

Minutes of “Wind Zone Classification & Evaluation Committee” meeting dtd. 07.08.17

Sub - 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 07.08.17 at MEDA conference hall under chairmanship of Shri. U. M. Pande, Chairman and 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. P. V. Tayde	Manager (PG-I & IDD)	Member Secretary

Manager (PG-I & ID) presented the information, site verification report related to the following proposals before committee:-

1) Developer - M/s. Regen Powertech Pvt. Ltd.

- Site – Isapur, Tal. Pusad, Dist. Yavatmal (Isapur mast - Vetted by NIWE for M/s Regen Powertech Pvt. Ltd).
- Investor - M/s. Hetero Med Solution Ltd, Hyderabad - 19.5 MW (13x1500KW).

2) Developer - M/s. T S Wind Power Developer.

- Site – Saighar, Tal. Javali, Dist. Satara (Kas (Saighar) mast - Vetted by NIWE for T S Wind Power Developer).
- Investor - M/s T S Wind Power Developer, Pune - 1.5 MW (1x1500KW).

3) Developer - M/s. T S Wind Power Developer.

- Site - Saighar, Tal. Javali, Dist. Satara (Kas (Saighar) mast - Vetted by NIWE for T S Wind Power Developer).
- Investor - M/s. Dr. K H Sancheti, Pune - 0.6 MW (1x600KW).

4) Developer - M/s. T S Wind Power Developer.

- Site - Saighar, Tal. Javali, Dist. Satara (Kas (Saighar) mast - Vetted by NIWE for T S Wind Power Developer).
- Investor - M/s. Drug House, Pune - 0.6 MW (1x600KW).

5) Developer - M/s. T S Wind Power Developer.

- Site - Saighar, Tal. Javali, Dist. Satara (Kas (Saighar) mast - Vetted by NIWE for T S Wind Power Developer).
- Investor - M/s. Navalakha Developer, Pune - 0.6 MW (1x600KW).

6) Developer - M/s T S Wind Power Developer.

- Site - Saighar, Tal. Javali, Dist. Satara (Kas (Saighar) mast - Vetted by NIWE for T S Wind Power Developer).
- Investor - M/s. Medilink Services, Pune - 1.5 MW (1x1500KW).

7) Developer - M/s Sri Maruti Wind Park Developer.

- Site - Vaspeth, Tal. Jath, Dist. Sangli (Vaspeth - MEDA Mast Vetted by NIWE).
- Investor - M/s. IOTA Mtech Power LLP, Kolkata - 02 MW (1x2000KW).

8) Developer - M/s Sri Maruti Wind Park Developer.

- Site – Vaspeth, Tal. Jath, Dist. Sangli (Vaspeth mast - MEDA Mast Vetted by NIWE).
- Investor - M/s. BMD Power Pvt. Ltd. Rajasthan - 06 MW (3x2000KW).

9) Developer - M/s Sri Maruti Wind Park Developer.

- Site – Mendhegiri, Tal. Jath, Dist. Sangli (Mendhegiri mast- Vetted by NIWE for INOX Wind Infrastructure Service Ltd).
- Investor - M/s. D J Malpani, ahmednagar- 04 MW (2x2000KW).

10) Developer - M/s Winwind Power Energy Pvt Ltd.

- Site - Vaspeth, Tal. Jath, Dist. Sangli (Vaspeth mast- MEDA Mast Vetted by NIWE).
- Investor - M/s. Siva Renewable Power & Energy Ltd, Chennai- 04 MW (4x1000KW).

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

- Site - Altur, Tal. Shahuwadi, Dist. Kolhapur (Altur mast- Vetted by NIWE for M/s Kenersys).
- Investor - M/s. Giriraj Enterprises, Sangamner - 02 MW (1x2000KW).

12) Developer - M/s Windwind Power Energy Pvt Ltd.

- Site - Mendhegiri, Tal. Jath, Dist. Sangli (Mendhegiri, mast- MEDA Mast declared by NIWE).
- Investor - M/s. Global Metal & Energy Pvt Ltd - 02 MW (5x2000KW).

