

WIND ENERGY PROJECT BY RAMCO GROUP IN INDIA.

Document Prepared By (The Ramco Cements Ltd.)

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¹ Earlier known as Madras Cements Limited

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1 PROJECT DETAILS

1.1 Summary Description of the Implementation Status of the Project

The project activity involves the exporting of 159.75 MW capacity wind power project consisting of 136 Wind Turbine Generators (WTGs) in Tirunelveli, Dindigul and Tirupur districts of Tamil Nadu, Hassan and Chitradurga districts of Karnataka. The power generated from wind energy is considered to be carbon neutral and hence does not contribute to any additional green house gas emissions. The project activity generates about 324 GWh of electricity annually which replaces equivalent quantum of power at the Tamil Nadu Electricity Board (TNEB), Bangalore Electricity Supply Company Ltd (BESCOM) and Chamundeshwari Electricity Supply Corporation Ltd (CESC) of the southern regional grid.

All the WTGs have been commissioned and are in operation since then. The dates of commissioning of each WTGs is provided in Appendix 1. The following table shows the ownership details, capacity and utilization of WTGs under the project activity:

Owner	Number and Capacity (KW)	Utilization
The Ramco Cements Limited ²	24 X 1650	Export to grid
	11 X 1650	Captive Consumption
	10 X 800	Captive Consumption
	43 X 800	Export to grid
Thanjavur Spinning Mills Limited	4 X 1250	Captive Consumption
Shri Vishnu Shankar Mill Limited	6 X 1250	Captive Consumption
	1 X 1650	Captive Consumption
Rajapalayam Mills Ltd	10 X 1250	Captive Consumption
	2 X 1650	Captive Consumption
Sandhya Spinning Mill Limited	4 X 1250	Captive Consumption
	1 X 350	Captive Consumption
Sudarsanam Spinning Mills	3 X 1250	Captive Consumption
	1 X 1650	Captive Consumption
Rajapalayam Textile (a division of Rajapalayam Mills Ltd)	1 X 1250	Captive Consumption
Ramco Industries Limited	6 X 1250	Captive Consumption
	2 X 800	Export to grid
	1 X 1500	Export to grid
	2 X 1650	Export to grid
	1 X 500	Captive Consumption
	1 X 750	Captive Consumption
Rajapalayam Spintext (a division of Rajapalayam Mills Ltd)	2 X 1250	Captive Consumption

The 67 WTGs³ of the project activity with aggregated capacity of 74MW has been registered under other program (i.e. under CDM) as it is allowed under VCS that "Projects can be registered

² Name changed. Certificate of Incorporation is being provided.

and issuing credits under both the VCS and CDM as long as credits are not issued for the same tonnes of emissions reduced or removed”.

Hence, these 67 WTGs are eligible for issuing credits under both the VCS and CDM program but the same tonnes of emissions reduced can be issued only under any one of the program (i.e. either under VCS or CDM) to avoid double counting of the same tonnes of emission reduction.

Therefore, for the current monitoring period, the emission reduction achieved by these 67 WTGs has been considered only up till the 31/10/2012, as the crediting period for this project starts from 01/11/2012⁴ although the project is registered under CDM on 18th October 2012.

The details are provided in section 2 of this document.

The total GHG emissions reductions achieved for this monitoring period is 661,206 tCO₂

1.2 Sectoral Scope and Project Type

Methodology : ACM0002 -“Consolidated baseline methodology for grid-connected electricity generation from renewable sources”, Version 10

Sectoral Scope : 1

Category : Energy Industries (renewable-/non-renewable sources)

Scale : Large

This is not a Grouped project.

1.3 Project Proponent

Organization name	The Ramco Cements Limited
Contact person	K Selvanayagam
Title	Company's Secretary
Address	The Ramco Group Ltd.Auras Corporate Centre 98 A, 5th floor, Dr. Radhakrishna Road , Mylapore, Chennai - 600004Tamil Nadu. India
Telephone	+9144 28478666
Email	ksn@ramcocements.co.in

1.4 Other Entities Involved in the Project

- Thanjavur Spinning Mills Limited (TSML)
- Shri Vishnu Shankar Mill Limited (SVSM)

³ Please refer Appendix 1 for the details of WTGs registered under CDM.

⁴ <http://cdm.unfccc.int/Projects/DB/SGS-UKL1349793965.06/view>

- Rajapalayam Mills Ltd (RML)
- Rajapalayam Spintext (RST)
- Sandhya Spinning Mill Limited (Sandhya)
- Sudarsanam Spinning Mills (SSM)
- Ramco Industries Limited (RIL)
- Sri Ramco Spinners (SRS)

The Contact details are same as above.

1.5 Project Start Date

30 January 2003 (Date on which first lot of WTGs were commissioned)

1.6 Project Crediting Period

Crediting period start date: 28 March 2006 (Starting date of first monitoring period as per the VCS guidance on start date)

Crediting period end date: 27 March 2016

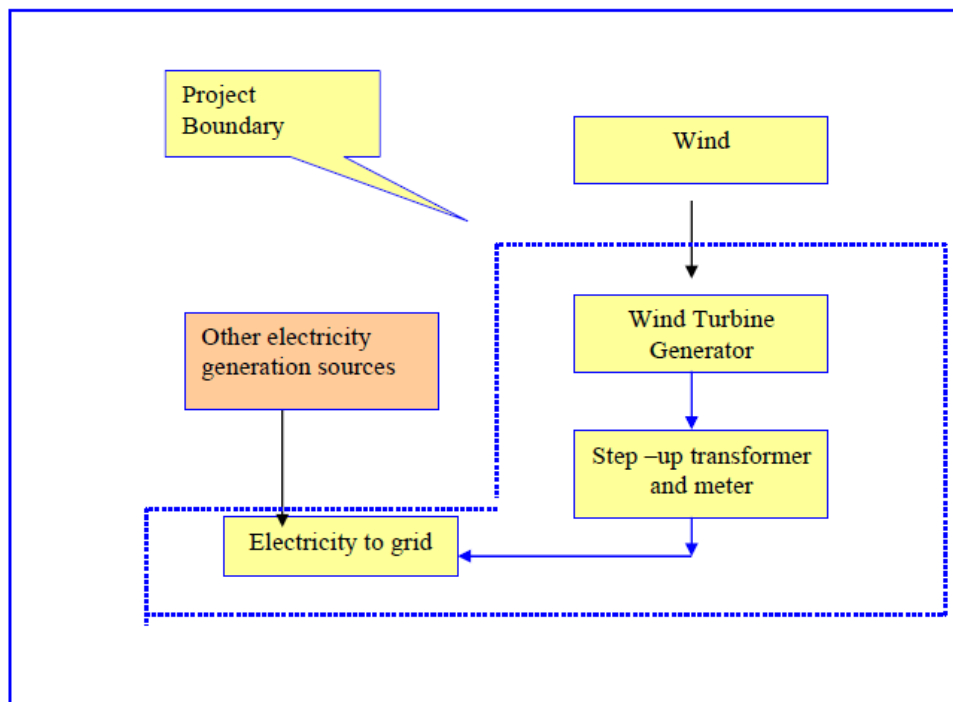
Total years: 10 years crediting period, which will be renewed once.

