

CENTRE FOR WIND ENERGY TECHNOLOGY

Ref.No.: C-WET/S&C/RLMM/2011-12/23

Date : 22.06.2011

To

All Concerned

Dear Sir,

Sub: Revised List of Models and Manufacturers of Wind Turbines – “MAIN LIST”

The revised “**MAIN LIST**” of “**Models and Manufacturers of wind turbines**”, prepared as per MNRE guidelines no.66/53/2000-WE (PG) dated 23.10.2000, 66/53/2006-WE dated 24.07.2008, 66/53/2006-WE dated 08.12.2009, 66/53/2006-WE dated 08.01.2010 and MNRE letter no.66/53/2006-WE dated 29.12.2009, based on the information provided by wind turbine manufacturers, is enclosed.

Thanking you,

Yours faithfully,

For Centre for Wind Energy Technology

(A. Senthil Kumar)
Unit Chief,
Standards & Certification

Encl: As above

Sir,

Sub: Revised List of Models and Manufacturers of wind turbines – “MAIN LIST”

The Ministry had issued guidelines vide MNRE no.66/241/95-WE/PG dated 13.06.1996 to streamline the development and facilitate healthy and orderly growth of the wind power sector in the country. The guidelines, inter-alia, include measures for the installation of duly tested and certified quality equipment which will optimize generation of energy from wind power projects. As per the revised guidelines of MNRE no.66/53/2000-WE(PG) dated 23.10.2000, para 3, point (i), on re-introduction of requirement of Certification by Independent testing and Certification agencies, MNRE letter no.66/53/2006-WE dated 29.12.2009, revised guidelines of MNRE no.66/53/2006-WE dated 24.07.2008, 66/53/2006-WE dated 08.12.2009, 66/53/2006-WE dated 08.01.2010 the list of manufacturers has been drawn up by C-WET with models of wind turbines of unit capacity 225kW and above that have obtained Type Approval / Certificate from designated certification agencies or under Testing and Certification, as per the information received from the manufacturers. The list has three tables as detailed below:

1. Table –A : List of wind turbine models possessing valid Type Approval / Certificate
2. Table –B : List of wind turbine models that are under Testing and Certification
3. Table –C : List of wind turbine models that are under Testing and Certification and kept in abeyance by the RLMM committee (As per the MNRE guidelines dated 24.07.2008, 08.12.2009 and 08.01.2010, the wind turbine models are kept separately in Table–C, withdrawing their entitlement for commercial deployment of machines under self certification)

Table – A: The wind turbine models possessing valid Type Approval / Certificate:

Sl. No.	Indian Manufacturers with address	Collaboration / Joint Venture	Model Rotor Dia (RD) (m) / Hub height (HH) (m)	Capacity	* Type Certificate (Valid until)	*Manufacturing System Certificate / ISO Certificate (Valid until)
1.	M/s. Chiranjeevi Wind Energy Limited, 26-A, Kamaraj Road, Mahalingapuram Pollachi-642 002 Coimbatore - District Phone : 04259- 224438 Fax : 04259-224437	None	CWEL C30/250 kW RD : 29.8 m HH : 50 m Tower type: Lattice	250 kW	Available (25.02.2015)	YES (17.11.2011)

* State Electricity Boards / TRANSCOs/ State Nodal Agencies/ developers shall refer complete Type Approval / Certificate of the models listed above including ISO certificate for verification of validity period, detailed specifications, power curve, and all the other relevant information. Also refer the renewed Type Certificate / ISO certificate for the validity period above than the period mentioned.