13) Developer - M/s Sri Maruti wind Park Developer.

- Site - Jadhavwadi, Tal. Khanapur, Dist. Sangli (Jadhavwadi mast- Vetted by NIWE for M/s. ReGen Powertech Pvt ltd, chennai).
- Investor - M/s. Orange Maha Wind energy Pvt Ltd - 10 MW (5x2000KW).

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

- Site - Nandurpathar, Tal. Parner, Dist. Ahmednagar (Nandurpathar mast- Vetted by NIWE for M/s. T S Wind Power Developer).
- Investor - M/s. D J Malpani, Sangamner – 7.2 MW (3x2400KW).

15) Developer - M/s Sri Maruti Wind Park Developer.

- Site - Mendhegiri, Tal. Jath, Dist. Sangli (MEDA Mast Vetted by NIWE).
- Investor - M/s. Energon MH Wind Power Private Limited- 16 MW (8x2000KW).

Observation & Suggestion of ZEC -

1) Developer - M/s. Regen Powertech Pvt. Ltd.

- Site – Isapur, Tal. Pusad, Dist. Yavatmal (Isapur mast - Vetted by NIWE for MEDA & project specific WPD vetted by NIWE for M/s Regen Powertech Pvt. Ltd).
- Investor - M/s. Hetero Med Solutions Ltd, Hyderabad - 19.5 MW (13x1500KW).
- The project is commissioned during the financial year 2016-17.
- As per site visit on dtd. 15/06/2017 at Isapur of DGM, MEDA Amravati, 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 Longitude (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=(8-9)	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast			
1	372	ISP 8	4447	1.5	19	46	06.7	77	30	38.6	522	439	91	Inapur, Pusad, Yavatmal	-----	7.02	83	18.3.17	Above (+/-) 60 m elev. difference
2	372	ISP 9	4445	1.5	19	46	15.6	77	30	31.1	521	439	112	Inapur, Pusad, Yavatmal	-----	7.07	82	18.3.17	Above (+/-) 60 m elev. difference
3	372	ISP 10	4448	1.5	19	46	21.6	77	30	17.4	524	439	153	Sawargaon (B), Pusad, Yavatmal	-----	6.85	85	18.3.17	Above (+/-) 60 m elev. difference
4	372	ISP 12	4450	1.5	19	46	45.0	77	30	38.6	520	439	117	Inapur, Pusad, Yavatmal	-----	7.8	81	18.3.17	Above (+/-) 60 m elev. difference
5	372	ISP 13	4444	1.5	19	46	31.1	77	29	44.1	531	439	250	Sawargaon (B), Pusad, Yavatmal	-----	6.36	92	18.3.17	Above (+/-) 60 m elev. difference
6	372	ISP 14	4443	1.5	19	46	39.2	77	29	43.1	534	439	301	Sawargaon (B), Pusad, Yavatmal	-----	6.53	95	18.3.17	Above (+/-) 60 m elev. difference
7	372	ISP 15	4442	1.5	19	46	50.1	77	29	30.3	523	439	309	Sawargaon (B), Pusad, Yavatmal	-----	6.57	84	18.3.17	Above (+/-) 60 m elev. difference
8	372	ISP 16	4441	1.5	19	46	56.9	77	29	23.7	524	439	311	Sawargaon (B), Pusad, Yavatmal	-----	6.63	85	18.3.17	Above (+/-) 60 m elev. difference
9	372	ISP 17	4440	1.5	19	47	02.5	77	29	16.7	528	439	314	Sawargaon (B), Pusad, Yavatmal	-----	6.67	89	18.3.17	Above (+/-) 60 m elev. difference
10	372	ISP 18	4451	1.5	19	47	12.0	77	29	25.6	526	439	329	Sawargaon (B), Pusad, Yavatmal	-----	7.05	87	18.3.17	Above (+/-) 60 m elev. difference
11	372	ISP 19	4439	1.5	19	47	20.2	77	28	48.9	529	439	133	Lohar (kh), Pusad, Yavatmal	-----	6.79	90	18.3.17	Above (+/-) 60 m elev. difference
12	372	ISP 20	4438	1.5	19	47	28.6	77	28	48.0	523	439	133	Lohar (kh), Pusad, Yavatmal	-----	7.01	84	18.3.17	Above (+/-) 60 m elev. difference
13	372	ISP 21	4446	1.5	19	47	37.3	77	28	48.2	521	439	127	Lohara (kh), Pusad, Yavatmal	-----	7.27	82	18.3.17	Above (+/-) 60 m elev. difference