1.7 Project Location

The project activity is located in Uthumalai, Anaikulam, N. Krishna puram, Kuruchampatti, Dhanakkarkulam, Kavalakurichi, Panagudi, Kallupalayam, Pazhavor, Thandaryarkulam, Vadiyoor, Rajagopalaperi and Anaikulam villages in Tirunelveli district of Tamilnadu; Pushpathur village in Dindigul district of Tamilnadu; Thungavi and Udumalpet villages in Tirupur district of Tamilnadu; Gulihosahalli village in Chitradurga district of Karnataka; Aidahalli village in Hassan district of Karnataka. The geo-coordinates of each WTGs is provided in Appendix 2

Project boundary:

Project boundary is depicted in the diagram below:



1.8 Title and Reference of Methodology

Title: ACM0002 -“Consolidated baseline methodology for grid-connected electricity generation from renewable sources”. Version: 10

Reference:

http://cdm.unfccc.int/filestorage/N/F/9/NF9EDA0V5K382HW0JR14GS7XYQUMCP/EB47_repan07_ACM0002_ver10.pdf?t=RFZ8bXZ2c2UwfDAZ2hww5BKUHpnGTB0Px_IW

The methodology refers to the following tools:

- Tool to calculate the emission factor for an electricity system (version 1.1)
- Tool for the demonstration and assessment of additionality (version 5.2)
- Tool to calculate project or leakage CO₂ emissions from fossil fuel combustion (version 02)

1.9 Other Programs

- Emission Trading Programs and Other Binding Limits:

This project activity is not a part of any other mechanism that includes GHG allowances trading which take place in a jurisdiction or sector in which binding limits are established on GHG emissions.

- Other Forms of Environmental Credit

The project has not sought nor received another form of GHG related environmental credit for this monitoring period and has not been cancelled from the environmental credit program.

- Participation under Other GHG Programs

A part of WTGs registered under this VCS project are now part of the CDM project activity. This VCS project consisted of total 136 WTGs with capacity of 159.75 MW that were commissioned to supply electricity to the grid. However, 67 WTGs with capacity of 74 MW are now registered under the Clean Development Mechanism (CDM) of UNFCCC on 18th October 2012. Thus, these 67 WTGs are eligible for issuing credits under both the VCS and CDM but credits can be issued for the **same tonnes of emissions reduced or removed** in any one program (either VCS or CDM) to avoid double counting. For example: If PP has claimed the credits from these 74MW capacity for a particular period in CDM during the crediting period than those credits will not be claimed under VCS as the credits issued in other program are not eligible under VCS in accordance to the double counting principle.

The Registration number of the registered CDM project is 7647.

Reference: <http://cdm.unfccc.int/Projects/DB/SGS-UKL1349793965.06/view>

Therefore, for this monitoring the WTGs registered under the CDM project activity are excluded from calculation of GHG emission reductions after the date of registration i.e. 18th October 2012.

2 IMPLEMENTATION STATUS

2.1 Implementation Status of the Project Activity

The project activity involves the implementation of 159.75 MW capacity wind power project consisting of 136 wind turbine generators (WTGs). All the WTGs have been commissioned and are operational. The details of date commissioning for all the WTG's is provided in Appendix 1.

As explained in above sections, 67⁵ WTGs of the project activity with aggregated capacity of 74MW has been registered under other program (i.e. under CDM) on 18th October 2012. Hence, these 67 WTGs are eligible for issuing credits under both the VCS and CDM program but the same tonnes of emissions reduced can be issued only under any one of the program (i.e. either under VCS or CDM) to avoid double counting of the same tonnes of emission reduction.

Therefore, for the current monitoring period, the emission reduction achieved by these 67⁶ WTGs has been considered only up till 31/10/2012 which is the one day prior to the start of crediting period under CDM.

Further, the project activity is implemented and is operational as described in VCS PD and there have been no events that may impact the GHG emission reductions or removals, although there have been instances of meter replacement due to failure of meter and the defective meters were replaced immediately with a new meter to avoid any impact on the monitoring. The details of meter replacement are provided in Appendix 3. It was observed that there is no impact on the GHG emission reduction for this monitoring period. Also, there has not been any WTG shut down pertaining to this monitoring period.

⁵ Please refer Appendix 1 for the details of WTGs registered under CDM.

⁶ The JMR dates for all of the WTGs end before 18th October 2013.

2.2 Deviations

2.2.1 Methodology Deviations

Not applicable as there are no deviations from the applied methodology to the project activity.

2.2.2 Project Description Deviations

There are no project descriptions deviations applied during this monitoring period that may impact the applicability of the methodology, additionality or the appropriateness of the baseline scenario.
Grouped Project

This is not a Grouped project.

3 DATA AND PARAMETERS

3.1 Data and Parameters Available at Validation

Data / Parameter	EF_y ($EF_{grid, CM, y}$)
Data unit	tCO ₂ /MWh
Description	Combined Margin CO ₂ emission factor of the southern regional grid
Source of data	CO ₂ baseline database for the Indian Power Sector – Central Electricity Authority (CEA), Ministry of Power, Version 4.0, dated September 2008
Value applied:	0.92694
Justification of choice of data or description of measurement methods and procedures applied	CEA has estimated the simple operating margin and build margin emission factors for the southern regional grid. For calculating the CO ₂ emission factor as per combined margin method for the wind power generation project activities the weights of 0.75 for operating margin and 0.25 for build margin are considered as per 'Tool to calculate the emission factor for an electricity system (Version 01.1)
Purpose of the data	This parameter is used for calculation of baseline emissions
Comments	-

3.2 Data and Parameters Monitored

Data / Parameter	EG_y ($EG_{PJ, y}$)
Data unit	MWh
Description	Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the project activity.
Source of data	Joint Meter Reading (JMR) report
Description of measurement methods	The metering equipment is located at each WTG's location and the energy is metered by the SEBs at the high voltage side of the step

and procedures to be applied	up transformers installed at each HTSC connection. Monthly meter reading is recorded by the authorized representatives of SEBs in presence of the representative of Ramco group. In addition to this officials (site staff) of Ramco Group record daily reading from the SEB meter
Frequency of monitoring/recording	Monthly
Value monitored:	713321570
Monitoring equipment	Type: Energy Meter Accuracy Class ⁷ : 0.5/ 0.2 Calibration frequency: Once in five years
QA/QC procedures to be applied	All the meters would be calibrated by the SEBs as per their norms. Details of calibration are provided in Appendix 1 As per the Power Purchase Agreement (PPA) with SEBs, all the energy meters and the meter boxes will be kept sealed by SEBs. Hence SEBs is responsible for maintenance and calibration of the main energy meter as per their norms. In Ramco Group, Assistant Engineer (AE) - Wind Farm is responsible for collecting the required information from the operators, who look after the day to day operation of the WTGs at the ground level. The AE – Wind Farm records the generation on a daily basis for each service connection point and reports the cumulative generation to the Manager - Electrical. The Manager – Electrical reports to the DGM – Wind Farm on a daily basis. The DGM – Wind Farm is responsible for overall operation of the WTGs.
Purpose of the data	This parameter is used for calculation of baseline emissions
Calculation method	For WTG's that are used for <u>captive consumption</u> , the net electricity supplied to the grid is a calculated figure that uses the formula as given below: Net electricity supplied to the grid = (Net electricity exported to the grid) – wheeling charges (in kwh). Wheeling charges are calculated by multiplying 5 % with the total electricity exported to the grid. For WTG's that <u>export electricity</u> to the grid, the net electricity supplied to the grid is a calculated figure that uses the formula as given below: Net electricity supplied to the grid = (Net electricity exported to the grid) where the net electricity supplied is calculated by deducting the electricity imported from the electricity exported
Comments	Daily SEB Meter readings recorded by Ramco Group staff in the

