# Minutes of "Wind Zone Classification and Evaluation Committee" meeting held on dtd. 18/5/2017

Subject:- Finalization of wind zone class of Wind Power projects developed by Following developer for their Investors:-

Meeting of "Wind Zone Classification and Evaluation Committee" held on 18/5/2017 at MEDA conference hall under chairmanship of Sr. General Manager (Adm. & Pub.). Following Committee Members were present for the meeting:-

1	Shri. U. M. Pande	Sr. General Manager (Adm. & Pub.)	Chairman
2	Shri. Purushottam Jadhav	General Manager (Co-ord.)	Member
3	Shri. M. A. Pise	General Manager ((PG-I/IDD)	Member
4	Shri. S. V. Gore	Assistant Director (Finance)	Member
5	Shri. S. R. Patil	Manager (IDD)	Member Secretary

Manager (ID) presented the information of site verification report related to the following proposals before Committee:-

- 1) Developer:- M/s. Sri Maruti Wind Park Developers.
- Site:- Jadhavwadi, Tal. Khanapur, Dist. Sangli (Vetted by NIWE for M/s Regen Powertech Pvt. Ltd.)
- Investor:- M/s. Clean Wind Power (Satara) Pvt Ltd:- 6.00 MW (3 x 2000 KW).
- 2) Developer:- M/s. Sri Maruti Wind Park Developers.
- Site:- Jadhavwadi, Tal. Khanapur, Dist. Sangli (Vetted by NIWE for M/s Regen Powertech Pvt. Ltd.)
- Investor:- M/s. Inox Renewables Ltd.. :- 16.0 MW (8 x 2000 KW).
- 3) Developer:- M/s. Sri Maruti Wind Park Developers.
- Site:- Jadhavwadi, Tal. Khanapur, Dist. Sangli (Vetted by NIWE for M/s Regen Powertech Pvt. Ltd.)
- Investor:- M/s. Sri Balaji Co. :- 4.0 MW (2 x 2000 KW).
- 4) Developer:- M/s. Sri Maruti Wind Park Developers.
- Site:- Jadhavwadi, Tal. Khanapur, Dist. Sangli (Vetted by NIWE for M/s Regen Powertech Pvt. Ltd.)
- Investor:- M/s. Ashwini Traders :- 2.0 MW (1 x 2000 KW).

- 5) Developer:- M/s. Sri Maruti Wind Park Developers.
- Site:- Jadhavwadi, Tal. Khanapur, Dist. Sangli (Vetted by NIWE for M/s Regen Powertech Pvt. Ltd.)
- Investor:- M/s. Shree Siddhivinayaka Cotton Corporation:- 2.0 MW (1 x 2000 KW).
- 6) Developer:- M/s. Sri Maruti Wind Park Developers.
- Site:- Mendhegiri, Tal. Jath, Dist. Sangli
- Investor:- M/s. D.J. Malpani :- 4.0 MW (2 x 2000 KW).
- 7) Developer:- M/s. Sri Maruti Wind Park Developers.
- Site:- Mendhegiri, Tal. Jath, Dist. Sangli
- Investor:- M/s. Giriraj Enterprises..:- 6.0 MW (3 x 2000KW).
- 8) Developer:- M/s. T. S. Wind Power Developer.
- Site:- Ameni, Tal. Shahuwadi, Dist. Kolhapur
- Investor:- M/s. Giriraj Enterprises..:- 2.0 MW (1 x 2000 KW).
- 9) Developer:- M/s. T. S. Wind Power Developer.
- Site:- Ameni, Tal. Shahuwadi, Dist. Kolhapur
- Investor:- M/s. Giriraj Enterprises..:- 2.0 MW (1 x 2000 KW).
- 10) Developer:- M/s. Aditya Engineers.
- Site:- Bhud, Tal. Khanapur, Dist. Sangli
- Investor:- M/s. ReNew Wind Energy (Rajasthan) Pvt. Ltd.:- 1.5 MW (1 x 1500 KW).
- 11) Developer:- M/s. T. S. Wind Power Developer.
- Site:- Thoseghar, Tal. Satara, Dist. Satara
- Investor:- M/s. Rajasthan Gum Pvt. Ltd.:- 10.50 MW (5 x 2100 KW).

12) Developer:- M/s. T. S. Wind Power Developer.

- Site:- Thoseghar, Tal. Revande, Dist. Satara
- Investor:- M/s. Neha Sharma.:- 2.1 MW (1 x 2100 KW)
- 13) Developer:- M/s. T. S. Wind Power Developer.
- Site:- Thoseghar, Tal. Satara, Dist. Satara
- Investor:- M/s. Shree Ram Industries..:- 2.1 MW (1 x 2100 KW).

14) Developer: - M/s. T. S. Wind Power Developer.

- Site:- Nandurpathar, Tal. Parner, Dist. Ahemednagar
- Investor:- M/s. Green Infra Corporate Solar Limited.:- 9.6 MW (4 x 2400 KW).

15) Developer: - M/s. Suzlon Energy Ltd.

- Site:- Chakla, Tal. Nandurbar, Dist. Nandurbar
- Investor:- M/s. Giriraj Enterprises:- 3.0 MW (2 x 1500 KW).

- Site:- Jadhavwadi, Tal. Khanapur, Dist. Sangli (Vetted by NIWE for M/s Regen Powertech Pvt. Ltd.)
- Investor:- M/s. Clean Wind Power (Satara) Pvt Ltd:- 6.00 MW (3 x 2000 KW).
- The only one WTG i.e 2.0 MW (1 x 2000kW) project is commissioned during the financial year 2015-16.
- As per site visit on dtd. 17/02/2017 at Jadhavwadi of Shri. R.A. Karandikar, Technician, MEDA Girye, the WTG location wise observations are as below:-

Sr. No.	Final file no.	WTG Locati on No.	MED A WTG No.	WTG Cap. MW	WTG Latit ude (N)			WTG Longit ude (E)			WTG Elev. MASL in mtrs.	Ref. Mast Elev. MASL in mtrs.	Forest Comp/ Survey/ Gut No.	Village Taluka District	Distance from Ref. wind mast in km		Diff. betwn . Ref. wind mast and WTG Elev. (Mtr.)	Date of Comm	Rem ark
1	2	3	4	5	6			7			8	9	10	11	12	13	14	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast			
		110.47	1001	2.0	47		22.2	= 1	10	20.4	000	0//	0.54		0.47		20	NT /	147:41 1
1		HC 16	4381	2.0	17	33	22.2	74	43	20.4	838	866	371	Mohi,	9.46	-	-28	Not	Within
														Khanapur, Sangli				Comm.	(+/-) 60 m elev. differe nce
2	WPP	HC 19	4382	2.0	17	17	1.6	74	42	49.4	852	866	775	Khanapur,	3.46		-14	23.12.16	Within
	-13- 2000													Khanapur,					(+/-) 60
														Sangli					m elev.
	-456																		differe nce
3	WPP	HC 20	4383	2.0	17	16	40.7	74	42	57.6	852	866	775	Khanapur,	4.04	-	-14	Not	Within
			2000									200						Comm.	(+/-)60
	2000																		m elev.
																			differe
																			nce
	-13-	110 20	4000	2.0	17	10	40.7	74	12	57.0	0.02	500	775	Khanapur, Khanapur, Sangli			-14	0	

- MEDA received an application for 6.00 MW (3 x 2000 KW) wind zone class of Wind Power projects developed by M/s. Clean Wind Power (Satara) Pvt Ltd. Out of 3 x 2000 kW WTGs the only one WTG i.e 2.0 MW (1 x 2000kW) project is commissioned during the financial year 2015-16. WTGs having the details at Sr. No. 1 & 3 above are found erected but yet not commissioned.
- Suggestions:- As per the procedure for classification of wind power projects into wind zone class, committee discussed and evaluated the said proposal with respect to above points. Committee suggested to issue the letter to M/s. Clean Wind Power (Satara) Pvt Ltd to submit the commissioning report of balance two WTGs mentioned at Sr. No. 1 & 3 above. After receipt of commissioning report committee will decide on zone of the project.

Minutes of hearing – No one is present from M/s. Sri Maruti Wind Park Developers / M/s. Clean Wind Power (Satara) Pvt Ltd. Further, no objection raised by other developer present in the hearing.

# Committee Recommendation-

Representative of applicant / Developer / Investor who present in the hearing has not raised any objection regarding committee suggestion. In view of this, Committee recommended to issue the letter to M/s. Clean Wind Power (Satara) Pvt Ltd to submit the commissioning report of balance two WTGs mentioned at Sr. No. 1 & 3 above.