Observation-

- There is a MEDA Mast vetted by NIWE, Chennai at Isapur wind mast within the 10 km radial distance of the above mentioned wind power project.
- As per site inspection report the nearest reference Wind Mast for the above mentioned wind power project is at Village – Isapur, Tal.- Pusad, Dist.- Yavatmal (**Latitude- N 19⁰ 43' 56.7"** **Longitude- E 77⁰ 27' 18.51"** **Elev.- 439 m AMSL**) having **WPD- 246 W/m² @ 80 m AGL** declared by NIWE for MEDA & project specific WPD vetted by NIWE for M/s Regen Powertech Pvt. Ltd

- However, NIWE has sent letter report on preparing WPD map at 50m & 80 m agl of 21 locations at Isapur site in Maharashtra to MEDA. The site specific WPD estimation is carried out for M/s Regen Powertech Pvt Ltd, Chennai and it is found that project site WPD at 50m & 80m are 170.66 W/m² & 218.14 W/m² respectively
- On the basis of above NIWE report, previously we recommended Wind Zone-I letter to 7 WTGs locations of wind power project of M/s. Hetero Med Solutions Ltd, Hyderabad for their 10.50 MW (7x1500KW) under Site Isapur, Tal. Pusad, Dist. Yavatmal.
- For the 19.5 MW (13x1500KW) above mentioned wind power project, all WTGs are within effective area (10 km radial distance) of referred wind mast and overall 100% WTG location co-ordinates of wind power project are **above (+/-) 60 m** elevation difference of referred wind mast.
- It is observed that, elevation difference (in meter) between reference wind mast and above mentioned WTGs elevation is above within limit.
- As per approved procedure, if a wind power project falls
 - i) Within the effective area, if 50% or more than 50% of WTG location co-ordinates of a wind power project are falling above or below 60m elevation difference with reference to the mean sea level of the wind mast, then either MEDA can advise the developer/investor to approach C-WET to obtain project specific annual mean WPD report from C-WET; or the developer/investor can request MEDA for permission to approach C-WET to obtain project specific annual mean WPD report from C-WET. MEDA may allow developer/investor to approach C-WET only in those cases which fall under this criterion.
 - ii) The classification of such wind power projects into wind zone class will be done on the basis of the project specific annual mean WPD issued by C-WET, a copy of which will be marked by C-WET to MEDA.
 - iii) C-WET will lay down appropriate methodology for the issuance of the project specific annual mean WPD.
- However, we have previously received NIWE report on preparing WPD map at 50m & 80 m agl of Isapur site in Yavatmal district to MEDA. The site specific WPD of 21 locations estimation is carried out for M/s Regen Powertech Pvt Ltd, Chennai and it is found that project site WPD at 50m & 80m are 170.66 W/m² & 218.14 W/m² respectively. So, it is felt that, now there is no requirement that the developer/investor should approach NIWE (C-WET) again to obtain project specific annual mean WPD report of 19.5 MW (13x1500KW) above mentioned wind power project at Isapur, Tal. Pusad, Dist. Yavatmal site.
- 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/m²) 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 9th November, 2015.

Thereafter, i.e. from 10th 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.

- As per NIWE report of specific WPD estimation done for M/s Regen Powertech Pvt. Ltd Chennai at Isapur-Pusad (Maharashtra) 19.5 MW (13x1500KW) locations of M/s. Hetero Med Solutions Ltd, Hyderabad have average WPD (W/m^2) at 80m height are found $\leq 250 \text{W/m}^2$
- **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. Hetero Med Solutions Ltd, Hyderabad for their 19.5 MW (13x1500KW) capacity wind power project as per above list.