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Sl. No.	Indian Manufacturers with address	Collaboration / Joint Venture	Model Rotor Dia (RD) (m) / Hub height (HH) (m)	Capacity	* Type Certificate (Valid until)	*Manufacturing System Certificate / ISO Certificate (Valid until)
2	M/s. Enercon (India) Ltd. “Enercon Tower” A-9, Veera Industrial Estate Veera Desai Road Andheri (West) Mumbai - 400 053 Phone : 022-66924848 Fax : 022- 66990940	Enercon GmbH, Germany.	E-48 RD : 48 m HH : 50/56/57/65/ 75/76 m Tower type: For HH 50/56/57/65/76 m– Tubular steel & 75 m - pre cast concrete	800 kW	Available (15.05.2013)	YES (08.02.2013)
			E -53 RD : 53 m HH : 73 / 75 m Tower type: For HH 73 m–Steel & 75 m - concrete tower	800 kW	Available (15.05.2013)	
3.	M/s. Gamesa Wind Turbines Private Limited No.489, G.N.T Road, Thandal Kazhani village, Vadagarai (Post), Red Hills, Chennai– 600 052 Phone: 044-30989898 Fax : 044-26322205	Gamesa Innovation and Technology, S.L. Spain.	MADE AE59 RD : 59 m HH : 60.6 m Tower type: Tubular steel	800 kW	Available (17.02.2013)	YES (31.12.2012)
			G52-850 kW 50 Hz RD : 52 m HH : 44/55/65 m Tower type: Tubular steel	850 kW	Available (16.12.2012)	
			G58-850 kW 50 Hz RD : 58 m HH : 44/55/65/74 m Tower type: Tubular steel	850 kW	Available (17.12.2011)	
			Gamesa G90-2.0 MW IEC IIA 50 Hz RD : 90 m HH : 67/78/100 m Tower type: Tubular steel	2000 kW	Available (31.10.2012)	

* State Electricity Boards / TRANSCOs/ State Nodal Agencies/ developers shall refer complete Type Approval / Certificate of the models listed above including ISO certificate for verification of validity period, detailed specifications, power curve, and all the other relevant information. Also refer the renewed Type Certificate / ISO certificate for the validity period above than the period mentioned.

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Sl. No.	Indian Manufacturers with address	Collaboration / Joint Venture	Model Rotor Dia (RD) (m) / Hub height (HH) (m)	Capacity	* Type Certificate (Valid until)	*Manufacturing System Certificate / ISO Certificate (Valid until)
			Gamesa G90-2.0 MW IEC IIIA 50 Hz RD : 90 m HH : 67/78/100 m Tower type: Tubular steel	2000 kW	Available (31.10.2012)	
			Gamesa G80-2.0 MW IEC IA 50 Hz RD : 80 m HH : 60/67/78 m Tower type: Tubular steel	2000 kW	Available (31.10.2012)	
			Gamesa G80-2.0 MW IEC IIA 50 Hz RD : 80 m HH : 60/67/78/100 m Tower type: Tubular steel	2000 kW	Available (31.10.2012)	
			Gamesa G87-2.0 MW IEC IIA 50 Hz RD : 87 m HH : 67/78/100 m Tower type: Tubular steel	2000 kW	Available (02.11.2012)	
4.	M/s. GE India Industrial Private Limited., Division: Wind Energy, A-1, 2 nd Floor, Golden Enclave, Corporate Towers HAL Airport Road, Bangalore – 560 017 Phone : 080- 40183802 Fax : 080 - 25203860	Technology Transfer Agreement with GE Infrastructure Technology International, LLC, USA	GE 1.5sle 50 Hz RD : 77 m HH : 80 m Tower type: Tubular steel	1500 kW	Available (19.01.2012)	YES (31.03.2014)
			GE 1.6-82.5, 50 Hz RD: 82.5 m HH: 80 m Tower type: Tubular steel	1600 kW	Available (19.10.2011)	
5.	M/s. Global Wind Power Limited 301, Satellite Silver, 3 rd Floor, Andheri Kurla Road, Marol, Andheri (East) Mumbai– 400 059 Phone : 022-39918500 Fax : 022- 39918521	License Agreement with NORWIN A/S, Denmark. License Agreement with Fuhrlander AG, Germany.	NORWIN 750 kW RD : 47 m HH : 65 m Tower type: Tubular steel	750 kW	Available (15.07.2011)	YES (12.02.2012)
			FL 2500-100 / W2E – W100 2.5 MW, 50 Hz RD : 100.2 m HH : 98.2 / 85 m Tower type: Tubular steel	2500 kW	Available (28.04.2012)	

* State Electricity Boards / TRANSCOs/ State Nodal Agencies/ developers shall refer complete Type Approval / Certificate of the models listed above including ISO certificate for verification of validity period, detailed specifications, power curve, and all the other relevant information. Also refer the renewed Type Certificate / ISO certificate for the validity period above than the period mentioned.