- Site:- Jadhavwadi, Tal. Khanapur, Dist. Sangli (Vetted by NIWE for M/s Regen Powertech Pvt. Ltd.)
- Investor:- M/s. Inox Renewables Limited:- 16.00 MW (8 x 2000 KW).
- The project is commissioned during the financial year 2015-16
- As per site visit on dtd. 17/02/2017 at Jadhavwadi of Shri. R.A. Karandikar, Technician, MEDA Girye, the WTG location wise observations are as below:-

Sr. No.	Final file no.	WTG Locati on No.	MEDA WTG No.	WTG Cap. MW	WTG Latit ude (N)			WTG Longitu de (E)			WTG Elev. MASL in mtrs.	Ref. Mast Elev. MASL in mtrs.	Forest Comp/ Survey/ Gut No.	Village Taluka District	Distan ce from Ref. wind mast in km		Diff. betwn . Ref. wind mast and WTG Elev. (Mtr.)	Date of Comm	Remark
1	2	3	4	5	6			7			8	9	10	11	12	13	14	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast			
1	WPP- 13- 2000- 270	RVT 17	4182	2.0	17	15	5.3	74	36	40.2	855	866	834	Renavi, Khanapur, Sangli	9.68	-	-11	31/10/15	Within (+/-) 60 m elev. difference
2	WPP- 13- 2000- 246	RVT 15	4183	2.0	17	15	15.5	74	36	34.4	851	866	824	Renavi, Khanapur, Sangli	9.65	-	-15	31/10/15	Within (+/-) 60 m elev. difference
3	WPP-13- 2000-379	SBT 28	4186	2.0	17	15	42.1	74	36	13.0	850	866	1039	Renavi, Khanapur, Sangli	9.80	-	-16	31/10/15	Above (+/-) 60 m elev. difference
4	WPP-13- 2000-268	RVT 11	4181	2.0	17	15	50.1	74	36	8.6	832	866	1043/ 44	Renavi, Khanapur, Sangli	9.81	-	-34	31/10/15	Within (+/-) 60 m elev. difference
5	WPP- 13- 2000- 254	RVT 03	4364	2.0	17	17	13.2	74	36	33.0	827	866	83	Renavi, Khanapur, Sangli	8.34	-	-39	31/10/15	Within (+/-) 60 m elev. difference
6	WPP- 13- 2000- 381	SBT 57	4185	2.0	17	16	10.0	74	36	10.9	842	866	1069	Renavi, Khanapur, Sangli	9.51	-	-24	31/10/15	Within (+/-) 60 m elev. difference
7	WPP- 13- 2000- 224	SBT 22	4402	2.0	17	17	7.2	74	41	42.8	868	866	275	Jadhavwa di, Khanapur, Sangli	1.91	-	2	31/10/15	Within (+/-) 60 m elev. difference
8	WPP- 13- 2000- 159	SBT 24	4194	2.0	17	17	40.0	74	41	47.9	859	866	342	Balawadi Khanapur, Sangli	1.30	-	-7	31/10/15	Within (+/-) 60 m elev. difference

- There is no NIWE, Chennai declared wind mast within the 10 km radial distance of the above mentioned wind power project.
- Nearest reference Wind Mast for the above mentioned wind power project is at Village Jadhavwadi, Tal.- Khanapur, Dist.- Sangli (Latitude- N 17º 18' 02.2'' Longitude- E 74º 41' 10.7'' Elev.- 860 m AMSL) having WPD- 184.96 W/m<sup>2</sup> @ 50 m AGL vetted by C-WET Chennai for M/s. ReGen Powertech Private Limited, Chennai vide their letter no.C-WET/WRA/141/2012-2013 dated 24.09.2013.

- As per wind classification procedure, all WTGs are within effective area (10 km radial distance) of referred wind mast and overall 100% WTG location coordinates of wind power project are **within (+/-) 60 m** elevation difference of referred wind mast.
- However, Out of 8 WTGs of 16.00 MW (8 x 2000 KW) wind power project 5 WTGs having distance from Ref. wind mast is nearly an equal to 10 km. So, confirmation is required for the same from M/s. Inox Renewables Limited.
- Suggestions:- As per the procedure for classification of wind power projects into wind zone class, committee discussed and evaluated the said proposal with respect to above points and committee suggested to issue the letter to M/s. Inox Renewables Limited to confirm the distance of their WTGs (16.00 MW (8 x 2000 KW) capacity wind power project at Site:- Jadhavwadi, Tal. Khanapur, Dist. Sangli) from reference wind mast.
- Minutes of hearing No one is present from M/s. Sri Maruti Wind Park Developers / M/s. Inox Renewables Limited. Further, M/s. Sri Maruti Wind Park Developers vide their letter no. SMWPD/MEDA/WZC/16.00MW dated 06.05.17 has informed us that, M/s. Sri Maruti Wind Park Developers has declared that all WTGs have covered within 10 Km distance from Jadhavwadi wind mast. For this purpose, they have submitted the topo sheet.

# Committee Recommendation-

Representative of applicant / Developer / Investor who present in the hearing has not raised any objection regarding committee suggestion. In view of this, Committee concluded to issue a **Wind Zone – I** letter to M/s. Sri Maruti Wind Park Developers for their 16.00 MW (8 x 2000 KW) capacity wind power project.

- Site:- Jadhavwadi, Tal. Khanapur, Dist. Sangli (Vetted by NIWE for M/s Regen Powertech Pvt. Ltd.)
- Investor:- M/s. Sri Balaji & Co.:- 4.0 MW (2 x 2000 KW).
- The project is commissioned during the financial year 2015-16
- As per site visit on dtd. 17/02/2017 at Jadhavwadi of Shri. R.A. Karandikar, Technician, MEDA Girye, the WTG location wise observations are as below:-

Sr. No.	Final file no.	WTG Location No.	MEDA WTG No.	WTG Cap. MW	WTG Latitu de (N)			WTG Longit ude (E)			WTG Elev. MASL in mtrs.	Ref. Mast Elev. MASL in mtrs.	Forest Comp/ Survey/ Gut No.	Village Taluka District	Distance from Ref. wind mast in km		Diff. betwn. Ref. wind mast and WTG Elev. (Mtr.)	Date of Comm	Remark
1	2	3	4	5	6			7			8	9	10	11	12	13	14	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast			
1	WPP-13- 2000-380	SBT 54	4187	2.0	17	16	50.0	74	36	40.9	840	866	6	Renavi, Khanapur, Sangli	8.27	-	-26	31/10/ 15	Within (+/-) 60 m elev. differen ce
2	WPP-13- 2000-380	SBT 55	4417	2.0	17	16	40.7	74	36	44.0	835	866	6	Renavi, Khanapur, Sangli	8.26	-	-31	31/10/ 15	Within (+/-) 60 m elev. differen ce

- There is no NIWE, Chennai declared wind mast within the 10 km radial distance of the above mentioned wind power project.
- Nearest reference Wind Mast for the above mentioned wind power project is at Village Jadhavwadi, Tal.- Khanapur, Dist.- Sangli (Latitude- N 17º 18' 02.2" Longitude- E 74º 41' 10.7" Elev.- 860 m AMSL) having WPD- 184.96 W/m<sup>2</sup> @ 50 m AGL vetted by C-WET Chennai for M/s. ReGen Powertech Private Limited, Chennai vide their letter no.C-WET/WRA/141/2012-2013 dated 24.09.2013.
- As per wind classification procedure, all WTGs are within effective area (10 km radial distance) of referred wind mast and overall 100% WTG location coordinates of wind power project are **within (+/-) 60 m** elevation difference of referred wind mast.
- Suggestions:- As per the procedure for classification of wind power projects into wind zone class, committee discussed and evaluated the said proposal with respect to above points and committee suggested to issue the wind zone - I letter to M/s. Sri Balaji & Co. for their 4.0 MW (2 x 2000 KW) capacity wind power project as per above list.

Minutes of hearing – No one is present from M/s. Sri Maruti Wind Park Developers / M/s. Sri Balaji & Co. Further, no objection raised by other developer present in the hearing.

# Committee Recommendation-

Representative of applicant / Developer / Investor who present in the hearing has not raised any objection regarding committee suggestion. In view of this, Committee concluded to issue a **Wind Zone – I** letter to M/s. Sri Balaji & Co. for their **4.0 MW (2 x 2000 KW)** capacity wind power project.