2) Developer - M/s. T S Wind Power Developer.

- Site - Kas (Saighar), Tal. Javali, Dist. Satara - (Vetted by NIWE for T S Wind Power Developer).
- Investor - M/s T S Wind Power Developer, Pune - 1.5 MW (1x1500KW).
- The project is commissioned during the financial year 2010-11.
- As per site visit on dtd. 04/05/2017 at Saighar of Mr. Rajesh 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 Longitude (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 = 8-9	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast			
1	365	W-01	2913	1.5	17	48	46.7	73	45	18.5	1227	1237	34	Warsolikoli, Mahabaleshwar, Satara	6.23		-10	31.3.11	Within (+/-) 60 m elev. difference

- Nearest reference Wind Mast for the above mentioned wind power project is at 2 km S of Viver Satara & 5 km NNW of Karanje from Village – Saighar, Tal.- Jawali, Dist.- Satara (**As per site inspection report, Latitude- N 17° 50' 53.1'' Longitude- E 73° 48' 9.6'' Elev.- 1237 m AMSL**) having **WPD- 214.46 W/m² @ 50 m AGL** vetted by C-WET Chennai for M/s. T S Wind Power Developers, Satara, vide their letter no. C-WET/WR/CF-012/2012-13 dated 16.04.2012.
- Further, it is also mentioned in C-WET report that, C-WET/MEDA mast was located around 7 km at Ambral i.e within the 10 km radial distance of the above mentioned wind power project. The mast details given on NIWE website is - **Latitude- 17° 54' 26.3 N'' Longitude- 73° 49' 59.1 E'' Elev.- 1302 m AMSL**) having **WPD- 175 W/m² @ 50 m AGL**
- As per wind classification procedure, all WTGs are within effective area (10 km radial distance) of referred wind mast and overall 100% 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. T S Wind Power Developer, Pune for their 1.5 MW (1x1500KW) capacity wind power project as per above list.

3) Developer - M/s. T S Wind Power Developer.

- Site - Kas (Saighar), Tal. Jawali, Dist. Satara (Kas (Saighar) mast - Vetted by NIWE for T S Wind Power Developer).
- Investor - M/s. Dr. K H Sancheti, Pune - 0.6 MW (1x600KW).
- The project is commissioned during the financial year 2012-13.
- As per site visit report dated. 06/07/2017, PO, Divisional office - MEDA, Pune visited Saighar & submitted the WTG location wise observation as below. This report is endorsed by DGM, MEDA, Pune.

Sr. No.	Final file no.	WTG Location No.	MEDA WTG No.	WTG Cap. MW	WTG Latitude (N)			WTG Longitude (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 = 8-9	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast			
1	374	S-4	3395	0.6	17	45	37.4	73	47	18.4	1157	1229	2	Sahyadrinagar, Jawali, Satara	9.60	----	-72	31.3.13	above (+/-) 60 m elev. difference

- Nearest reference Wind Mast for the above mentioned wind power project is at 2 km S of Viver Satara & 5 km NNW of Karanje from Village – Saighar, Tal.- Jawali, Dist.- Satara (**As per site inspection report, Latitude - 17° 50' 53.08 N'' Longitude - 73° 48' 9.58 E'' Elev.- 1229m AMSL**) having **WPD- 214.46 W/m² @ 50 m AGL** vetted by C-WET Chennai for M/s. T S Wind Power Developers, Satara, vide their letter no.C-WET/WR/CF-012/2012-13 dated 16.04.2012.
- Further, it is also mentioned in C-WET report that, C-WET/MEDA mast was located around 7km at Ambral i.e within the 10 km radial distance of the above mentioned wind power project. The mast details given on NIWE website is - **Latitude- 17° 54' 26.3 N'' Longitude- 73° 49' 59.1 E'' Elev.- 1302 m AMSL**) having **WPD- 175 W/m² @ 50 m AGL**
- As per wind classification procedure, all WTGs are within effective area (10 km radial distance) of referred wind mast and overall 100% WTG location co-ordinates of wind power project are **above (+/-) 60 m** elevation difference of referred wind mast.
- It is observed that, elevation difference (in meter) between reference wind mast and above mentioned WTGs elevation is above within limit.
- As per approved procedure, if a wind power project falls
 - Within the effective area, if 50% or more than 50% of WTG location co-ordinates of a wind power project are falling above or below 60m elevation difference with reference to the mean sea level of the wind mast, then either MEDA can advise the developer/investor to approach C-WET to obtain project specific annual mean WPD report from C-WET; or the developer/investor can request MEDA for permission to approach C-WET to obtain project specific annual mean WPD report from C-WET. MEDA may allow developer/investor to approach C-WET only in those cases which fall under this criterion.
 - The classification of such wind power projects into wind zone class will be done on the basis of the project specific annual mean WPD issued by C-WET, a copy of which will be marked by C-WET to MEDA.
 - C-WET will lay down appropriate methodology for the issuance of the project specific annual mean WPD.