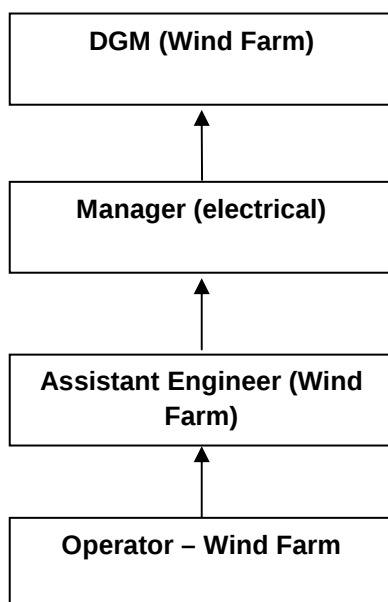
⁷ The WTGs in the project activity have few meters with 0.2 accuracy class and few with 0.5 accuracy class.

	log book will serve as the source of data when the individual verification period dates and the dates of JMRs of the various WTGs in the project activity do not coincide. The data is archived for a period of two years after crediting period.
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3.3 Monitoring Plan

Organization structure for monitoring:

The day to day operation of the WTGs at the ground level is managed 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 on a daily basis for each service connection point and reports the cumulative generation to the Manager - Electrical. The Manager – Electrical reports to the DGM – Wind Farm on a daily basis. The DGM – Wind Farm is responsible for overall operation of the WTGs. The organization structure is given below in Fig 3.1:



Energy meter accuracy check and calibration details:

As per the registered PD, the electricity meter would be calibrated by the State Electricity Boards (SEBs) as per their norms. For the calibration of meters, the SEB refers to Central Electricity Authority (CEA) installation and operation of meters regulations 2006, which state that all the meters shall be tested at least once in five years. The dates of calibration, accuracy class of the meters, and result for all the HTSC are provided in Appendix 1 and the meter failure details are provided in Appendix 2. The accuracy class of the meters is 0.5 and for the new replaced meter is 0.2s.

Training of monitoring personals:

The training for the O&M team at Pushpathur site has been conducted by Enercon Training Academy, Daman.

Procedures for maintenance of monitoring equipment

In the project activity, the main energy meter is the only equipment which is required to track the monitoring parameters. As per the Power Purchase Agreement (PPA) with SEBs, all the energy meters and the meter boxes will be kept sealed by SEBs. Hence, SEBs are responsible for maintenance of the main energy meter.

The available grid is the southern regional grid of India. The electricity exported to the grid by the project activity and the electricity imported by the project activity from the grid is recorded every month by state electricity utility, Tamil Nadu State Electricity Board (TNEB).

For WTGs that are used for captive consumption, the net electricity supplied to the grid is a calculated figure that uses the formula as given below:

Net electricity supplied to the grid = (Net electricity exported to the grid) – wheeling charges (in kWh).

Net electricity exported to the grid is calculated by deducting the total electricity imported from the total electricity exported.

Net electricity exported to grid = Total export – total import

Wheeling charges (in kWh) = Total export * 5%

Wheeling charges are calculated by multiplying 5 % with the total electricity exported to the grid.

These wheeling charges are decided as per the policy decided by the Tamil Nadu electricity regulatory commission and would be subject to a change if the policy changes.

For WTGs that export electricity to the grid, the net electricity supplied to the grid is a calculated figure that uses the formula as given below:

Net electricity supplied to the grid = (Net electricity exported to the grid)

Net electricity exported to grid = Total export – total import

In the event when the individual verification period dates and billing cycle dates (or dates of JMR) of the various WTGs in the project activity do not coincide, the following procedure would be adopted to estimate the net electricity supplied to the grid during the specific period/ or days where there is a mis-match.

The daily generation readings recorded at the generation meters (maintained by equipment suppliers in the log books) will be monitored for each of the WTGs in the project activity. The log books detailing daily generation from each WTG would be maintained at the site office. For the corresponding JMR period (where there is a mismatch of dates with that of the individual verification periods), the daily generation readings has been used to arrive at the net generation of a particular WTG (HTSC no) for the period of mismatch of dates of billing cycle with the verification period.

For example: HTSC No D120: monthly billing cycle date is 15th of each month and the current monitoring period has started from 1st April 2011. To arrive⁸ at the net generation for a period from 1st April 2011 to 15th April 2011, difference of daily meter reading for export & import value on 15th April (Final reading) & 1st April (initial reading) has been calculated separately which is then multiplied to the “MF Factor”. The final calculated import value is then deducted from export value to arrive at the net generation value for the mismatch period i.e. for 1st to 15th April. Apportioning calculation example is demonstrated below for a WTG; HTSC No D 120:

- Billing Cycle date – 15th of each month
 - Monitoring period starts from 1st April 2011.
- Therefore, mismatch period – 1st April to 15th April

	Date	Export kWh	Import kWh
Final Reading (FR)	15.04.2011	2975.09	8.7
Initial Reading (IR)	01.04.2011	2960.9	8.51
Difference (DIF) = FR - IR		14.19	0.19
General(GEN)	(“MF factor” : 1200)* Diff	17028	228
Net Generation	(Export – Import)	16800 kWh	

Similar apportioning procedure has been adopted for all the WTGs at the start of the monitoring period (i.e. for April 2011) as well as in the end of the monitoring period (i.e. June 2013). Detail calculation is provided in emission reduction excel sheet for all the WTGs respectively.

4 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS

4.1 Baseline Emissions

Baseline Emissions for the amount of electricity supplied by project activity, BE_y is calculated as

$$\begin{aligned}
 BE_y &= (EG_y - EG_{\text{baseline}}) \times EF_y \\
 &= (713321570 - 0) \text{ kWh} \times 0.92694 \text{ tCO}_2/\text{kWh} \\
 &= 661,206 \text{ t CO}_2
 \end{aligned}$$

EG_y: Net Electricity supplied by the project activity to the grid

EG_{baseline}: Baseline electricity supplied to the grid in the case of modified or retrofit facilities. For new power plants this value is taken as zero. As this is a new power plant this is zero for the project

EF_y: Combined margin CO₂ emission factor for grid connected power generation in the year y.

