRANA
(Post Jacha)

Details of meters:

Transformer 2:

Main meter
Make: Secure Meters Ltd.
Sr. No. GJB00592
Type: E3M051, 3 PHASE, 4 WIRE
(MWH, MVARh, MVAh, MVA)
66 KV / 3/110 / 3, 150/1 A, 50 HZ,
POWER FACTOR -1 TO 1,
Ref. Temp. 27 deg centig.,
1600 Pulse/ Unit, Ib: 1 A, Imax: 2 A,
IEC: 60687,
CL: 0.5 S,
Year: 2005
Lab No. MDVSTP 0601003

Old Seal Details:

Main meter
TTB: 3366714-15(SATYA)
OPTICAL: 3366713(SATYA)
METER BOX: 3366716-17-18-19(SATYA)


New Seal Details:

Main Meter
TTB: 3762920-21(INTECH)
OPTICAL: 3762919(INTECH)
METER BOX: 3762922-23-24-25(INTECH)

TEST RESULT:

Main Meter
KWH % Error = WPL.

Kanji Ram, Manager-SGSL
Rajendra Gohil J.E. GETCO
Ravi Nair GEDA
Bhavin Bava J.E. Lab PGVCL, NAKHATRANA
(Post Jacha)

 Powering A Greener Tomorrow		Monthly Generation Report(Location)		2016-2017	
Customer	Gokul Agro Resources Ltd.		Unit Size of Turbine	1.250	
Location (Site)	Adodar		No. of Turbine	AD033	
State	GJ - Saurashtra		Model No	S 66 Mark II	
Comm.Date	09-Aug-2012		Install Capacity (MW)	1.250	
Generation Month	Generation At Controller (KWH)	Machine Availability	Grid Availability %	Generation At 100 % Grid	PLF At 100 % Grid
Apr-16	165293	98.18	99.82	165591	18.4
May-16	272618	99.84	98.68	276264	29.71
Jun-16	322360	98.68	97.89	329308	36.59
Jul-16	518727	98.12	99.38	521963	56.13
Aug-16	388662	98.41	99.57	390340	41.97
Sep-16	183943	98.87	98.74	184422	20.49
Oct-16	81228	94.76	98.45	82506	8.87
Nov-16	94157	93.54	99.69	94449	10.49
Dec-16	123750	97.54	98.53	125606	13.51
Jan-17	141628	99.33	98.98	143087	15.39
Feb-17	151966	99.93	99.72	152392	18.14
Mar-17	214973	99.43	99.89	215209	23.14
Total	2659315	98.05	99.2	2681137	24.4
Yearly PLF (%)	24.29			24.49	

SUZLON Powering A Greener Tomorrow		Monthly Generation Report(Location)		2017-2018	
Customer	Gokul Agro Resources Ltd.		Unit Size of Turbine	1.250	
Location (Site)	Vanku		No. of Turbine	V05	
State	GJ - Kutch		Model No	S 64	
Comm.Date	18-Jul-2006		Install Capacity (MW)	1.250	
Generation Month	Generation At Controller (KWH)	Machine Availability	Grid Availability %	Generation At 100 % Grid	PLF At 100 % Grid
Apr-17	127095	99.93	99.00	128378	14.26
May-17	198900	99.77	97.66	203665	21.9
Jun-17	192883	98.85	95.39	201994	22.44
Jul-17	246311	95.25	87.18	262531	30.38
Aug-17	146092	78.14	99.69	146546	15.76
Sep-17	53372	94.36	99.75	53505	5.95
Oct-17	46674	99.89	99.91	46716	5.02
Nov-17	82048	94.83	99.32	82609	9.18
Dec-17	138500	95.08	100.00	138500	14.89
Jan-18	49194	98.42	88.63	55504	5.97
Feb-18	54179	99.45	99.39	54511	6.49
Mar-18	64523	99.13	99.09	65115	7
Total	1399571	95.86	97.08	1459574	13.27
Yearly PLF (%)	12.78			13.33	

SUZLON Powering A Greener Tomorrow		Monthly Generation Report(Location)		2021-2022	
Customer	Gokul Agro Resources Ltd.		Unit Size of Turbine	1.250	
Location (Site)	Kadoli		No. of Turbine	M16	
State	GJ - Kutch		Model No	S 70 AE 33	
Comm.Date	22-Dec-2006		Install Capacity (MW)	1.250	
Generation Month	Generation At Controller (KWH)	Machine Availability	Grid Availability %	Generation At 100 % Grid	PLF At 100 % Grid
Apr-21	95148	94.82	98.76	96342	10.7
May-21	184320	79.11	96.56	190886	20.53
Jun-21	320300	97.86	98.07	326603	36.29
Jul-21	427328	87.91	98.53	433703	46.63
Aug-21	293381	98.83	100.00	293381	31.55
Sep-21	164075	90.04	98.78	166101	18.46
Oct-21	82508	96.44	99.76	82706	8.89
Nov-21	79698	94.21	99.72	79921	8.88
Dec-21	90345	78.98	100.00	90345	9.71
Jan-22	87745	92.92	100.00	87745	9.43
Feb-22	66381	86.07	98.30	67528	8.04
Mar-22	85133	92.41	97.59	87235	9.38
Total	1976362	90.85	98.84	2002496	18.21
Yearly PLF (%)	18.05			18.29	