- M/s. Dr. K H Sancheti has submitted NIWE report on preparing WPD map at 30m & 50 m agl of Saighar site in Satara district to MEDA. The said report is carried out for M/s T S Wind Power Developer, Pune and it is found that project site WPD at 30m & 50m are 179.43 W/m² & 214.46 W/m² respectively.
- All WTGs are within effective area (10 km radial distance) of referred wind mast. However more than 50% WTGs of above wind power project are above (+/-) 60 m elevation difference of referred wind mast. So, it was advised to M/s. Dr. K H Sancheti to approach NIWE, Chennai for obtaining the project specific Annual Wind Power Density report from NIWE addressed to MEDA.
- **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. Dr. K H Sancheti to obtain project specific wind power density report from NIWE for their 0.6 MW (1x600KW) capacity wind power project

4) Developer - M/s. T S Wind Power Developer.

- Site - Kas (Saighar), Tal. Javali, Dist. Satara (Kas (Saighar) Vetted by NIWE for M/s T S Wind Power Developer).
- Investor - M/s. Drug House, Pune - 0.6 MW (1x600KW).
- The project is commissioned during the financial year 2011-12.
- As per site visit report dated. 06/07/2017, PO, Divisional office - MEDA, Pune visited Saighar & submitted the WTG location wise observation as below. This report is endorsed by DGM, MEDA, Pune.

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1	2	3	4	5	6			7			8	9	10	11	12	13	14 = 8-9	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast			
1	376	M-02	3252	0.6	17	47	30.0	73	46	41.1	1164	1229	12B/10	Manti, Javali, Satara	6.76	----	-65	31.3.12	above (+/-) 60 m elev. difference

- Nearest reference Wind Mast for the above mentioned wind power project is at 2 km S of Viver Satara & 5 km NNW of Karanje from Village – Saighar, Tal.- Jawali, Dist.- Satara (**As per site inspection report, Latitude - 17° 50' 53.08 N'' Longitude - 73° 48' 9.58 E'' Elev.- 1229m AMSL**) having **WPD- 214.46 W/m² @ 50 m AGL** vetted by C-WET Chennai for M/s. T S Wind Power Developers, Satara, vide their letter no.C-WET/WR/CF-012/2012-13 dated 16.04.2012.
- Further, it is also mentioned in C-WET report that, C-WET/MEDA mast was located around 7km at Ambral i.e within the 10 km radial distance of the above mentioned wind power project. The mast details given on NIWE website is - **Latitude- 17° 54' 26.3 N'' Longitude- 73° 49' 59.1 E'' Elev.- 1302 m AMSL**) having **WPD- 175 W/m² @ 50 m AGL**
- As per wind classification procedure, all WTGs are within effective area (10 km radial distance) of referred wind mast and overall 100% WTG location co-ordinates of wind power project are **above (+/-) 60 m** elevation difference of referred wind mast.
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 - C-WET will lay down appropriate methodology for the issuance of the project specific annual mean WPD.