- Site:- Jadhavwadi, Tal. Khanapur, Dist. Sangli (Vetted by NIWE for M/s Regen Powertech Pvt. Ltd.)
- Investor:- M/s. Ashwini Traders.:- 2.0 MW (1 x 2000 KW).
- The project is commissioned during the financial year 2015-16
- As per site visit on dtd. 17/02/2017 at Jadhavwadi of Shri. R.A. Karandikar, Technician, MEDA Girye, the WTG location wise observations are as below:-

Sr. No.	Final file no.	WTG Locatio n No.	MEDA WTG No.	WTG Cap. MW	WTG Latitu de (N)			WTG Longit ude (E)			WTG Elev. MASL in mtrs.	Ref. Mast Elev. MASL in mtrs.	Forest Comp/ Survey/ Gut No.	Village Taluka District	Distance from Ref. wind mast in km		Diff. betwn. Ref. wind mast and WTG Elev. (Mtr.)	Date of Comm	Remark
1	2	3	4	5	6			7			8	9	10	11	12	13	14	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast			
1	WPP- 13- 2000- 267	RVT 16	4416	2.0	17	14	55.4	74	36	36.1	867	866	831	Renavi, Khanapur, Sangli	9.96	-	-1	31/10/ 15	Within (+/-) 60 m elev. difference

- There is no NIWE, Chennai declared wind mast within the 10 km radial distance of the above mentioned wind power project.
- Nearest reference Wind Mast for the above mentioned wind power project is at Village Jadhavwadi, Tal.- Khanapur, Dist.- Sangli (Latitude- N 17º 18' 02.2" Longitude- E 74º 41' 10.7" Elev.- 860 m AMSL) having WPD- 184.96 W/m<sup>2</sup> @ 50 m AGL vetted by C-WET Chennai for M/s. ReGen Powertech Private Limited, Chennai vide their letter no.C-WET/WRA/141/2012-2013 dated 24.09.2013.
- As per wind classification procedure, all WTGs are within effective area (10 km radial distance) of referred wind mast and overall 100% WTG location coordinates of wind power project are **within (+/-) 60 m** elevation difference of referred wind mast.
- Suggestions:- As per the procedure for classification of wind power projects into wind zone class, committee discussed and evaluated the said proposal with respect to above points and committee suggested to issue the wind zone - I letter to M/s. Ashwini Traders for their 2.0 MW (1 x 2000 KW) capacity wind power project as per above list.

Minutes of hearing – No one is present from M/s. Sri Maruti Wind Park Developers / M/s. Ashwini Traders. Further, no objection raised by other developer present in the hearing.

# Committee Recommendation-

Representative of applicant / Developer / Investor who present in the hearing has not raised any objection regarding committee suggestion. In view of this, Committee concluded to issue a **Wind Zone – I** letter to M/s. Ashwini Traders for their **2.0 MW (1 x 2000 KW)** capacity wind power project.

- Site:- Jadhavwadi, Tal. Khanapur, Dist. Sangli (Vetted by NIWE for M/s Regen Powertech Pvt. Ltd.)
- Investor:- M/s. Shree Siddhivinayaka Cotton Corporation.:- 2.0 MW (1 x 2000 KW).
- The project is commissioned during the financial year 2015-16
- As per site visit on dtd. 17/02/2017 at Jadhavwadi of Shri. R.A. Karandikar, Technician, MEDA Girye, the WTG location wise observations are as below:-

Sr. No.	Final file no.	WTG Location No.	MEDA WTG No.	WTG Cap. MW	WTG Latitu de (N)			WTG Longit ude (E)			WTG Elev. MASL in mtrs.	Ref. Mast Elev. MASL in mtrs.	Forest Comp/ Survey/ Gut No.	Village Taluka District	Distance from Ref. wind mast in km		Diff. betwn. Ref. wind mast and WTG Elev. (Mtr.)	Comm	Remark
1	2	3	4	5	6			7			8	9	10	11	12	13	14	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast			
1	WPP-13- 2000-306	RVT 04	4184	2.0	17	16	58.8	74	36	31.4	841	866	58/B	Renavi, Khanapur, Sangli	8.47		-25	31/10/ 15	Within (+/-) 60 m elev. difference

- There is no NIWE, Chennai declared wind mast within the 10 km radial distance of the above mentioned wind power project.
- Nearest reference Wind Mast for the above mentioned wind power project is at Village Jadhavwadi, Tal.- Khanapur, Dist.- Sangli (Latitude- N 17º 18' 02.2" Longitude- E 74º 41' 10.7" Elev.- 860 m AMSL) having WPD- 184.96 W/m<sup>2</sup> @ 50 m AGL vetted by C-WET Chennai for M/s. ReGen Powertech Private Limited, Chennai vide their letter no.C-WET/WRA/141/2012-2013 dated 24.09.2013.
- As per wind classification procedure, all WTGs are within effective area (10 km radial distance) of referred wind mast and overall 100% WTG location coordinates of wind power project are **within (+/-) 60 m** elevation difference of referred wind mast.
- Suggestions:- As per the procedure for classification of wind power projects into wind zone class, committee discussed and evaluated the said proposal with respect to above points and committee suggested to issue the wind zone I letter to M/s. Shree Siddhivinayaka Cotton Corporation for their 2.0 MW (1 x 2000 KW) capacity wind power project as per above list.

Minutes of hearing – No one is present from M/s. Sri Maruti Wind Park Developers / M/s. Shree Siddhivinayaka Cotton Corporation. Further, no objection raised by other developer present in the hearing.

#### Committee Recommendation-

Representative of applicant / Developer / Investor who present in the hearing has not raised any objection regarding committee suggestion. In view of this, Committee concluded to issue a **Wind Zone – I** letter to M/s. Shree Siddhivinayaka Cotton Corporation for their **2.0 MW (1 x 2000 KW)** capacity wind power project

- Site:- Mendhegiri, Tal. Jath, Dist. Sangli
- Investor:- M/s. D.J. Malpani.:- 4.0 MW (2 x 2000 KW).
- The project is commissioned during the financial year 2015-16
- As per site visit on dtd. 16/02/2017 at Mendhegiri of Shri. V.R.Pawaskar, Sr. Technician, MEDA Girye, the WTG location wise observations are as below:-

Sr. No.	Final file no.	WTG Location No.	MEDA WTG No.	WTG Cap. MW	WTG Latitu de (N)			WTG Longit ude (E)			WTG Elev. MASL in mtrs.	Ref. Mast Elev. MASL in mtrs.	Forest Comp/ Survey/ Gut No.	Village Taluka District	Distance from Ref. wind mast in km		Diff. betwn. Ref. wind mast and WTG Elev. (Mtr.)	Date of Comm	Remark
1	2	3	4	5	6			7			8	9	10	11	12	13	14	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast			
1	WPP-13- 2000-302	MV2T - 06	4137	2.0	17	01	00.7	75	18	22.6	673	745	73/A	Muchandi, Jath, Sangli	-	9.40	-72	3/10/15	Above (+/-) 60 m elev. difference
2	WPP-13- 2000-302	MV2T- 12	4138	2.0	17	01	14.8	75	18	23.2	671	745	73/B	Muchandi, Jath, Sangli	-	9.60	-74	3/10/15	Above (+/-) 60 m elev. difference

- Nearest reference Wind Mast for the above mentioned wind power project is at location –Mendhegiri, Tal-Jath & Dist. Sangali (Latitude- N 16° 59′ 37.6″ Longitude- E 75° 13′ 21.6″ Elev.- 745 m amsl) having WPD- 208.00 watt/m<sup>2</sup> @ 50 m AGL declared by NIWE Chennai for MEDA.
- As per wind classification procedure, all WTGs are within effective area (10 km radial distance) of referred wind mast and overall 100% WTG location coordinates of wind power project are **Above (+/-) 60 m** elevation difference of referred wind mast.
- Suggestions:- As per the procedure for classification of wind power projects into wind zone class, committee discussed and evaluated the said proposal with respect to above points and committee suggested to issue a letter to M/s. D.J. Malpani, Sangamner to obtain project specific wind power density report from NIWE for their 4.0 MW (2 x 2000 KW) capacity wind power project.
- Minutes of hearing No one is present from M/s. Sri Maruti Wind Park Developers / M/s. D.J. Malpani. Further, M/s. Sri Maruti Wind Park Developers vide their letter no. SMWPD/MEDA/WZC/16.00MW dated. 06.5.17 has informed us that, M/s D.J Malpani has already applied for obtaining wind power density report from NIWE, Chennai through their consultant M/s. Inox Wind

Infrastructure Services Ltd on dated 3<sup>rd</sup> May 2017 & it is under process. It will take another two month to obtain WPD report.

# Committee Recommendation-

Representative of applicant / Developer / Investor who present in the hearing has not raised any objection regarding committee suggestion. In view of this, Committee discuss & evaluated the said proposal with respect to above points. Committee recommended that, after receiving the wind power density report from NIWE, Chennai necessary action will be taken for this project.