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Sl. No.	Indian Manufacturers with address	Collaboration / Joint Venture	Model Rotor Dia (RD) (m) / Hub height (HH) (m)	Capacity	* Type Certificate (Valid until)	*Manufacturing System Certificate / ISO Certificate (Valid until)
6.	M/s. Inox Wind Limited, Inox Towers, Plot No.17, Sector 16 A, Noida Uttar Pradesh- 201 301 Phone : 0120 – 6149600 Fax : 0120 – 6149610	License Agreement with AMSC-WINDTEC GmbH, Austria.	WT2000DF RD : 93.3m HH : 80 m Tower type: Tubular steel	2000 kW	Available (29.04.2013)	YES (23.06.2013)
7.	M/s. Kenersys India Private Limited Industry House, Survey No.49, Mundhwa, Pune- 411 036 Phone : 020- 30462899 Fax : 020 – 30462888	KENERSYS GmbH, Germany.	K82 RD : 82 m HH : 80 m Tower type: Tubular Steel	2000 kW	Available (10.09.2015)	YES (09.11.2011)
8.	M/s. Leitner Shriram Manufacturing Ltd No.D-17, Sipcot Industrial Complex, Gummidipoondi - 601201, Thiruvallur District, Tamilnadu Phone : 044-27926000 Fax : 044-27924944	LEITWIND BV, Netherlands.	Leitner LTW77- 1.35 MW RD : 76.6 m HH : 65 m Tower type: Tubular steel	1350 kW	Available (30.11.2012)	YES (04.01.2012)
			Leitwind LTW77- 1.5 MW RD : 76.6 m HH : 61/65/80 m Tower type: For HH 61/65/80 m–Tubular Steel & 80 m - Hybrid tower (Steel and Concrete)	1500 kW	Available (20.08.2012)	
			Leitwind LTW80- 1.5 MW RD : 80.3 m HH : 65 /80 m Tower type: Tubular steel	1500 kW	Available (06.04.2013)	
			Leitwind LTW80- 1.8 MW RD : 80.3 m HH : 65 /80 m Tower type: Tubular steel	1800 kW	Available (06.04.2013)	
9.	M/s. Pioneer Wincon Private Ltd. 30/1A, Harrington Chambers, 2 nd Floor, “A” Block, Abdul Razaq 1 st Street, Saidapet, Chennai- 600 015 Phone : 044- 24314798 Fax : 044- 24314798	None	Pioneer P250/29 RD : 29.6 m HH : 50 m Tower type: Lattice	250 kW	Available (26.06.2011)	YES (06.03.2012)

* State Electricity Boards / TRANSCOs/ State Nodal Agencies/ developers shall refer complete Type Approval / Certificate of the models listed above including ISO certificate for verification of validity period, detailed specifications, power curve, and all the other relevant information. Also refer the renewed Type Certificate / ISO certificate for the validity period above than the period mentioned.

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Sl. No.	Indian Manufacturers with address	Collaboration / Joint Venture	Model Rotor Dia (RD) (m) / Hub height (HH) (m)	Capacity	* Type Certificate (Valid until)	*Manufacturing System Certificate / ISO Certificate (Valid until)
10.	M/s. Regen Powertech Pvt Ltd, No.28, College Road, Chennai- 600 006 Phone : 044 – 30280200 Fax : 044 – 30280199	Sub-license agreement with Vensys Energy, AG, Germany.	VENSYS 77 RD: 76.84 m HH : 75/ 85m Tower Type : Tubular steel	1500 kW	Available (01.07.2011)	YES (20.06.2011)
11.	M/s. RRB Energy Limited No.17 , Vembuliamman Koil Street, K.K. Nagar (West), Chennai- 600 078 Phone: 044-23641111 Fax : 044-23642222	Technological cooperation with Vestas Wind Systems A/s, Denmark.	V39-500 kW with 47m rotor diameter RD : 47m HH : 50 m Tower type: Tubular steel & Lattice	500kW	Available (20.04.2012)	YES (17.12.2011)
			Pawan Shakthi–600 kW RD : 47m HH : 50/65 m Tower type: For HH 50m - Lattice & 65m-Tubular steel	600 kW	Available (04.07.2011)	
12.	M/s. Shiram EPC Limited No.9, Vanagaram Road, Ayanambakkam Chennai – 600095 Phone: 044-26533313 Fax : 044-43537643	License agreement with TTG Industries Ltd.	SEPC 250T RD : 28.5 m HH : 41.2 m Tower type: Lattice	250 kW	Available (11.06.2012)	YES (22.05.2012)
13.	M/s. Siva Windturbine India Private Limited 12A, Kandampalayam, Perundurai, Erode- District Pin : 638052 Phone : 04294 – 220017 Fax : 04294 – 220137	License agreement with Wind Technik Nord, Germany.	SIVA 250/50 RD : 30 m HH : 50 m Tower type: Lattice	250 kW	Available (30.01.2012)	YES (30.09.2011)
14.	M/s. Southern Wind Farms Limited No.15, Soundarapandian Street, Ashok nagar, Chennai – 600 083 Phone : 044 – 39182600 Fax : 044 - 39182636	None	GWL 225 RD : 29.8 m HH : 45 m Tower type : Tubular steel	225 kW	Available (27.02.2012)	YES (05.01.13)