- M/s. Drug House has submitted NIWE report on preparing WPD map at 30m & 50 m agl of Saighar site in Satara district to MEDA. The said report is carried out for M/s T S Wind Power Developer, Pune and it is found that project site WPD at 30m & 50m are 179.43 W/m² & 214.46 W/m² respectively.
- All WTGs are within effective area (10 km radial distance) of referred wind mast. However more than 50% WTGs of above wind power project are above (+/-) 60 m elevation difference of referred wind mast. So, it was advised to M/s. Dr. Drug House to approach NIWE, Chennai for obtaining the project specific Annual Wind Power Density report from NIWE addressed to MEDA.
- **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 Drug House to obtain project specific wind power density report from NIWE for their 0.6 MW (1x600KW) capacity wind power project

5) Developer - M/s. T S Wind Power Developer.

- Site - Kas (Saighar), Tal. Javali, Dist. Satara (Kas (Saighar) mast - Vetted by NIWE for M/s T S Wind Power Developer).
- Investor - M/s. Navalakha Developers, Pune - 0.6 MW (1x600KW).
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					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast			
1	373	G-05	3262	0.6	17	46	42.2	73	46	57.2	1170	1229	612	Ganje, Javali, Satara	8.1	----	-59	17.5.12	Within (+/-) 60 m elev. difference

- Nearest reference Wind Mast for the above mentioned wind power project is at 2 km S of Viver Satara & 5 km NNW of Karanje from Village – Saighar, Tal.- Jawali, Dist.- Satara **(As per site inspection report, Latitude- 17° 50' 53.08 N'' Longitude- 73° 48' 9.58 E'' Elev.- 1229m AMSL) having WPD- 214.46 W/m² @ 50 m AGL** vetted by C-WET Chennai for M/s. T S Wind Power Developers, Satara, vide their letter no. C-WET/WR/CF-012/2012-13 dated 16.04.2012.
- Further, it is also mentioned in C-WET report that, C-WET/MEDA mast was located around 7km at Ambral i.e within the 10 km radial distance of the above mentioned wind power project. The mast details given on NIWE website is - **Latitude- 17° 54' 26.3 N'' Longitude- 73° 49' 59.1 E'' Elev.- 1302 m AMSL) having WPD- 175 W/m² @ 50 m AGL**
- As per wind classification procedure, all WTGs are within effective area (10 km radial distance) of referred wind mast and overall 100% 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 letter to M/s. Navalakha Developers, Pune to confirm the elevation difference with respect to reference mast of their WTGs **0.6 MW (1 x 600 KW)** capacity wind power project at Site Kas (Saighar), Tal. Javali, Dist. Satara from reference wind mast. Also confirm that, there is no any existing wind mast available within 10 km.

6) Developer - M/s. T S Wind Power Developer.

- Site - Kas (Saighar), Tal. Javali, Dist. Satara (Kas (Saighar) mast - Vetted by NIWE for T S Wind Power Developer).
- Investor - M/s. Medilink Services, Pune - 1.5 MW (1x1500KW).
- The project is commissioned during the financial year 2010-11.
- As per site visit report dated. 06/07/2017, PO, Divisional office - MEDA, Pune visited Saighar & submitted the WTG location wise observation as below. This report is endorsed by DGM, MEDA, Pune.

Sr. No.	Final file no.	WTG Location No.	MEDA WTG No.	WTG Cap. MW	WTG Latitude (N)			WTG Longitude (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 = 8-9	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast			
1	375	W-04	2708	1.5	17	48	28.0	73	45	33.1	1205	1229	41	Warsolikoli, Mahabaleshwar, Satara	6.42	----	-24	26.9.10	Within (+/-) 60 m elev. difference