- Site:- Mendhegiri, Tal. Jath, Dist. Sangli
- Investor:- M/s. Giriraj Enterprises.:- 6.0 MW (3 x 2000 KW).
- The project is commissioned during the financial year 2015-16
- As per site visit on dtd. 16/02/2017 at Mendhegiri of Shri. V.R.Pawaskar, Sr. Technician, MEDA Girye, the WTG location wise observations are as below:-

Sr. No.	Final file no.	WTG Locati on No.	MED A WTG No.	WTG Cap. MW	WTG Latit ude (N)			WT G Longi tude (E)			WTG Elev. MASL in mtrs.	Ref. Mast Elev. MASL in mtrs.	Forest Comp/ Survey/ Gut No.	Village Taluka District	Distance from Ref. wind mast in km		Diff. betwn. Ref. wind mast and WTG Elev. (Mtr.)	Date of Comm	Remark
1	2	3	4	5	6			7			8	9	10	11	12	13	14	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast			
1	WPP- 13- 2000- 441	MV2T- 57	4428	2.0	16	58	14.30	75	15	35.55	741	745	80/1/B	Untwadi, Jath, Sangli	-	4.62	-4	31/10/ 15	Within (+/-) 60 m elev. difference
2	WPP- 13- 2000- 373	MV2T- 63	4133	2.0	16	57.1	76	75	16	48.07	737	745	215/2	Khojanwadi Jath, Sangli		7.73	-8	31/10/ 15	Within (+/-) 60 m elev. difference
3	WPP- 13- 2000- 384	MV2T- 01	4404	2.0	17	00	50.4	75	18	36.2	670	745	83/2/C	Muchandi, Jath Sangli	-	9.56	-75	31/10/ 15	Above (+/-) 60 m elev. difference

- Nearest reference Wind Mast for the above mentioned wind power project is at location -Mendhegiri, Tal-Jath & Dist. Sangali (Latitude- N 16° 59′ 37.6″ Longitude- E 75° 13′ 21.6″ Elev.- 745 m amsl) having WPD- 208.00 watt/m<sup>2</sup> @ 50 m AGL declared by NIWE Chennai for MEDA.
- As per wind classification procedure, all WTGs are within effective area (10 km radial distance) of referred wind mast and overall more than 50% WTG location co-ordinates of wind power project are **within (+/-) 60 m** elevation difference of referred wind mast.
- Suggestions:- As per the procedure for classification of wind power projects into wind zone class, committee discussed and evaluated the said proposal with respect to above points and committee suggested to issue the wind zone - I letter to M/s. Giriraj Enterprises for their 6.0 MW (3 x 2000 KW) capacity wind power project as per above list.

Minutes of hearing – No one is present from M/s. Sri Maruti Wind Park Developers / M/s. Giriraj Enterprises. Further, no objection raised by other developer present in the hearing.

# Committee Recommendation-

Representative of applicant / Developer / Investor who present in the hearing has not raised any objection regarding committee suggestion. In view of this, Committee concluded to issue the **wind zone - I** letter to M/s. Giriraj Enterprises for their **6.0 MW (3 x 2000 KW)** capacity wind power project.

# 8) Developer:- M/s. T.S. Wind power Developer.

- Site:- Ameni, Tal. Shahuwadi, Dist. Kolhapur
- Investor:- M/s. Giriraj Enterprises.:- 2.0 MW (1 x 2000 KW).
- The project is commissioned during the financial year 2014-15
- As per site visit on dtd. 16/02/2017 at Mendhegiri of Shri. R.C. Tamboli, Technician, MEDA Girye, the WTG location wise observations are as below:-

Sr. No.	Final file no.	WTG Location No.	MEDA WTG No.	WTG Cap. MW	WTG Latitu de (N)			WTG Longit ude (E)			WTG Elev. MASL in mtrs.	Ref. Mast Elev. MASL in mtrs.	Forest Comp/ Survey/ Gut No.	Village Taluka District	Distance from Ref. wind mast in km		Diff. betwn. Ref. wind mast and WTG Elev. (Mtr.)	Date of Comm	Remark
1	2	3	4	5	6			7			8	9	10	11	12	13	14	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast			
1	WPP- 13- 2000- 434	AM-01	Kolhapur / Bhendwa de/Kener sys/ 2.0MW/D / 14- 15/4392	2.0	16	57	16.3	73	57	09.4	750	865	1460, 1467	Shirgaon, Shahuwadi, Kolhapur	5.65	-	-115	31/3/15	Above (+/-) 60 m elev. difference

• However, NIWE vide their letter no NIWE/WRA/131/2016-2017 dated 17.1.2017 has sent copy of final report on preparing WPD map at 50m & 80m agl of Ameni site in Kolhapur district to MEDA. The site specific WPD estimation is carried out for M/s Kenersys India Pvt. Ltd., Pune and the following WTG locations are found to be falling over the said area-

Loc-Id	Latitude	Longitude	GPS	Elev.	Elev.	Diff.	Average	Average	
		-	(+/-	4m	vs mas	st	WPD	WPD	
			accura	cy)			(W/m <sup>2</sup> ) at	$(W/m^2)$	at
							50 m height	80 m heig	ht
AM 01	16º 57' 15.96'' N	73°57.9′38′′E	748		115		164.0	203.3	

- There is no NIWE, Chennai declared wind mast within the 10 km radial distance of the above mentioned wind power project.
- Nearest reference Wind Mast for the above mentioned wind power project is at Village Ameni (Altur mast), Tal.- Shahuwadi, Dist.- Kolhapur (Latitude- N 16<sup>o</sup> 59' 53.82'' Longitude- E 73<sup>o</sup> 55' 49.14'' Elev.- 865 m AMSL) having WPD- 164.0 W/m<sup>2</sup> @ 50 m AGL vetted by C-WET Chennai for M/s. Kenersys India Pvt Ltd, Pune vide their letter no.NIWE/WRA/131/2016-17 dtd. 17.01.2017.
- As per wind classification procedure, all WTGs are within effective area (10 km radial distance) of referred wind mast and overall 100% WTG location coordinates of wind power project are **above (+/-) 60 m** elevation difference of referred wind mast.

- But, as per NIWE report of specific WPD estimation for 2.0 MW (1 X 2000 KW) wind power project of M/s. Giriraj Enterprises at Ameni, Dist. Kolhapur the Average WPD (W/m<sup>2</sup>) at 50m height are found <=250W/m<sup>2</sup>
- Suggestions:- As per the procedure for classification of wind power projects into wind zone class, committee discussed and evaluated the said proposal with respect to above points and committee suggested to issue the wind zone - I letter to M/s. Giriraj Enterprises for their 2.0 MW (1 X 2000 KW) capacity wind power project as per above list.
- Minutes of hearing Shri. Amit Lakhanpal from M/s. T.S. Wind power developer, present in the meeting. Further, no objection raised by them and representative of other developer present in the hearing.

# Committee Recommendation-

Representative of applicant / Developer / Investor who present in the hearing has not raised any objection regarding committee suggestion. In view of this, Committee concluded to issue the **wind zone - I** letter to M/s. Giriraj Enterprises for their **2.0 MW (1 X 2000 KW)** capacity wind power project.

# 9) Developer:- M/s. T.S. Wind power Developer.

- Site:- Ameni, Tal. Shahuwadi, Dist. Kolhapur
- Investor:- M/s. Giriraj Enterprises.:- 2.0 MW (1 x 2000 KW).
- The project is commissioned during the financial year 2015-16
- As per site visit on dtd. 16/02/2017 at Mendhegiri of Shri. R.C. Tamboli, Technician, MEDA Girye, the WTG location wise observations are as below:-

Sr. No.	Final file no.	WTG Location No.	MEDA WTG No.	WTG Cap. MW	WTG Latitu de (N)			WTG Longit ude (E)			WTG Elev. MASL in mtrs.	Ref. Mast Elev. MASL in mtrs.	Forest Comp/ Survey/ Gut No.	Village Taluka District	Distance from Ref. wind mast in km		Diff. betwn. Ref. wind mast and WTG Elev. (Mtr.)	Date of Comm	Remark
1	2	3	4	5	6			7			8	9	10	11	12	13	14	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast			
1	WPP- 13- 2000- 434	AIVI-02	Kolhapur /Bhendw ade/Kene rsys/2.0M W/D/15- 16/4403	2.0	16	57	8.0	73	57	13.4	752	865	1458	Shirgaon, Shahuwadi, Kolhapur	5.70	-	-113	20/3/16	Above (+/-) 60 m elev. difference