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Sl. No.	Indian Manufacturers with address	Collaboration / Joint Venture	Model Rotor Dia (RD) (m) / Hub height (HH) (m)	Capacity	* Type Certificate (Valid until)	*Manufacturing System Certificate / ISO Certificate (Valid until)
15.	M/s. Suzlon Energy Ltd. Tree Lounge, Level 0 One Earth, Opp. Magarpatta City, Hadapsar, Pune – 411028 Phone : 020- 40122000 Fax : 020- 40122200	Suzlon Energy Gmbh, Germany.	Suzlon S.52 / 600 kW RD : 52 m HH : 75 m Tower type: Lattice	600 kW	Available (12.08.2012)	YES (14.04.2012)
			Suzlon S64 – 1.25 MW / MARK II RD : 64 m HH : 56/65/74m Tower type: Tubular steel	1250 kW	Available (11.11.2012)	
			Suzlon S66 – 1.25 MW / MARK II RD : 66 m HH : 65/74 m Tower type: Tubular steel	1250 kW	Available (11.11.2012)	
			Suzlon S82V3-1500 kW RD : 82 m HH : 78 m Tower type: Tubular steel	1500 kW	Available (08.08.2012)	
			Suzlon S88 V3A - 2100 kW RD : 88 m HH : 80 m Tower type: Tubular Steel	2100 kW	Available (07.02.2012)	
16.	M/s. Vestas Wind Technology India Pvt. Ltd. 298, Rajiv Gandhi Salai, Sholinganallur, Chennai- 600 119 Phone :044- 24505100 Fax :044- 24505101	Wholly owned Subsidiary of Vestas Group, Denmark.	V82-1.65 MW RD : 82 m HH : 70 / 78 / 80 m Tower type: Tubular steel	1650 kW	Available (06.02.2013)	YES (10.09.2013)
			Vestas V100-1.8 MW 50/60Hz VCS Mk 7 RD : 100 m HH : 80 / 95 m Tower type: Tubular steel	1800 kW	Available 04.03.2016	
17.	M/s. Winwind Power Energy Private Limited STERLING TOWER 327, Anna Salai Teynampet, Chennai – 600 006 Phone : 044 – 24313001 Fax : 044 – 24313066	License agreement with Winwind Oy, Finland	WinWinD 1 MW RD : 60 m HH : 70 m Tower type: Tubular steel	1000 kW	Available (12.11.2015)	YES (31.12.2011)

* State Electricity Boards / TRANSCOs/ State Nodal Agencies/ developers shall refer complete Type Approval / Certificate of the models listed above including ISO certificate for verification of validity period, detailed specifications, power curve, and all the other relevant information. Also refer the renewed Type Certificate / ISO certificate for the validity period above than the period mentioned.

Table – B: The wind turbine models that are under Testing and Certification:

Sl. No.	Indian Manufacturers with address	Collaboration / Joint Venture	Model Rotor Dia (RD) (m) / Hub height (HH) (m)	Capacity	*Category (New / Existing)	**Manufacturing System Certificate / ISO Certificate (Valid until)
1.	M/s. Garuda Vaayu Shakthi Limited, New No. 56, Old No. 44, Thirumalai Pillai Road, T. Nagar, Chennai – 600 017 Phone: 044 – 2834 5377 Fax : 044 – 2834 5376	None	Garuda 700.54 RD: 54m HH: 73m Tower type: Tubular steel	700 kW	New	YES (09.02.2014)
2.	M/s. Global Wind power Limited, 301, Satellite Silver, 3 rd Floor, Andheri Kurla Road, Marol, Andheri (East) Mumbai– 400 059 Phone : 022-39918500 Fax : 022- 39918521	License Agreement with Lagerwey Wind B.V, The Netherlands.	Lagerwey L-82 2MW RD: 82m HH: 80m Tower type: Tubular steel	2000 kW	New	YES (12.02.2012)
3.	M/s. Pioneer Wincon Private Ltd. 30/1A, Harrington Chambers, 2 nd Floor, “A” Block Abdul Razaq, 1 st Street, Saidapet Chennai- 600 015 Phone : 044- 24314798 Fax : 044- 24314798	None	P750/49 RD : 49m HH : 61.1 m Tower type: Lattice	750 kW	Existing	YES (06.03.2012)
4.	M/s. Regen Powertech Pvt Ltd, No.28, College road, Chennai -600 006. Phone: 044-30280200 Fax : 044-30280199	Sub-license agreement with Vensys Energy, AG, Germany.	VENSYS 82 RD: 82.34 m HH: 70/75/85/100 m Tower type: Tubular steel	1500 kW	Existing	YES (20.06.2011)