4.2 Project Emissions

The project activity uses wind power to generate electricity and hence as per the ACM0002 version 10 “For most renewable power generation project activities”:

$$PE_y = 0.$$

⁸ Detailed calculation is provided in the emission reduction calculation excel spread sheet.

4.3 Leakage

Emissions Leakage on account of the project activity is not considered in accordance with ACM0002, version 10.

$$L_y = 0$$

4.4 Net GHG Emission Reductions and Removals

Year		Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)
2011	From 1 st April	3339	0	0	3339
	April	7216	0	0	7216
	May	17187	0	0	17187
	June	41815	0	0	41815
	July	56177	0	0	56177
	August	54103	0	0	54103
	September	36647	0	0	36647
	October	29932	0	0	29932
	November	5813	0	0	5813
	December	11427	0	0	11427
2012	January	10358	0	0	10358
	February	11693	0	0	11693
	March	8645	0	0	8645
	April	6098	0	0	6098
	May	21347	0	0	21347
	June	566212	0	0	56621
	July	54824	0	0	54824
	August	54903	0	0	54903
	September	52678	0	0	52678
	October	34385	0	0	34385
	November	3650	0	0	3650
	December	4003	0	0	4003
2013	January	8620	0	0	8620
	February	8571	0	0	8571
	March	5875	0	0	5875
	April	3268	0	0	3268
	May	8174	0	0	8174
	June	26423	0	0	26423
	Upto 30 th June	17416	0	0	17416
Total		661206	0	0	661206⁹

⁹ The value is rounddown value to be conservative.

APPENDIX 1: <METER DETAILS AND COMMISSIONING OF WTGs>

Monitoring period from 01 April 2011 – 31 October 2012 for WTGs now under CDM

HTSC No.	Main Meter Serial No	Meter Make	Meter Accuracy Class
Pushpathur			
D97	04892635	ELSTER	0.5
D98	04892637	ELSTER	0.5
D99	04892636	ELSTER	0.5
D100	04892640	ELSTER	0.5
D101	04892641	ELSTER	0.5
D102	04892642	ELSTER	0.5
D115	04901370	ELSTER	0.5
D116	04959597	ELSTER	0.5
D117	04901300	ELSTER	0.5
D118	TN902861	SECURE	0.2s
D119	10267837	L&T	0.5
D120	04959602	ELSTER	0.5
D121	04901297	ELSTER	0.5
D122	04901981	ELSTER	0.5
D129	04901369	ELSTER	0.5
D132	04901448	ELSTER	0.5
D133	04901431	ELSTER	0.5
D134	04901367	ELSTER	0.5
D135	TN902395	SECURE	0.2s
D136	04938074	ELSTER	0.5
D137	HT02120283	Wallaby	0.2s
D138	04938076	ELSTER	0.5
D139	04938077	ELSTER	0.5
D140	TN902403	SECURE	0.2s
Thandarkulam			
2357	12090151	L&T	0.2s
2358	TN 902008	PREMIER	0.5
2359	13192519	L&T	0.2s
2360	04881133	ELSTER	0.5
2361	TNB 04109	PREMIER	0.5
2362	12091943	L&T	0.2s
2367	12091957	L&T	0.2s
2368	04892607	ELSTER	0.5
Uthumalai			
2505	09593234	L & T	0.5
2506	09593235	L & T	0.5
2507	09593236	L & T	0.5
2509	09593237	L & T	0.5

2510	09593239	L & T	0.5
2522	09593240	L & T	0.5
2616	10287890	L & T	0.5
2629	12092089	L & T	0.2s
Udumalpet			
U1459	13192511	L&T	0.2s
U1460	12091961	L&T	0.2s
U1464	04892595	ELSTER	0.5
U1465	HT2110724	WALLABY	0.2s
U1468	04889975	ELSTER	0.5
U1469	04889961	ELSTER	0.5
U1522	TN9 01621	SECURE	0.5
U1532	04901343	ELSTER	0.5

HTSC No.	Date of Commissioning	1 st Date of calibration	2 nd Date of calibration	Validity of calibration	Result
MCL Pushpatur					
D97	23.07.2007	23.07.2007	10.05.2010	10.05.2015	Satisfactory
D98	23.07.2007	23.07.2007	06.05.2010	06.05.2015	Satisfactory
D99	23.07.2007	23.07.2007	06.05.2010	06.05.2015	Satisfactory
D100	23.07.2007	23.07.2007	10.05.2010	10.05.2015	Satisfactory
D101	02.08.2007	02.08.2007	10.05.2010	10.05.2015	Satisfactory
D102	02.08.2007	02.08.2007	10.05.2010	10.05.2015	Satisfactory
D115	27.09.2007	27.09.2007	10.05.2010	10.05.2015	Satisfactory
D116	27.09.2007	27.09.2007	10.05.2010	10.05.2015	Satisfactory
D117	27.09.2007	27.09.2007	06.05.2010	06.05.2015	Satisfactory
D118	27.09.2007	06.05.2010	14.12.2011	14.12.2016	Satisfactory
D119	27.09.2007	06.05.2010	27.11.2010	06.05.2015	Satisfactory
D120	27.09.2007	27.09.2007	06.05.2010	06.05.2015	Satisfactory
D121	27.09.2007	27.09.2007	06.05.2010	06.05.2015	Satisfactory
D122	27.09.2007	27.09.2007	10.05.2010	10.05.2015	Satisfactory
D129	28.09.2007	28.09.2007	10.05.2010	10.05.2015	Satisfactory
D132	02.01.2008	02.01.2008	10.05.2010	10.05.2015	Satisfactory
D133	02.01.2008	02.01.2008	10.05.2010	10.05.2015	Satisfactory
D134	02.01.2008	02.01.2008	06.05.2010	06.05.2015	Satisfactory
D135	15.03.2008	10.05.2010	07.10.2011	07.10.2016	Satisfactory
D136	15.03.2008	15.03.2008	10.05.2010	10.05.2015	Satisfactory
D137	15.03.2008	15.03.2008	10.05.2010	10.05.2015	Satisfactory
D138	15.03.2008	15.03.2008	10.05.2010	10.05.2015	Satisfactory
D139	15.03.2008	15.03.2008	06.05.2010	06.05.2015	Satisfactory
D140	15.03.2008	06.05.2010	15.10.2011	15.10.2016	Satisfactory
MCL-Thandyarkulam					
2357	04.06.2007	07.04.2010	21.03.2012	21.03.2017	Satisfactory
2358	04.06.2007	07.04.2010	11.07.2011	11.07.2016	Satisfactory
2359	04.06.2007	18.12.2008	07.04.2010	07.04.2015	Satisfactory
2360	04.06.2007	18.12.2008	07.04.2010	07.04.2015	Satisfactory
2361	05.06.2007	15.12.2008	07.04.2010	07.04.2015	Satisfactory
2362	05.06.2007	07.04.2010	04.05.2012	04.05.2017	Satisfactory
236	14.06.2007	07.04.2010	09.04.2013	09.04.2018	Satisfactory
2368	15.06.2007	18.12.2008	07.04.2010	07.04.2015	Satisfactory
MCL – Uthumalai					
2505	31.12.2007	06.04.2010	19.12.2011	19.12.2016	Satisfactory