• However, NIWE vide their letter no NIWE/WRA/131/2016-2017 dated 12.1.2017 has sent copy of final report on preparing WPD map at 50m & 80m agl of Ameni site in Kolhapur district to MEDA. The site specific WPD estimation is carried out for M/s Kenersys India Pvt. Ltd., Pune and the following WTG locations are found to be falling over the said area-

Loc-Id	Latitude	Longitude	GPS	Elev.	Elev.	Diff.	Average	Average
		_	(+/-	4m	vs mas	st	WPD	WPD
			accura	icy)			(W/m <sup>2</sup> ) at	(W/m <sup>2</sup> ) a
							50 m height	80 m height
AM 02	16º 57' 7.76'' N	73°57′13.42′′E	746		117		164.0	203.3

# Observation-

- There is no NIWE, Chennai declared wind mast within the 10 km radial distance of the above mentioned wind power project.
- MERC vide its letter no. MERC/RE Cell No. 6/2015-16/01457 dtd 9.2.2016 informed MEDA as below –

" In this regard, I am directed to inform you that in line with Regulation 26.2 of MERC (Terms and Conditions for determination of RE tariff) Regulation, 2010 and the Commission's ruling in Case No. 100 of 2014, MEDA shall certify the Annual Mean Wind Power Density (WPD in W/m<sup>2</sup>) to be measured at b50 meter hub height for classification of Wind Power Projects into the Wind Zone class, commissioned during FY 2014-15 and the extended period up to 9 November, 2015.

*Thereafter, i.e. from 10 November, 2015 onwards, certification of WPD shall be governed as per Regulation 28.2 of MERC (Terms and Conditions for Determination of Renewable Energy Tariff) Regulations, 2015."* 

# MERC (T and C for Determination of RE Tariff) Regulations, 10.11. 2015

- 28.2 The annual mean wind power density specified in Regulation 28.1 shall be measured at 80 meter hub height, and State Nodal Agency shall certify the Wind Zone relevant to the proposed Wind Energy Project.
- 28.3 For the purpose of classification of a Wind Energy Project in a particular Wind Zone class, the State Nodal Agency shall refer to the wind power density map prepared by the National Institute for Wind Energy.
- Nearest reference Wind Mast for the above mentioned wind power project is at Village Ameni (Altur mast), Tal.- Shahuwadi, Dist.- Kolhapur (Latitude- N 16<sup>0</sup> 59' 53.82'' Longitude- E 73<sup>0</sup> 55' 49.14'' Elev.- 865 m AMSL) having WPD- 164.0 W/m<sup>2</sup> @ 50 m AGL and WPD- 203.3 W/m<sup>2</sup> @ 80 m AGL vetted by NIWE Chennai for M/s. Kenersys India Pvt Ltd, Pune vide their letter no.NIWE/WRA/131/2016-17 dtd. 17.01.2017.
- As per wind classification procedure, all WTGs are within effective area (10 km radial distance) of referred wind mast and overall 100% WTG location coordinates of wind power project are **above (+/-) 60 m** elevation difference of referred wind mast.
- As per NIWE report of specific WPD estimation for 2.0 MW (1 X 2000 KW) wind power project of M/s. Giriraj Enterprises at Ameni, Dist. Kolhapur the Average WPD (W/m<sup>2</sup>) at 80m height are found <=250W/m<sup>2</sup>
- Suggestions:- As per the procedure for classification of wind power projects into wind zone class, committee discussed and evaluated the said proposal with respect to above points and committee suggested to issue the wind zone - I letter to M/s. Giriraj Enterprises for their 2.0 MW (1 X 2000 KW) capacity wind power project as per above list.
- Minutes of hearing Shri. Amit Lakhanpal from M/s. T.S. Wind power developer, present in the meeting. Further, no objection raised by them and representative of other developer present in the hearing.

# Committee Recommendation-

Representative of applicant / Developer / Investor who present in the hearing has not raised any objection regarding committee suggestion. In view of this, Committee concluded to issue the **wind zone - I** letter to M/s. Giriraj Enterprises for their **2.0 MW (1 X 2000 KW)** capacity wind power project.

10) Developer:- M/s. Aditya Engineers.

- Site:- Bhud, Tal. Khanapur, Dist. Sangli
- Investor:- M/s. ReNew Wind Energy (Rajasthan) Pvt. Ltd.- 1.5 MW (1 x 1500 KW).
- The project is commissioned during the financial year 2014-15
- As per site visit on dtd. 16/02/2017 at Mendhegiri of Shri. R. A. Karandikar, Technician, MEDA Girye, the WTG location wise observations are as below:-

Sr. No.	Final file no.	WTG Location No.	MEDA WTG No.	WTG Cap. MW	WTG Latitu de (N)			WTG Longit ude (E)			WTG Elev. MASL in mtrs.	Ref. Mast Elev. MASL in mtrs.	Forest Comp/ Survey/ Gut No.	Village Taluka District	Distance from Ref. wind mast in km		Diff. betwn. Ref. wind mast and WTG Elev. (Mtr.)	Date of Comm.	Remark
1	2	3	4	5	6			7			8	9	10	11	12	13	14	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast			
1	WPP-08- 2000-895		3834	1.5	47	40	05	19	11	28.7	807	842	265	Benapur, Khanapur, Sangli	2.41	-	-35	27/12/ 14	Within (+/-) 60 m elev. difference

# Observation-

- The error observed in WTG location co-ordinates. The WTG location co-ordinates mentioned in application and site visit report are mismatching.
- Suggestions:- As per the procedure for classification of wind power projects into wind zone class, committee discussed and evaluated the said proposal with respect to above points and committee suggested to issue a letter to M/s. ReNew Wind Energy (Rajasthan) Pvt. Ltd., for re-inspection of their 1.5 MW (1 x 1500 KW) capacity wind power project as per above list.
- Re-inspection Report Shri. R. A. Karandikar, Technician, MEDA Girye vide their letter dated 24.4.17 has submitted re-inspection report. The WTG location wise observations are as below:-

Sr. No.	Final file no.	WTG Location No.	MEDA WTG No.	WTG Cap. MW	Lat	WTG itude (N	1)	Lon	WTG gitude		WTG Elev. MASL in mtrs.	Ref. Mast Elev. MASL in mtrs.	Forest Comp/ Survey/ Gut No.	Village Taluka District	Distance from Ref. wind mast in km		Diff. betwn. Ref. wind mast and WTG Elev. (Mtr.)	Date of Comm	Remark
1	2	3	4	5		6			7		8	9	10	11	12	13	14	15	16
					Deg	Min	Sec	Deg	Deg Min Sec						Pvt. Mast	NIWE/ MEDA Mast			
1	WPP-08- 2000-895	SBV 70	3834	1.5	17	17	12.0	74	45	19.4	823	817		Benapur, Khanapur, Sangli	2.47	-	-6	27/12/ 14	Within (+/-) 60 m elev. difference

# **Observation-**

 There is NIWE/MEDA declared wind mast within the 10 km radial distance of the above mentioned wind power project at Village – Bhud, Tal.- Khanapur, Dist.- Sangli (Latitude- N 17<sup>o</sup> 20' 33.5" Longitude- E 74<sup>o</sup> 42' 6.8" Elev.- 809 m AMSL) having WPD- 224 W/m<sup>2</sup> @ 50 m AGL vetted by C-WET Chennai.

- Nearest reference Wind Mast for the above mentioned wind power project is at Village – Balewadi 2, Dist.- Sangli (Latitude- N 17º 17' 14.92'' Longitude- E 74º 43' 18.67'' Elev.- 835 m AMSL) having WPD- 165.53 W/m² @ 50 m AGL vetted by C-WET Chennai for M/s. reNew Power Ventures Pvt. Ltd., Gurgaon vide their Ref no.CWET/WR/CF-71/2013-14 dated 01.10.2013.
- As per wind classification procedure, all WTGs are within effective area (10 km radial distance) of referred wind mast and overall 100% WTG location coordinates of wind power project are **within (+/-) 60 m** elevation difference of referred wind mast.
- Suggestions:- As per the procedure for classification of wind power projects into wind zone class, committee discussed and evaluated the said proposal with respect to above points and committee suggested to issue the wind zone I letter to M/s. ReNew Wind Energy (Rajasthan) Pvt. Ltd. for their 1.5 MW (1 x 1500 KW) capacity wind power project as per above list.
- Minutes of hearing No one is present from M/s. Aditya Engineers / M/s. ReNew Wind Energy (Rajasthan) Pvt. Ltd. Further, no objection raised by other developer present in the hearing regarding re-inspection report.