*MNRE guidelines dated 08.12.2009 and 08.01.2010 may be referred for the classification of ‘Existing’ / ‘New’ manufacturers and for the number of installable wind turbines.

** State Electricity Boards / TRANSCOs/ State Nodal Agencies/ developers shall refer the renewed ISO certificate for the validity period above than the period mentioned.

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Sl. No.	Indian Manufacturers with address	Collaboration / Joint Venture	Model Rotor Dia (RD) (m) / Hub height (HH) (m)	Capacity	*Category (New / Existing)	**Manufacturing System Certificate / ISO Certificate (Valid until)
5.	M/s. Shriram EPC Limited No.9, Vanagaram Road, Ayanambakkam Chennai – 600 095 Phone: 044-26533313 Fax : 044-43537643	License agreement with TTG Industries Ltd.	SEPC 250T RD : 28.5 m HH : 51.5 m Tower type: Lattice	250 kW	New	YES (22.05.2012)
			SEPC-250T WITH ROTOR BLADE EXTENDER RD: 29.6 m HH: 51.5 m Tower type: Lattice	250 kW		
6.	M/s. Suzlon Energy Ltd. Tree Lounge, Level 0 One Earth, Opp. Magarpatta City, Hadapsar, Pune – 411 028 Phone : 020- 40122000 Fax : 020- 40122200	Suzlon Energy Gmbh, Germany	Suzlon S95, 50 Hz, STV RD:95 m HH:80 /90 m Tower Type: Tubular steel	2100 kW	Existing	YES (14.04.2012)
			Suzlon S97, 50 Hz, STV RD:97 m HH:90 m Tower Type: Tubular steel	2100 kW		
			Suzlon S88 Mk II DFIG, 50 Hz, STV RD:88 m HH:80 m Tower Type: Tubular steel	2250 kW		

*MNRE guidelines dated 08.12.2009 and 08.01.2010 may be referred for the classification of 'Existing' / 'New' manufacturers and for the number of installable wind turbines.

** State Electricity Boards / TRANSCOs/ State Nodal Agencies/ developers shall refer the renewed ISO certificate for the validity period above than the period mentioned.

Table – C: The wind turbine models that are under Testing and Certification and kept in abeyance by RLMM Committee:

-NIL-

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This “Main List” list has been prepared with the available documents/information provided for the designated models by the manufacturers during the period of review and with all possible care and rigor by RLMM committee appointed by MNRE, Government of India. State Electricity Boards, State Nodal Agencies, developers and any party refers the list shall verify complete type approval / certificate of the models listed above including ISO certificate for verification of validity period, detailed specifications, power curve and all the other relevant information. Nevertheless, C-WET/MNRE and their scientists and engineers are not responsible for any consequences including technical, commercial and legal implications that may arise due to the usage of the list by any party. The responsibility for the usage, verification of complete documents and consequences thereof lies entirely with the user. Addendum to this “MAIN LIST” may be issued on a quarterly basis until the revision of the next “MAIN LIST”.

This list supersedes the Main List dated 18.05.2010, Addendum-I dated 27.09.2010 and Addendum-II dated 19.01.2011.

for Centre for Wind Energy Technology

(A. Senthil Kumar)
Unit Chief,
Standards & Certification

To

1. The Joint Secretary – (Wind Energy), MNRE, New Delhi.
2. The Director - (Wind Energy), MNRE, New Delhi.
3. All State Nodal Agencies
4. All State Electricity Boards / TRANSCOs
5. All Wind Turbine Manufacturers
6. All Financial Institutions
7. Indian Wind Turbine Manufacturers Association
8. Indian Wind Power Association.
9. C-WET Website www.cwet.tn.nic.in OR <http://cwet.res.in>