2506	22.01.2008	22.01.2008	06.04.2010	06.04.2015	Satisfactory
2507	24.01.2008	06.04.2010	19.12.2011	19.12.2016	Satisfactory
2509	04.02.2008	06.04.2010	19.12.2011	19.12.2016	Satisfactory
2510	13.02.2008	13.02.2008	06.04.2010	06.04.2015	Satisfactory
2522	17.03.2008	17.03.2008	06.04.2010	06.04.2015	Satisfactory
2616	22.04.2008	22.04.2008	06.04.2010	06.04.2015	Satisfactory
2629	23.05.2008	19.02.2011	27.09.2013	27.09.2018	Satisfactory
MCL-Udumalpet					
U1459	27.07.2007	27.07.2007	11.05.2010	11.05.2015	Satisfactory
U1460	31.07.2007	11.05.2010	09.05.2012	09.05.2017	Satisfactory
U1464	16.08.2007	16.08.2007	11.05.2010	11.05.2015	Satisfactory
U1465	16.08.2007	11.05.2010	12.10.2011	12.20.2016	Satisfactory
U1468	22.08.2007	22.08.2007	26.04.2010	26.04.2015	Satisfactory
U1469	22.08.2007	22.08.2007	26.04.2010	26.04.2015	Satisfactory
U1522	29.03.2008	26.04.2010	21.04.2011	21.04.2016	Satisfactory
U1532	31.03.2008	31.03.2008	26.04.2010	26.04.2015	Satisfactory

WTGs with continued operation under VCS

HTSC No.	Meter Make	Main Meter Serial No	Meter Accuracy Class
MCL Pushpathur			
D31	Elster	04 863 755	0.5
D69	Elster	04 865 527	0.5
D76	Elster	04 865 537	0.5
D77	Elster	04 865 532	0.5
MCL – Uthumalai			
1528	ELSTER	04 725 718	0.5
1529	ELSTER	04 725 717	0.5
1530	ELSTER	04 725 659	0.5
1531	ELSTER	04 725 723	0.5
2037	ELSTER	04 862 846	0.5
2038	ELSTER	04 804 661	0.5
2039	ELSTER	04 804 669	0.5
2067	ELSTER	04 863 470	0.5
2068	ELSTER	04 863 656	0.5
MCL-Udumalpet			
U1310	ELSTER	04 804 784	0.5
U1311	SECURE	TNB 03943	0.5
RIL			
271	ELSTER	02 350 217	0.5
426	ELSTER	02 332 453	0.5
468	ABB	02 261 066	0.5
510	ABB	02 307 301	0.5
630	ELSTER	02 329 694	0.5

1383	ELSTER	04 698 100	0.5
1384	ELSTER	02 139 995	0.5
1525	ELSTER	04 725 704	0.5
1526	ABB	04 725 703	0.5
ELP-27	L&T	05 436 131	KRHT1
H-31	L&T	7041039	KRHT1
RMU			
978	ELSTER	04 668 106	0.5
SRS			
973	ELSTER	02 369 488	0.5
RST			
975	ELSTER	02 373 870	0.5
977	ELSTER	02 373 869	0.5
Sandhya			
631	ELSTER	02 329 213	0.5
632	ELSTER	02 329 668	0.5
1422	ELSTER	02 329 045	0.5
1468	ELSTER	02 211 299	0.5
1044	ELSTER	04 954 012	0.5
SSM			
578	ELSTER	02 329 038	0.5
579	ELSTER	02 329 029	0.5
926	ELSTER	02 369 497	0.5
1540	ELSTER	04 725 715	0.5
SVSM			
587	ELSTER	02 329 020	0.5
588	ELSTER	02 329 035	0.5
974	ELSTER	02 373 975	0.5
976	ELSTER	04 863 697	0.5
1333	ELSTER	04 681 386	0.5
1354	ABB	02 139 993	0.5
1527	ELSTER	04 725 661	0.5
TSML			
625	ELSTER	02 329 669	0.5
626	ELSTER	04 863 456	0.5
1041	ELSTER	02 373 988	0.5
1748	ELSTER	04 804 619	0.5
RML			
576	ELSTER	02 329 028	0.5
577	ELSTER	02 329 022	0.5
944	ELSTER	02 373 974	0.5
972	ELSTER	02 373 951	0.5

979	ELSTER	02 373 871	0.5
980	ELSTER	04 668 107	0.5
1022	ELSTER	02 377 867	0.5
1347	ELSTER	04 691 177	0.5
1348	ELSTER	04 681 410	0.5
1467	ELSTER	04 719 785	0.5
1582	ELSTER	04 726 575	0.5
1691	ELSTER	04 726 621	0.5

HTSC No.	Date of Commissioning	Last calibration	Recent calibration	Validity of calibration	Result
MCL Pushpathur					
D31	27.02.2007	27.02.2007	12.07.2011	12.07.2016	Satisfactory
D69	29.03.2007	29.03.2007	06.05.2010	06.05.2015	Satisfactory
D76	16.04.2007	16.04.2007	06.05.2010	06.05.2015	Satisfactory
D77	16.04.2007	16.04.2007	23.11.2011	23.11.2016	Satisfactory
MCL – Uthumalai					
1528	31.12.2005	08.08.2008	12.01.2010	12.01.2015	Satisfactory
1529	31.12.2005	08.08.2008	12.01.2010	12.01.2015	Satisfactory
1530	31.12.2005	09.03.2009	12.01.2010	12.01.2015	Satisfactory
1531	31.12.2005	08.08.2008	18.05.2012	18.05.2017	Satisfactory
2037	28.09.2006	18.03.2010	22.05.2012	22.05.2017	Satisfactory
2038	28.09.2006	15.10.2008	22.05.2012	18.03.2015	Satisfactory
2039	28.09.2006	06.04.2010	29.02.2012	29.02.2017	Satisfactory
2067	29.09.2006	22.07.2009	22.05.2012	22.05.2017	Satisfactory
2068	29.09.2006	06.04.2010	22.05.2012	22.05.2017	Satisfactory
MCL-Udumalpet					
U1310	29.09.2006	26.04.2010	08.05.2012	08.05.2017	Satisfactory
U1311	29.09.2006	26.04.2010	08.05.2012	08.05.2017	Satisfactory
RIL					
271	31.03.2004	-	27.04.2010	27.04.2015	Satisfactory
426	21.03.2004	24.02.2008	07.04.2010	07.04.2015	Satisfactory
468	30.01.2003	05.04.2010	29.09.2011	29.09.2016	Satisfactory
510	25.03.2003	10.07.2008	07.04.2010	07.04.2015	Satisfactory
630	30.09.2003	06.04.2010	29.09.2011	29.09.2016	Satisfactory
1383	15.09.2005	04.01.2008	05.04.2010	05.04.2015	Satisfactory
1384	15.09.2005	08.01.2008	05.04.2010	05.04.2015	Satisfactory
1525	28.12.2005	12.08.2008	07.04.2010	07.04.2015	Satisfactory
1526	28.12.2005	12.08.2008	22.07.2010	22.07.2015	Satisfactory
ELP-27	31.03.2006	24.07.2009	-	24.07.2014	Satisfactory
H-31 ¹⁰	10.10.2007	25.11.2008	-	25.11.2013	Satisfactory
RMU					
978	30.09.2004	08.01.2008	05.04.2010	05.04.2015	Satisfactory
SRS					
973	30.09.2004	16.12.2008	06.04.2010	06.04.2015	Satisfactory
RST					

¹⁰ Meter Accuracy class of 0.2.