# Committee Recommendation-

Representative of applicant / Developer / Investor who present in the hearing has not raised any objection regarding committee suggestion. In view of this, Committee concluded to issue the **wind zone - I** letter to M/s ReNew Wind Energy (Rajasthan) Pvt. Ltd for their **1.5 MW (1 x 1500 KW)** capacity wind power project.

11) Developer:- M/s. T. S. Wind Power Developer.

- Site:- Thoseghar, Tal. Satara, Dist. Satara
- Investor:- M/s. Rajasthan Gum Pvt. Ltd. .:- 10.50 MW (5 x 2100 KW).
- Out of 10.50 MW, 4 no. WTGs i.e. 8.4 MW (4 x 2100 kW) project is commissioned during the financial year 2014-15. And,
- One no. WTG i.e. 2.1 MW (1 x 2100 kW) project is commissioned during the financial year 2015-16.
- As per site visit on dtd. 14/02/2017 at Rajapuri of Shri. R. S. Mohite, Technician, MEDA Chalkewadi, the WTG location wise observations are as below:-

Sr. No.	Final file no.	WTG Location No.	MEDA WTG No.	WTG Cap. MW	WTG Latitude (N)			WTG Longitu de (E)			WTG Elev. MASL in mtrs.	Ref. Mast Elev. MASL in mtrs.	Forest Comp/ Survey/ Gut No.	Village Taluka District	Distance from Ref. wind mast in km		Diff. betwn. Ref. wind mast and WTG Elev. (Mtr.)	Date of Comm	Remark
1	2	3	4	5	6			7			8	9	10	11	12	13	14	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast			
														Daiamuni					Mithin (1/)
1	WPP-13- 2000-431	TSG-01	4332	2.1	17	35	52.0	73	53	55.7	1115	1122	1050	Rajapuri, Satara, Satara	7.34	-	-7	31/3/15	Within (+/-) 60 m elev. difference
2	WPP-13- 2000-431	TSG-02	4333	2.1	17	35	49.5	73	53	04.7	1117	1122	1045	Rajapuri, Satara, Satara	4.51	-	-5	31/3/15	Within (+/-)
3	WPP-13- 2000-431	TSG-03	4334	2.1	17	35	52.9	73	53	27.3	1111	1122	1075	Rajapuri, Satara, Satara	2.53	-	-11	31/3/15	Within (+/-)
4	WPP-13- 2000-431	TSG-04	4335	2.1	17	35	23.0	73	53	50.8	1108	1122	522	Revande Satara, Satara	2.90	-	-14	31/3/15	Within (+/-) 60 m elev. difference
5	WPP-13- 2000-431	TSG-07	4467	2.1	17	35	55.1	73	53	56.4	1088	1122	480	Revande, Satara, Satara	3.55	-	-34	11/3/16	Within (+/-) 60 m elev. difference

# **Observation-**

- There is no NIWE, Chennai declared wind mast within the 10 km radial distance of the above mentioned wind power project.
- Out of 10.50 MW, 4 no. WTGs i.e. 8.4 MW (4 x 2100 kW) project is commissioned during the financial year 2014-15. And,
- One no. WTG i.e. 2.1 MW (1 x 2100 kW) project is commissioned during the financial year 2015-16.
- MERC vide its letter no. MERC/RE Cell No. 6/2015-16/01457 dtd 9.2.2016 informed MEDA as below –

" In this regard, I am directed to inform you that in line with Regulation 26.2 of MERC (Terms and Conditions for determination of RE tariff) Regulation, 2010 and the Commission's ruling in Case No. 100 of 2014, MEDA shall certify the Annual Mean Wind Power Density (WPD in W/m<sup>2</sup>) to be measured at b50 meter hub height for classification of Wind Power Projects into the Wind Zone class, commissioned during FY 2014-15 and the extended period up to 9 November, 2015.

*Thereafter, i.e. from 10 November, 2015 onwards, certification of WPD shall be governed as per Regulation 28.2 of MERC (Terms and Conditions for Determination of Renewable Energy Tariff) Regulations, 2015."* 

# MERC (T and C for Determination of RE Tariff) Regulations, 10.11. 2015

- 28.2 The annual mean wind power density specified in Regulation 28.1 shall be measured at 80 meter hub height, and State Nodal Agency shall certify the Wind Zone relevant to the proposed Wind Energy Project.
- 28.3 For the purpose of classification of a Wind Energy Project in a particular Wind Zone class, the State Nodal Agency shall refer to the wind power density map prepared by the National Institute for Wind Energy.
- Nearest reference Wind Mast for the above mentioned wind power project is at Village Rajapuri, Tal.- Satara, Dist.- Satara (Latitude- 17<sup>o</sup> 35' 47.81" N Longitude- 73<sup>o</sup> 53' 20.91" E Elev.- 1125 m AMSL) having WPD- 155.27 W/m<sup>2</sup> @ 50 m AGL and WPD- 194.02 W/m<sup>2</sup> @ 80 m AGL vetted by NIWE, Chennai for M/s TS Wind Power Developers, Pune vide their letter no. NIWE/WRA/087/2016-17 dtd. 25.01.2017
- As per wind classification procedure, all WTGs are within effective area (10 km radial distance) of referred wind mast and overall 100% WTG location coordinates of wind power project are **within (+/-) 60 m** elevation difference of referred wind mast.
- Suggestions:- As per the procedure for classification of wind power projects into wind zone class, committee discussed and evaluated the said proposal with respect to above points and committee suggested to issue the wind zone - I letter to M/s. Rajasthan Gum Pvt. Ltd. for their 10.50 MW (5 x 2100 KW) capacity wind power project as per above list.
- Minutes of hearing Shri. Amit Lakhanpal from M/s. T.S. Wind power developer, present in the meeting. Further, no objection raised by them and representative of other developer present in the hearing.

#### Committee Recommendation-

Representative of applicant / Developer / Investor who present in the hearing has not raised any objection regarding committee suggestion. In view of this, Committee concluded to issue the **wind zone - I** letter to M/s. Rajasthan Gum Pvt. Ltd. for their **10.50 MW (5 x 2100 KW)** capacity wind power project.

12) Developer:- M/s. T. S. Wind Power Developer.

- Site:- Thoseghar, Tal. Satara, Dist. Satara
- Investor:- M/s. Neha Sharma. :- 2.1 MW (1 x 2100 KW).
- The project is commissioned during the financial year 2015-16.
- As per site visit on dtd. 14/02/2017 at Rajapuri of Shri. R. S. Mohite, Technician, MEDA Chalkewadi, the WTG location wise observations are as below:-

Sr. No.	Final file no.	WTG Locati on No.	MED A WTG No.	WTG Cap. MW		WTG tude		Lo	WT ngituo	G de (E)	WTG Elev. MASL in mtrs.	Ref. Mast Elev. MASL in mtrs.	Forest Comp/ Survey/ Gut No.	Village Taluka District	Distance from Ref. wind mast in km		Diff. betwn. Ref. wind mast and WTG Elev. (Mtr.)	Date of Comm	
1	2	3	4	5		6			7		8	9	10	11	12	13	14	15	16
					Deg	Min	Sec	Deg	Min	Sec					P∨t. Mast	NIWE/ MEDA Mast			
1	WPP- 13- 2000- 276	TSG- 05	4418	2.1	17	36	39. 0	73	54	51.1	1092	1122	510	Revande/ Satara/ Satara	3.14	-	-30	31/10/ 15	Within (+/-) 60 m elev. difference

- There is no NIWE, Chennai declared wind mast within the 10 km radial distance of the above mentioned wind power project.
- Nearest reference Wind Mast for the above mentioned wind power project is at Village Rajapuri, Tal.- Satara, Dist.- Satara (Latitude- 17<sup>o</sup> 35' 47.81" N Longitude- 73<sup>o</sup> 53' 20.91" E Elev.- 1125 m AMSL) having WPD- 155.27 W/m<sup>2</sup> @ 50 m AGL and WPD- 194.02 W/m<sup>2</sup> @ 80 m AGL vetted by NIWE, Chennai for M/s TS Wind Power Developers, Pune vide their letter no. NIWE/WRA/087/2016-17 dtd. 25.01.2017
- As per wind classification procedure, all WTGs are within effective area (10 km radial distance) of referred wind mast and overall 100% WTG location coordinates of wind power project are **within (+/-) 60 m** elevation difference of referred wind mast.
- Suggestions:- As per the procedure for classification of wind power projects into wind zone class, committee discussed and evaluated the said proposal with respect to above points and committee suggested to issue the wind zone - I letter to M/s. Neha Sharma for their 2.1 MW (1 x 2100 KW) capacity wind power project as per above list.
- Minutes of hearing Shri. Amit Lakhanpal from M/s. T.S. Wind power developer, present in the meeting. Further, no objection raised by them and representative of other developer present in the hearing.