Application of methodologies and standardized baselines

References to methodologies and standardized baselines

SECTORAL SCOPE – 01 Energy industries (Renewable/Non-renewable sources)

TYPE I – Renewable Energy Projects

CATEGORY – AMS-I.D. – Small-scale Methodology Grid connected renewable electricity generation, Version 18.0

This methodology comprises renewable energy generation units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass:

(a) Supplying electricity to a national or a regional grid.

- ❖ This project is included within the UCR Standard Positive List of technologies and are within the small-scale CDM thresholds (e.g., installed capacity up to 15 MW). The positive list comprises of: (a) renewable electricity generation technologies of installed capacity up to 15 MW, (wind power electricity generation);
- ❖ Project activity involves installation of wind power generation with capacity 3.75 MW which is less than 15MW. The proposed project is a greenfield 3.75 MW wind power project, i.e., the only component is a renewable power project below 15 MW.
- ❖ The project activity involves installation of WTGs, hence, the activity is not a hydro power project or combined heat and power (co-generation) systems.
- ❖ Project displaces grid electricity consumption (e.g., grid import).
- ❖ The project activity is a new installation, it does not involve any retrofit measures nor any replacement.
- ❖ Landfill gas, waste gas, wastewater treatment and agro-industries projects are not relevant to the project activity. No biomass is involved, the project is only a wind power project.
- ❖ The technology/measure allowed under the grid connected wind power generation systems displace equivalent quantity of electricity from the regional grid in India. The testing/certifications; all the equipment of the wind power project activity will be complying with applicable national/ international standards. The above details may be verified from one or more of the following documents:
 - Technology Specification provided by the technology supplier
 - Purchase order copies
 - EPC contracts
 - Power purchase agreement
 - Project commissioning certificates
- ❖ The project activity is a voluntary coordinated action. The project activity is a 3.75 MW Wind Power based renewable electricity generation project. It does not include any non-renewable unit and cofiring system.



- ❖ As per 'Central Pollution Control Board (Ministry of Environment & Forests, Govt. of India)', final document on revised classification of Industrial Sectors under Red, Orange, Green and White Categories (07/03/2016), it has been declared that a wind project activity falls under the "White category". White Category projects/industries do not require any environmental clearance such as 'Consent to Operate' from PCB as such project does not lead to any negative environmental impacts. Additionally, as per Indian Regulation, Environmental and Social Impact Assessment is not required for wind projects. Additionally, there are social, environmental, economic and technological benefits which contribute to sustainable development.
- ❖ This methodology comprises renewable energy generation units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass that supply electricity to user(s). Hence this methodology is applicable and fulfilled for the wind project activity.
- ❖ The project activity involves the installation of new power plants at listed sites where there was no renewable energy power plant operating prior to implementation of project.
- ❖ Project and leakage emissions from biomass are not applicable.

Applicability of double counting emission reductions

- WTGs V-05 and M-16 have been previously registered under the UNFCCC CDM as:

Title project activity: 5 MW WIND POWER PROJECT BY GOKUL REFOILS AND SOLVENT LIMITED

CDM Registration Date: 07 Feb 2011

CDM Reference number: 4062

Monitoring Period: 07/02/2011 - 31/01/2012

CERs issued: 5956 tCO₂ (Serial Range: Block start: IN-5-175448640-1-1-0-4062 Block end: IN-5-175454595-1-1-0-4062)

- WTGs ADO-33 has been previously registered under the UNFCCC CDM as:

Title project activity: 2.5 MW Wind Project by Gokul Refoils & Solvent Limited

CDM Reference number: 9722

CDM Registration Date: 26 Aug 2013

No CERs have been issued till date.



GARL is the de-merged entity of Gokul Refoils & Solvent Limited under which all the above CDM projects had been registered. The project activity has not claimed voluntary/verified carbon credits under any GHG mechanism for the period 2013-2022, hence the project activity will not cause double accounting of carbon offset units or credits (i.e., CoUs) under the UCR CoU Program.

Additionally, the same has been stated in the undertaking provided in the Double Counting Avoidance Assurance Document (DAA) by GARL. This UCR monitoring report does not cover any period of time which was part of the previous monitoring report, since the PP has decided not to claim any further credits under the CDM program (i.e., post 01/01/2013) and is seeking CoUs under the UCR program. Additionally, the same has been stated in the undertaking provided in the Double Counting Avoidance Assurance Document (DAA) by TEIL dated 25.10.2023.