975	30.09.2004	07.02.2009	06.04.2010	06.04.2015	Satisfactory
977	30.09.2004	16.12.2008	06.12.2010	06.04.2015	Satisfactory
Sandhya					
631	30.09.2003	16.12.2008	06.04.2010	06.04.2015	Satisfactory
632	30.09.2003	20.06.2008	06.04.2010	06.04.2015	Satisfactory
1422	27.09.2005	04.01.2008	05.04.2010	05.04.2015	Satisfactory
1468	29.09.2005	08.01.2008	05.04.2010	05.04.2015	Satisfactory
1044	18.11.2004	22.10.2008	06.04.2010	06.04.2015	Satisfactory
SSM					
578	21.09.2003	07.01.2008	05.04.2010	05.04.2015	Satisfactory
579	21.09.2003	18.12.2008	05.04.2010	05.04.2015	Satisfactory
926	23.09.2004	04.06.2007	05.04.2010	05.04.2015	Satisfactory
1540	31.12.2005	07.04.2010	06.11.2012	06.11.2017	Satisfactory
SVSM					
587	21.09.2003	22.11.2005	06.04.2010	06.04.2015	Satisfactory
588	22.09.2003	05.12.2006	06.04.2010	06.04.2015	Satisfactory
974	30.09.2004	06.04.2010	09.10.2012	09.10.2017	Satisfactory
976	30.09.2004	07.02.2009	06.04.2010	06.04.2015	Satisfactory
1333	16.07.2005	05.02.2009	05.04.2010	05.04.2015	Satisfactory
1354	12.08.2005	05.02.2009	05.04.2010	05.04.2015	Satisfactory
1527	28.12.2005	23.02.2009	07.04.2010	07.04.2015	Satisfactory
TSML					
625	29.09.2003	02.12.2006	06.04.2010	06.04.2015	Satisfactory
626	29.09.2003	18.12.2008	06.04.2010	06.04.2015	Satisfactory
1041	21.10.2004	06.04.2010	26.02.2011	26.02.2016	Satisfactory
1748	30.03.2006	02.06.2008	06.04.2010	06.04.2015	Satisfactory
RML					
576	21.09.2003	18.12.2008	05.04.2010	05.04.2015	Satisfactory
577	21.09.2003	18.12.2008	05.04.2010	05.04.2015	Satisfactory
944	28.09.2004	16.12.2008	05.04.2010	05.04.2015	Satisfactory
972	30.09.2004	05.04.2010	26.02.2011	26.02.2016	Satisfactory
979	30.09.2004	04.01.2008	05.04.2010	05.04.2015	Satisfactory
980	30.09.2004	24.07.2008	05.04.2010	05.04.2015	Satisfactory
1022	30.09.2004	07.02.2009	05.04.2010	05.04.2015	Satisfactory
1347	04.08.2005	05.04.2010	26.02.2011	26.02.2016	Satisfactory
1348	04.08.2005	05.04.2010	26.02.2011	26.02.2016	Satisfactory
1467	29.09.2005	08.01.2008	05.04.2010	05.04.2015	Satisfactory
1582	28.02.2006	24.02.2009	07.04.2010	07.04.2015	Satisfactory
1691	27.03.2006	24.02.2009	07.04.2010	07.04.2015	Satisfactory

APPENDIX 2: < DETAILED LOCATION OF WTGS>

Monitoring period from 01 April 2011 – 31 October 2012 for WTGs now under CDM

HT Sc No.	NO.s and Capacity (KW) of turbine	Make of Turbine	SF No. of Turbine	Location	Latitude	Longitude
MCL Pushpathur						
D97	1x800	Enercon	702/1A(P)	Pushpathur	N10 36 5.822	E77 24 2.497
D98	1x800	Enercon	451/1(P)	Pushpathur	N10 35 25.7	E77 27 25.556
D99	1x800	Enercon	461/1(P),457/1(P)	Pushpathur	N10 35 17.777	E77 27 40.388
D100	1x800	Enercon	305(P)	Pushpathur	N10 33 22.967	E77 25 31.349
D101	1x800	Enercon	1/1(P)	Pushpathur	N10 33 32.172	E77 25 10.455
D102	1x800	Enercon	9	Pushpathur	N10 33 21.471	E77 25 5.923
D115	1x800	Enercon	166/3 & 165/2(P)	Pushpathur	N10 33 48.419	E77 24 31.989
D116	2x800	Enercon	222, 210/1	Pushpathur	N10 35 55.43, N10 35 52.793	E77 24 59.435, E77 25 12.37
D117	1x800	Enercon	670/1B(P)	Pushpathur	N10 36 33.779	E77 27 5.877
D118	1x800	Enercon	665/1A(P)	Pushpathur	N10 39 53.363	E77 27 5.333
D119	2X800	Enercon	649/1C2(P),644(P)	Pushpathur	N10 35 2.105, N10 36 6.094	E77 27 14.39, E77 27 6.084
D120	1x800	Enercon	616/1A(P)	Pushpathur	N10 35 34.50	E77 27 15.17
D121	2x800	Enercon	471(P)SOUTH, 472(P),471(P)NO RTH	Pushpathur	N10 33 2.822, N10 35 18.626	E77 27 16.773, E77 27 10.868
D122	1x800	Enercon	228/2A2	Pushpathur	N10 33 47.03	E77 26 6.389
D129	7x800	Enercon	670/1B(P),347(P), 349(P)SOUTH, 356/4A,3G,5C, 358/1(P)NORTH, 416, 676(P), 675/1(P)	Pushpathur	N10 36 7.969, N10 36 4.638, N10 36 0.462, N10 36 6.492, N10 36 0.692, N10 36 3.355, N10 36 43.574	E77 28 1.439, E77 28 5.537, E77 27 57.231, E77 27 51.525, E77 27 42.812, E77 27 26.820, E77 27 26.244
D132	2x800	Enercon	53/1(P), 54/1(P) & 2(P)	Pushpathur	N10 35 1.947, N10 36 46.863	E77 24 49.427, E77 26 44.245
D133	1x800	Enercon	103/1B	Pushpathur	N10 37 1.551	E77 26 33.779
D134	1x800	Enercon	44/3A	Pushpathur	N10 35 26.614	E77 24 49.969
D135	7x800	Enercon	26/1(P),27/1(P), 12/1B3(P), 148/1,2(P), 144/4(P), 110/1A(P), 115/1(P), 110/3(P))	Pushpathur	N10 37 7.098, N10 37 4.643, N10 37 0.434, N10 37 0.151, N10 37 3.542, N10 37 4.232, N10 36 57.384	E77 26 55.041, E77 26 38.692, E77 26 51.136, E77 26 28.152, E77 26 10.488, E77 26 7.092, E77 26 13.319
D136	1x800	Enercon	199(P)	Pushpathur	N10 37 28.380	E77 25 49.131
D137	1x800	Enercon	204/2(P) & 126/1(P)	Pushpathur	N10 37 15.869	E77 25 47.388
D138	2x800	Enercon	225/2A2,2A3,2A4, 224/1(P), 125/1(P), 2(P)	Pushpathur	N10 36 1.945, N10 37 1.115	E77 25 40.589, E77 25 45.298
D139	2x800	Enercon	78/5,6(P), 100/1(P),2(P)	Pushpathur	N10 35 1.574, N10 36 41.402	E77 24 48.981, E77 246 31.245
D140	2x800	Enercon	69/1B(P),	Pushpathur	N10 36 1.294,	E77 24 45.736,