# Committee Recommendation-

Representative of applicant / Developer / Investor who present in the hearing has not raised any objection regarding committee suggestion. In view of this, Committee concluded to issue the **wind zone - I** letter to M/s. Neha Sharma for their **2.1 MW (1 x 2100 KW)** capacity wind power project

13) Developer:- M/s. T. S. Wind Power Developer.

- Site:- Thoseghar, Tal. Satara, Dist. Satara
- Investor:- M/s. Shree Ram Industries. .:- 2.1 MW (1 x 2100 KW).
- The project is commissioned during the financial year 2015-16.
- As per site visit on dtd. 14/02/2017 at Rajapuri of Shri. R. S. Mohite, Technician, MEDA Chalkewadi, the WTG location wise observations are as below:-

Sr. No.	Final file no.	WTG Locati on No.	MEDA WTG No.	WTG Cap. MW		WTG tude (	N)		WTG gitude		WTG Elev. MASL in mtrs.	Ref. Mast Elev. MASL in mtrs.	Forest Comp/ Survey/ Gut No.	Village Taluka District	Distance from Ref. wind mast in km		Diff. betwn. Ref. wind mast and WTG Elev. (Mtr.)	Date of Comm	Remar k
1	2	3	4	5		6			7		8	9	10	11	12	13	14	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast	=8-9		
1	WPP- 13- 2000- 455	TSG- 08	4468	2.1	17	37	4.5	73	55	5.6	1081	1122	470	Revande/ Satara/ Satara	3.94	-	-41	11/3/16	Within (+/-) 60 m elev. differen ce

#### **Observation-**

- There is no NIWE, Chennai declared wind mast within the 10 km radial distance of the above mentioned wind power project.
- MERC vide its letter no. MERC/RE Cell No. 6/2015-16/01457 dtd 9.2.2016 informed MEDA as below –

" In this regard, I am directed to inform you that in line with Regulation 26.2 of MERC (Terms and Conditions for determination of RE tariff) Regulation, 2010 and the Commission's ruling in Case No. 100 of 2014, MEDA shall certify the Annual Mean Wind Power Density (WPD in W/m<sup>2</sup>) to be measured at b50 meter hub height for classification of Wind Power Projects into the Wind Zone class, commissioned during FY 2014-15 and the extended period up to 9 November, 2015.

*Thereafter, i.e. from 10 November, 2015 onwards, certification of WPD shall be governed as per Regulation 28.2 of MERC (Terms and Conditions for Determination of Renewable Energy Tariff) Regulations, 2015."* 

# MERC (T and C for Determination of RE Tariff) Regulations, 10.11. 2015

28.2 - The annual mean wind power density specified in Regulation 28.1 shall be measured at 80 meter hub height, and State Nodal Agency shall certify the Wind Zone relevant to the proposed Wind Energy Project.

- 28.3 For the purpose of classification of a Wind Energy Project in a particular Wind Zone class, the State Nodal Agency shall refer to the wind power density map prepared by the National Institute for Wind Energy.
- Nearest reference Wind Mast for the above mentioned wind power project is at Village Rajapuri, Tal.- Satara, Dist.- Satara (Latitude- 17<sup>0</sup> 35' 47.81" N Longitude- 73<sup>0</sup> 53' 20.91" E Elev.- 1125 m AMSL) having WPD- 155.27 W/m<sup>2</sup> @ 50 m AGL and WPD- 194.02 W/m<sup>2</sup> @ 80 m AGL vetted by NIWE, Chennai for M/s TS Wind Power Developers, Pune vide their letter no. NIWE/WRA/087/2016-17 dtd. 25.01.2017
- As per wind classification procedure, all WTGs are within effective area (10 km radial distance) of referred wind mast and overall 100% WTG location coordinates of wind power project are **within (+/-) 60 m** elevation difference of referred wind mast.
- Suggestions:- As per the procedure for classification of wind power projects into wind zone class, committee discussed and evaluated the said proposal with respect to above points and committee suggested to issue the wind zone - I letter to M/s. Shree Ram Industries for their 2.1 MW (1 x 2100 KW) capacity wind power project as per above list.
- Minutes of hearing Shri. Amit Lakhanpal from M/s. T.S. Wind power developer, present in the meeting. Further, no objection raised by them and representative of other developer present in the hearing.

# Committee Recommendation-

Representative of applicant / Developer / Investor who present in the hearing has not raised any objection regarding committee suggestion. In view of this, Committee concluded to issue the **wind zone - I** letter to M/s. Shree Ram Industries for their **2.1 MW (1 x 2100 KW)** capacity wind power project

# 14) Developer:- M/s. T. S. Wind Power Developer.

- Site:- Nandurpathar, Tal. Parner, Dist. Ahemednagar
- Investor:- M/s. Green Infra Corporate Solar Limited.:- 9.6 MW (4 x 2400 KW).
- The project is commissioned during the financial year 2015-16.
- As per site visit on dtd. 6/6/2016 at Nandurpathar of Shri. R.M. Garad, PEO (Amravati) the WTG location wise observations are as below:-

Sr. No.	Final file no.	WTG Locati on No.	MEDA WTG No.	WTG Cap. MW	WTG Latit ude (N)			WT G Longi tude (E)			WTG Elev. MASL in mtrs.	Ref. Mast Elev. MASL in mtrs.	Forest Comp/ Survey/ Gut No.	Village Taluka District	Distance from Ref. wind mast in km		Diff. betwn . Ref. wind mast and WTG Elev. (Mtr.)	Date of Com m	Rema rk
1	2	3	4	5	6			7			8	9	10	11	12	13	14	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast			
1	WPP- 13- 2000- 454	NP25	NP25/NA NDURPA THAR/A HMDNA GAR/KE NERSYS/ 2.4MW/15 -16/4456	2.4	19	06	15.1	74	16	30.7	891	906	1127	Darodi/ Parner/ Ahmednag ar	4.68	-	-15	15/3/16	Within (+/-) 60 m elev. differen ce
2	WPP- 13- 2000- 454	NP27	NP27/NA NDURPA THAR/A HMDNA GAR/KE NERSYS/ 2.4MW/15 -16/4458	2.4	19	06	02.9	74	16	15.1	864	906	1127	Darodi/ Parner/ Ahmednag ar	4.48	-	-42	15/3/16	Within (+/-) 60 m elev. differen ce
3	WPP- 13- 2000- 457	NP33	NP33/NA NDURPA THAR/A HMDNA GAR/KE NERSYS/ 2.4MW/15 -16/4459	2.4	19	4	56.9	74	16	40.4	857	906	1095	Darodi/ Parner/ Ahmednag ar	6.43	-	-49	15/3/16	Within (+/-) 60 m elev. differen ce
4	WPP- 13- 2000- 457	NP34	NP34/NA NDURPA THAR/A HMDNA GAR/KE NERSYS/ 2.4MW/15 -16/4460	2.4	19	4	52.0	74	16	50.1	860	906	1092	Darodi/ Parner /Ahmedna gar	6.72	-	-46	15/3/16	Within (+/-) 60 m elev. differen ce

# Observation-

- There is no NIWE, Chennai declared wind mast within the 10 km radial distance of the above mentioned wind power project.
- MERC vide its letter no. MERC/RE Cell No. 6/2015-16/01457 dtd 9.2.2016 informed MEDA as below –

" In this regard, I am directed to inform you that in line with Regulation 26.2 of MERC (Terms and Conditions for determination of RE tariff) Regulation, 2010 and the Commission's ruling in Case No. 100 of 2014, MEDA shall certify the Annual Mean

Wind Power Density (WPD in  $W/m^2$ ) to be measured at b50 meter hub height for classification of Wind Power Projects into the Wind Zone class, commissioned during FY 2014-15 and the extended period up to 9 November, 2015.