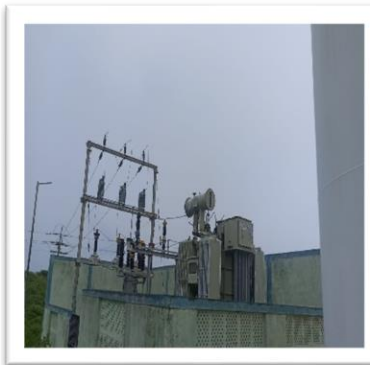
There is no double accounting of emission reductions in the project activity due to the following reasons:

- 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.

Project boundary, sources and greenhouse gases (GHGs)

As per applicable methodology, “the spatial extent of the project boundary includes the project power plant and all power plants connected physically to the electricity system that the UCR project power plants are connected”. The project boundary encompasses the physical, geographical site of the wind energy power plant, the energy metering equipment and the connected regional electricity grid.

	Source	GHG	Included?	Justification/Explanation
Baseline	Grid connected electricity	CO ₂	Included	Major source of emission
		CH ₄	Excluded	Excluded for simplification. This is conservative
		N ₂ O	Excluded	Excluded for simplification. This is conservative
Project Activity	Greenfield Wind Power Project	CO ₂	Excluded	Excluded for simplification. This is conservative
		CH ₄	Excluded	Excluded for simplification. This is conservative
		N ₂ O	Excluded	Excluded for simplification. This is conservative





Establishment and description of baseline scenario (UCR Protocol)

Net GHG Emission Reductions and Removals:

$$ER_y = BE_y - PE_y - LE_y$$

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 Annual Emission Reductions to be calculated are as follows: $BE_y = EG_{BL,y} \times EF_{CO_2, GRID, y}$

Where:

BE_y = Emission reductions in year y (tCO₂)

$EG_{BL,y}$ = Quantity of net electricity supplied to the grid as a result of the implementation of the UCR project activity in year y (MWh)

$EF_{CO_2, GRID, y}$ = CO₂ emission factor of the grid in year y (t CO₂/MWh) as determined by the UCR Standard.

Total Installed Capacity: 3.75 MW

Year	Power Generation in KWH		
	ADO33	V05	M16
2013	2480343	1234628	1968225
2014	2313232	1500683	2169547
2015	2411418	1459427	2013856
2016	2592910	1548357	2017512
2017	2534895	1503555	2241900
2018	2507865	1504847	2215575
2019	2324046	1507732	1951469
2020	1768246	908885	1339806
2021	2232177	1541779	1933530
2022	2003451	1307139	1340428
TOTAL	23168583	14017032	19191848



Issuance Period: 01.01.2013 to 31.12.2022 ((10 Years 00 Months)

$(BE_y) = 56377 \text{ MWh} * 0.9 \text{ tCO}_2/\text{MWh} = 50734 \text{ tCO}_2\text{e}$ (i.e., 50734 CoUs)

Total baseline emission reductions $(BE_y) = 50734 \text{ CoUs}$ (50734 tCO₂eq)

Emissions:

a) Project Emissions

Since the project activity is a wind power project, project emission for renewable energy plant is nil.

Thus, $PE_y = 0$.

b) Leakage

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 crediting period shall be submitted as a part of first monitoring and verification and is as below.

$$\begin{aligned} ER_y &= BE_y - PE_y - LE_y \\ &= 50734 - 0 - 0 \\ &= 50734 \text{ CoUs} \end{aligned}$$

Total Emission Reductions $(ER_y) = 50734 \text{ CoUs}$ (50734 tCO₂eq)



YEAR	TOTAL MWH SUPPLIED (ADO33 + V05 + M16)	EMISSION REDUCTIONS (tCO ₂)
2013	5683.20	5114
2014	5983	5385
2015	5885	5296
2016	6159	5542
2017	6280	5652
2018	6228	5605
2019	5783	5204
2020	4017	3615
2021	5707	5136
2022	4651	4185
Total	56377	50734

Conclusions:

Based on the audit conducted on the basis of UCR Protocol, which draws reference from UCR Protocol Standard Baseline Emission Factor for Indian Grid, UNFCCC Methodology Category AMS-I.D. Small-scale Methodology Grid connected renewable electricity generation, Ver 18.0, the documents submitted during the verification including the data, Project Concept Note (PCN) / Monitoring Report (MR), SQAC is able to certify that the emission reductions from the project - 3.75 MW Bundled Wind Power Project by GARL, Gujarat, India (UCR ID – 374) for the period 01/01/2013 to 31/12/2022 amounts to **50,734 CoUs (50,734 tCO₂eq)**

Santosh Nair
Lead Verifier (Signature)



Praful Shinganapurkar
Senior Internal Reviewer (Signature)

Date: 03/11/2023