			70/1,3(P)		N10 35 44.379	E77 24 45.439
MCL Thandyarkulam						
2357	1x1650	Vestas	525	Thandayarkulam	N8 19 45.8	E77 37 30.2
2358	1x1650	Vestas	538	Thandayarkulam	N8 19 19.4	E77 37 38.7
2359	1x1650	Vestas	529	Thandayarkulam	N8 19 39.6	E77 37 12.8
2360	1x1650	Vestas	568	Thandayarkulam	N8 19 32.7	E77 37 34.3
2361	1x1650	Vestas	931	Thandayarkulam	N8 18 45.0	E77 40 06.8
2362	1x1650	Vestas	754	Thandayarkulam	N8 18 53.6	E77 40 36.3
2367	1x1650	Vestas	150	Thandayarkulam	N8 18 40.9	E77 39 30.4
2368	1x1650	Vestas	502	Thandayarkulam	N8 19 55.1	E77 36 59.8
MCL – Uthumalai						
2505	1x1650	Vestas	179/2A,2B,3,4,5,6,7,8,9,10A,10B,11A,11B,11C,12	Vadiyoor	N8 58 097	E77 27 .549
2506	1x1650	Vestas	58/14A,14B,14C,15A,15B,15C,16(P),17A,17B,18,21	Rajagopalaperi	N8 57 .193	E77 27 .533
2507	1x1650	Vestas	324/2A,2B,2C,3,4A,4B,4C,5,6A,6B	Rajagopalaperi	N8 57 .504	E77 27 .620
2509	1x1650	Vestas	87/5,6,7,8,9,88/1,2,3A,3B,4,5,6,7,89/14A,14B,15,16,17,18	Anaikulam	N9 00 06.2	E77 27 24.3
2510	1x1650	Vestas	36/1,2(P),3(P),4,37/2(P),3,4(P),5,6,7(P)	Vadiyoor	N8 59 02.7	E77 28 06.4
2522	1x1650	Vestas	196/2B2,3B,3C	Rajagopalaperi	N8 56 .944	E77 27 .823
2616	1x1650	Vestas	234/5A,5B,5C,5D,6A,6B,7,8,11A,11B,11C,236/1A,1B,2,237/18A,18B	Rajagopalaperi	N8 56 40.7	E77 27 48.0
2629	1x1650	Vestas	653/1(P),654/1(P),2	Uthumalai	N8 58 20.3	E77 32 47.7
MCL-Udumalpet						
U1459	1x1650	Vestas	186(P),188/1AA(P)	Udumalpet	N10 35.857	E77 14.145
U1460	1x1650	Vestas	163/1	Udumalpet	N10 34.498	E 77 11.435
U1464	1x1650	Vestas	59/3B(P),253/C1(P)	Udumalpet	N10 37.239	E77 12.081
U1465	1x1650	Vestas	252/B1C(P),253/C1(P)	Udumalpet	N10 34.844	E77 11.315
U1468	1x1650	Vestas	446/3,446/4	Udumalpet	N10 37.760	E77 21.854
U1469	1x1650	Vestas	440/2A,2B	Udumalpet	N10 37.985	E77 21.804
U1522	1x1650	Vestas	370/1C1 1C2(P)	Udumalpet	N10 38.175	E77 21.520
U1532	1x1650	Vestas	525/2(P)	Udumalpet	N10 38.559	E77 20.304

WTGs with continued operation under VCS

HT Sc No.	NO.s and Capacity (KW) of turbine	Make of Turbine	SF No. of Turbine	Location	Latitude	Longitude
MCL Pushpathur						
D31	1x800	Enercon	484/1,2	Pushpathur	N10 34 4.981	E77 24 59.852
D69	7x800	Enercon	125/1A;188/1,2;193/1B;185;177/1B,1C(P);177/1C(P);	Pushpathur	N10 36 5.822, N10 36 1.228, N10 35 7.224,	E77 24 2.497, E77 24 20.415, E77 24 33.504,

			171		N10 36 8.74, N10 36 1.294, N10 35 1.574, N10 35 44.379	E77 24 33.496, E77 24 45.736, E77 24 48.981, E77 24 45.439
D76	1x800	Enercon	338	Pushpathur	N10 35 26.614	E77 24 49.969
D77	1x800	Enercon	347/2B1&2B2	Pushpathur	N10 35 11.947	E77 24 49.427
MCL Uthumalai						
1528	1x1650	Vestas	619/1,2	Uthumalai	N8 58 10.2	E77 32 32.4
1529	1x1650	Vestas	649/1,2,3,4	Uthumalai	N8 58 01.9	E77 32 52.0
1530	1x1650	Vestas	641/1,2	Uthumalai	N8 57 43.1	E77 32 46.9
1531	1x1650	Vestas	664/1,3	Uthumalai	N8 58 08.3	E77 32 13.1
2037	1x1650	Vestas	233/8A,8B	Anaikulam	N9 00 46.5	E77 28 15.2
2038	1x1650	Vestas	284/1(P)	Anaikulam	N9 00 22.2	E77 28 18.7
2039	1x1650	Vestas	64/2(P),65/2E,6,3 C,3B,2G,2D,2B,2 C,3A,4,5,2F,1, 66/3B,2B,5,8C,1A ,1B,2A,3A,4,6,7,8 A,8B	N. Krishna puram	N9 00 27.4	E77 29 34.0
2067	1x1650	Vestas	99/1,3(P),2(P),103 /11(P)	Kurichampatti	N8 59 27.1	E77 29 48.8
2068	1x1650	Vestas	83/3,4,5,6	Kurichampatti	N8 59 18.1	E77 29 21.3
MCL-Udumalpet						
U1311	1x1650	Vestas	161/1A3	Thungavi	N10 37.476	E77 18.987
U1310	1x1650	Vestas	34/2C2(P)	Thungavi	N10 37.644	E77 19.306
RIL						
271	1x1250	Suzlon	320/1(p)	Kallupalayam	N10 55 43.0	E77 04 11.1
426	1x750	NEG Micon	178/2 (part)	Panagudi	-	-
468	1x1250	Suzlon	301/3C (part)	Irukanthurai	N8 12 25.7	E77 40 09.5
510	500	Vestas RRB	1227/6 (part)	Pazhavor	-	-
630	1x1250	Suzlon	386/3(p)	Irukanthurai	N8 12 32.1	E77 30 21.9
1383	1x1250	Suzlon	483/1(P),2(P)	Irukanthurai	N8 10 34.3	E77 39 05.0
1384	1x1250	Suzlon	94/1B(P)	Irukanthurai	N8 12 58.7	E77 40 39.9
1525	1x1650	NEG Micon	212/2,212/3 & 213/2(P)	Uthumalai	N8 54 47.6	E76 33 16.3
F	1x1650	NEG Micon	207/3	Uthumalai	N8 55 46.8	E75 33 16.3
ELP- 27	2x800	Enercon	321/P	Gulihosahalli	-	-
H - 31	1x1500	Suzlon	SN-12	Aidahalli Kaval	-	-
RMU						
978	1x1250	Suzlon	879/3C	Dhanakarkulam	N8 14 06.4	E77 40 29.0
SRS						
973	1x1250	Suzlon	886/3A1	Irukanthurai	N8 12 42.8	E77 39 28.6
RST						
975	1x1250	Suzlon	705/3	Dhanakarkulam	N8 13 16.9	E77 38 44.2
977	1x1250	Suzlon	682/1 A, 1A (P)	Dhanakarkulam	N8 13 25.9	E77 39 08.2
Sandhya						
631	1x1250	Suzlon	393/3B(P)	Irrukanthurai	N8 11 35.0	E77 39 24.9
632	1x1250	Suzlon	329/4B(P)	Dhanakarkulam	N8 14 57.7	E77 38 43.0
1044	1x350	Suzlon	972/1B(P) & 2B(P)	Irrukanthurai	N8 12 17.7	E77 38 39.4
1422	1x1250	Suzlon	404/2B	Irrukanthurai	N8 11 20.0	E77 39 15.1
1468	1x1250	Suzlon	145/2(P)	Irrukanthurai	N8 12 07.7	E77 40 48.2
SSM						
578	1x1250	Suzlon	851/1B(P)	Dhanakarkulam	N8 13 25.5	E77 40 30.6
579	1x1250	Suzlon	854/1(P)	Dhanakarkulam	N8 13 35.3	E77 40 25.1