*Thereafter, i.e. from 10 November, 2015 onwards, certification of WPD shall be governed as per Regulation 28.2 of MERC (Terms and Conditions for Determination of Renewable Energy Tariff) Regulations, 2015."* 

# MERC (T and C for Determination of RE Tariff) Regulations, 10.11. 2015

- 28.2 The annual mean wind power density specified in Regulation 28.1 shall be measured at 80 meter hub height, and State Nodal Agency shall certify the Wind Zone relevant to the proposed Wind Energy Project.
- 28.3 For the purpose of classification of a Wind Energy Project in a particular Wind Zone class, the State Nodal Agency shall refer to the wind power density map prepared by the National Institute for Wind Energy.
- Adjacent Wind Mast for the above mentioned wind power project is at Village Kavadya Dongar, Tal. Parner, District - Ahmednagar (Latitude- N 19<sup>o</sup> 00' 24.9" Longitude- E 74<sup>o</sup> 32' 2" Elev.- 900 m amsl) having WPD- 277 W/m<sup>2</sup> @ 50 m AGL declared by NIWE Chennai for MEDA.
- Nearest reference Wind Mast for the above mentioned wind power project is at Village Nandurpathar, Tal. Parner, District Ahmednagar (Latitude- N 19<sup>o</sup> 07' 29.64" Longitude- E 74<sup>o</sup> 14' 11.22" Elev.- 907 m amsl) having WPD- 152.92 W/m<sup>2</sup>
  @ 50 m AGL and WPD- 187.91 W/m<sup>2</sup> @ 80 m SW AGL vetted by C-WET, Chennai for M/s TS Wind Power Developers vide their report dated 24.10.2013.
- As per wind classification procedure, all WTGs are within effective area (10 km radial distance) of referred wind mast and overall 100% WTG location coordinates of wind power project are **within (+/-) 60 m** elevation difference of referred wind mast.
- Suggestions:- As per the procedure for classification of wind power projects into wind zone class, committee discussed and evaluated the said proposal with respect to above points and committee suggested to issue the wind zone - I letter to M/s. Green Infra Corporate Solar Limited for their 9.6 MW (4 x 2400 KW) capacity wind power project as per above list.
- Minutes of hearing Shri. Amit Lakhanpal from M/s. T.S. Wind power developer, present in the meeting. Further, no objection raised by them and representative of other developer present in the hearing.

# Committee Recommendation-

Representative of applicant / Developer / Investor who present in the hearing has not raised any objection regarding committee suggestion. In view of this, Committee concluded to issue the **wind zone - I** letter to M/s. Green Infra

Corporate Solar Limited for their 9.6 MW (4 x 2400 KW) capacity wind power project

# 15) Developer:- M/s. Suzlon Energy Ltd.

- Site:- Chakla, Tal. Nandurbar, Dist. Nandurbar
- Investor:- M/s. Giriraj Enterprises. .:- 3.0 MW (2 x 1500 KW).
- The project is commissioned during the financial year 2000-11.
- As per site visit on dtd. 23/9/14 at Chakla of Shri. S. S. Jayabhaye, PEO, MEDA the WTG location wise observations are as below:-

Sr. No.	Final file no.	WTG Locatio n No.	MEDA WTG No.	WTG Cap. MW	Lat	WTG itude (i	N)		WTG gitude		WTG Elev. MASL in mtrs.	Ref. Mast Elev. MASL in mtrs.	Forest Comp/ Survey/ Gut No.	Village Taluka District	Distance from Ref. wind mast in km		Diff. betwn . Ref. wind mast and WTG Elev. (Mtr.)	Date of Comm	Remar k
1	2	3	4	5		6			7		8	9	10	11	12	13	14	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast	=8-9		
															Chakla	Chakla			
1	WPP- 08- 2000- 436	C-15	Nandurbar /Chakla/S uzlon/1.5M W/D/10- 11/2714	1.5	21	19	38.5	74	17	41.9	306	352	F.C.no. 131, Gut no. 17	Vasdara/ Nandurb ar/Nand urbar	5.28	2.54	-46	30/9/10	Within (+/-) 60 m elev. differen ce
2	WPP- 08- 2000- 436	C-16	Nandurbar /Chakla/S uzlon/1.5M W/D/10- 11/2715	1.5	21	19	50.2	74	17	53.3	322	352	F.C.no. 131, Gut no. 17	Vasdara/ Nandurb ar/Nand urbar	5.55	2.46	-30	27/10/ 10	Within (+/-) 60 m elev. differen ce

- 1. As per the procedure for classification of Wind Power project into Wind Zone class, "Wind Zone Classification and Evaluation Committee" in its meeting held on dated **02/12/2014** has evaluated the proposal. In brief observations/findings of the committee in this regard are as given below:-
- NIWE declared 25 m height MEDA mast is at location Chakla Taluka -Nandurbar District - Nandurbar (Latitude- N 21º 19' 0.14'' Longitude- E 74º 18' 59.9'' Elev.- 352 m amsl) having extrapolated WPD- 323.0 watt/m<sup>2</sup> @ 50 m AGL.
- Apart from above, NIWE vetted 65 m height mast of M/s. Suzlon is at location Chakla Taluka Nandurbar District Nandurbar (Latitude- N 21° 16′ 53.0″ Longitude- E 74° 18′ 30.2″ Elev.- 353 m amsl) having actual measured WPD-227.78 watt/m<sup>2</sup> @ 50 m AGL vide their letter no. C-WET/WRA/079/2008-2009 dated 27.09.2010.
- Nearest reference Wind Mast for the above mentioned wind power project is at location Chakla Taluka Nandurbar District Nandurbar (Latitude- N 21º 19' 0.14" Longitude- E 74º 18' 59.9" Elev.- 352 m amsl) having extrapolated WPD-323.0 watt/m<sup>2</sup> @ 50 m AGL.

- As per wind classification procedure, all WTGs are within effective area (10 km radial distance) of both above wind masts and overall 100% of WTG location coordinates of wind power project are within (+/-) 60 m elevation difference of referred nearest reference wind mast.
- Committee's Recommendations in its meeting dtd 02/12/2014:- As per the procedure for classification of wind power projects into wind zone class, committee discussed and evaluated the said proposal with respect to above points and committee recommended to issue the wind zone III letter to M/s. Giriraj Enterprises, for their 3.0 MW (2x1500KW) capacity wind power project.
- In view of above, MEDA vide its letter no.40 dtd 05/01/2015 has issued letter of Wind Zone –III for their 3.0 MW (2x1500KW) capacity wind power project to M/s. Giriraj Enterprises.
- Now, M/s. Giriraj Enterprises vide its letter dtd 21/1/2017 submitted a report on site specific wind power density (WPD) Map at 50m agl at Chakla Dist . Nandurbar Site prepared by NIWE, Chennai and issued on dtd 1.02.2016 to WTG Manufacturer M/s Suzlon Energy ltd. In this report, at point no.6 of page no. 13, conclusion is briefed as below –
- ➤ The estimated averaged WPD is found to be 247.82 W/m<sup>2</sup> at P-90 confidence level with all relevant corrections. The site specific WPD estimation is carried out for M/s Suzlon Energy Ltd and the following (Pocket no. 17) WTG locations are found to be falling over the said area -
  - C-15, C-16.
  - Moreover, NIWE in its above report, briefed the conclusion at Point no.7 of Page No.14 as below-

The WPD calculations are based on 50 m wind data of Chakla site (August 03-July-04) provided by M/s Suzlon Energy ltd, Pune. As NIWE measurement was carried out at 25 m height (April 1999 to 14<sup>th</sup> June 2000) and extrapolation from 25m to 50m height will give more uncertainly, NIWE has considered actual measurements (August 2003 to July 2004) carried out by M/s Suzlon Energy ltd. at 50m height for WPD calculation. The study area for calculating the WPD figures have been obtained from the map given by customer. For single turbines, 2kmx2km area has been taken for the WPD analysis.

The estimated averaged WPD is found to be  $247.82W/m^2$  at P-90 confidence level with all relevant corrections. The site specific WPD estimation is carried out for M/s Suzlon Energy Ltd, Pune.

 As per NIWE report of specific WPD estimation for 3.0 MW (2x1500KW) wind power project of M/s. Giriraj Enterprises at Chakla, Dist. Nandurbar the Average WPD (W/m<sup>2</sup>) at 50m height are found <=250W/m<sup>2</sup>

- As per site specific wind power density (WPD) report of NIWE for 3.0 MW (2x1500KW) wind power project of M/s. Giriraj Enterprises at Chakla, Dist. Based on NIWE report, the said project is reclassified into Wind Zone-I. Our earlier zone letter no. 40 dated 05/1/2015 stands cancelled.
- Suggestions:- As per the procedure for classification of wind power projects into wind zone class, committee discussed and evaluated the said proposal with respect to above points and committee suggested to issue the wind zone - I letter to M/s. Giriraj Enterprises for their 3.0 MW (2x1500KW) capacity wind power project as per above list.
- Minutes of hearing Shri. Rajesh Naik from M/s. Suzlon Energy Ltd., present in the meeting. Further, no objection raised by them and representative of other developer present in the hearing.

# Committee Recommendation-

Representative of applicant / Developer / Investor who present in the hearing has not raised any objection regarding committee suggestion. In view of this, Committee concluded suggested to issue the **wind zone - I** letter to M/s. Giriraj Enterprises for their **3.0 MW (2x1500KW)** capacity wind power project as per above list.