926	1x1250	Suzlon	828/2(P)	Dhanakarkulam	N8 13 14.7	E77 40 19.8
1540	1x1650	NEG Micon	336/5,6,7A, 7B,8,9,10A,10B,1 1A,11B	Uthumalai	N8 57 57.3	E77 32 01.9
SVSM						
587	1x1250	Suzlon	662/2D	Dhanakarkulam	N8 13 13.2	E77 39 46.2
588	1x1250	Suzlon	755/3A1(P)	Dhanakarkulam	N8 12 44.5	E77 39 45.2
974	1x1250	Suzlon	782/1	Dhanakarkulam	N8 12 57.4	E77 39 59.5
976	1x1250	Suzlon	920/3B(P)	Dhanakarkulam	N8 13 11.9	E77 39 00.2
1333	1x1250	Suzlon	54/1C(P)	Irukanthurai	N8 13 28.4	E77 40 45.5
1354	1x1250	Suzlon	858/1B(P) & 857/2B(P)	Dhanakarkulam	N8 13 45.9	E77 40 43.9
1527	1x1650	NEG Micon	142/1(P)	Kavalakuruchi	N8 56 48.8	E77 32 16.3
TSML						
625	1x1250	Suzlon	123/5(P)	Dhanakarkulam	N8 14 55.9	E77 38 12.8
626	1x1250	Suzlon	338/4(P)	Dhanakarkulam	N8 14 55.0	E77 38 28.0
1041	1x1250	Suzlon	887/1C(P)	Irukanthurai	N8 12 33.9	E77 39 16.4
1748	1x1250	Suzlon	884/2G(P),2I(P)	Irukanthurai	N8 12 15.1	E77 39 24.3
RML						
576	1x1250	Suzlon	674/(P)	Dhanakarkulam	N8 13 33.2	E77 39 55.3
577	1x1250	Suzlon	845/1(P)	Dhanakarkulam	N8 13 34.5	E77 40 10.2
944	1x1250	Suzlon	311/2A1,2A2	Irukanthurai	N8 12 48.4	E77 40 17.3
972	1x1250	Suzlon	363/2A(P)	Irukanthurai	N8 12 15.1	E77 39 57.1
979	1x1250	Suzlon	890/4	Dhanakarkulam	N8 13 55.1	E77 40 16.8
980	1x1250	Suzlon	891	Dhanakarkulam	N8 14 04.2	E77 40 13.9
1022	1x1250	Suzlon	837/2	Irukanthurai	N8 12 04.8	E77 38 34.6
1347	1x1250	Suzlon	129/9(P)	Irukanthurai	N8 12 28.8	E77 41 14.4
1348	1x1250	Suzlon	36(P)	Irukanthurai	N8 12 39.5	E77 41 12.4
1467	1x1250	Suzlon	137/3(P)	Irukanthurai	N8 12 21.3	E77 40 59.6
1582	1x1650	NEG Micon	245/2(P)	Uthumalai	N8 58 07.9	E77 31 44.7
1691	1x1650	NEG Micon	249/2(P)	Uthumalai	N8 58 14.9	E77 31 26.9

APPENDIX 3: < DETAILS OF METER CHANGE>

Monitoring period from 01 April 2011 – 31 October 2012 for WTGs now under CDM

HT SC No.	Old Meter Serial No.	New Meter Sr. No.	Make	Accuracy Class
MCL Pushpathur				
D118	04901299	TN 902861	Secure	0.2s
D135	04901426	TN 902395	Secure	0.2s
D140	04938075	TN 902403	Secure	0.2s
MCL Thandyarkulam				
2357	04881134	12090151	L&T (ABT)	0.2s
2358	04881100	TN 902008	Premier	0.2s
2362	TN 900279	12091943	L&T (ABT)	0.2s
2367	04892606	12091957	L&T (ABT)	0.2s
MCL – Udumalpet				
U1460	04889948	12091961	L&T	0.2s
U1465	04901980	HT 2110724	Wallaby	0.2s
U1522	04938080	TN 901621	Secure	0.2s

WTGs with continued operation under VCS

HT SC No.	Old Meter Serial No.	New Meter Sr. No.	Make	Accuracy Class
MCL Pushpathur				
D31	04863755	10287921	L&T	0.2s
D77	04865532	TN 902737	Secure	0.2s
MCL – Uthumalai				
1531	TN04107	12091967	L&T	0.2s
2037	TNB04543	12090189	L&T	0.2s
2038	04804661	12090191	L&T	0.2s
2039	04804669	TN902719	Premier	0.2s
2067	08040605	12090200	L&T	0.2s
2068	04863822	12090182	L&T	0.2s
MCL-Udumalpet				
U1310	04804784	12091965	L&T	0.2s
U1311	TNB 03943	12091962	L&T	0.2s
RIL				
1540	0840579	12092147	L&T	0.2s
1525	04725704	09593368	L&T	0.2s