- Nearest reference Wind Mast for the above mentioned wind power project is at 2 km S of Viver Satara & 5 km NNW of Karanje South of viver Satara & 5 km North, North West of Karanje from Village – Saighar, Tal.- Jawali, Dist.- Satara (**As per site inspection report, Latitude- 17° 50' 53.08 N'' Longitude- 73° 48' 9.58 E'' Elev.- 1229m AMSL**) having **WPD- 214.46 W/m² @ 50 m AGL** vetted by C-WET Chennai for M/s. T S Wind Power Developers, Satara, vide their letter no. C-WET/WR/CF-012/2012-13 dated 16.04.2012.
- Further, it is also mentioned in C-WET report that, C-WET/MEDA mast was located around 7km at Ambral i.e within the 10 km radial distance of the above mentioned wind power project. The mast details given on NIWE website is - **Latitude- 17° 54' 26.3 N'' Longitude- 73° 49' 59.1 E'' Elev.- 1302 m AMSL** having **WPD- 175 W/m² @ 50 m AGL**
- As per wind classification procedure, all WTGs are within effective area (10 km radial distance) of referred wind mast and overall 100% 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. Medilink Services, Pune for their 1.5 MW (1x1500KW) capacity wind power project as per above list.

7) Developer - M/s. Sri Maruti Wind Park Developer.

- Site - Vaspeth, Tal. Jath, Dist. Sangli (Vaspeth - MEDA Mast Vetted by NIWE).
- Investor - M/s. IOTA Mtech Power LLP, Kolkata - 02 MW (1x2000KW).
- The project is commissioned during the financial year 2015-16.
- As per site visit report dated. 06/07/2017, PO, Divisional office - MEDA, Pune visited Saighar & submitted the WTG location wise observation as below. This report is endorsed by DGM, MEDA, Pune.

Sr. No.	Final file no.	WTG Location No.	MEDA WTG No.	WTG Cap. MW	WTG Latitude (N)			WTG Longitude (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 = 8-9	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast			
1	367	MVT-90	4153	2	17	05	10.9	75	16	44.7	692	672	163/2	Jath, Jath, Sangli	-----	8.48	20	31.10.15	Within (+/-) 60 m elev. difference

- There is a NIWE, Chennai declared Vaspeth 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 - Vaspeth, Tal.- Jath, Dist.- Sangli (**As per site inspection report, Latitude- 17° 06' 10.2 N'' Longitude- 75° 21' 24.5 E'' Elev.- 672 m AMSL**) having **WPD- 220 W/m² @ 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 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. IOTA Mtech Power LLP, Kolkata for their 2.0 MW (1x2000KW) capacity wind power project as per above list.

8) Developer - M/s. Sri Maruti Wind Park Developer.

- Site – Vaspeth, Tal. Jath, Dist. Sangli (Vaspeth mast - MEDA Mast Vetted by NIWE).
- Investor - M/s. BMD Power Pvt. Ltd. Rajasthan - 06 MW (3x2000KW).
- The project is commissioned during the financial year 2015-16.
- As per site visit report dated. 06/07/2017, PO, Divisional office - MEDA, Pune visited Saighar & submitted the WTG location wise observation as below. This report is endorsed by DGM, MEDA, Pune.

Sr. No.	Final file no.	WTG Location No.	MEDA WTG No.	WTG Cap. MW	WTG Latitude (N)			WTG Longitude (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 = 8-9	15	16
					Deg	Min	Sec	Deg	Min	Sec						Pvt. Mast	NIWE/ MEDA Mast		
1	366	MVT-03	4356	2	17	06	14.8	75	17	19.8	695	672	222	Karajangi, Jath, Sangli	-----	7.47	23	03.10.15	Within (+/-) 60 m elev. difference
2	366	MVT-08	3968	2	17	04	07.2	75	18	48.5	687	672	343	Valsang, Jath, Sangli	-----	5.98	15	31.10.15	Within (+/-) 60 m elev. difference
3	366	MVT-47	3962	2	17	04	41.2	75	18	45.1	691	672	355	Valsang, Jath, Sangli	-----	5.45	19	03.10.15	Within (+/-) 60 m elev. difference

- There is a NIWE, Chennai declared Vaspeth 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 - Vaspeth, Tal.- Jath, Dist.- Sangli (**As per site inspection report, Latitude- 17° 06' 10.2 N'' Longitude- 75° 21' 24.5 E'' Elev.- 672 m AMSL**) having **WPD- 220 W/m² @ 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 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. BMD Power Pvt. Ltd., Rajasthan for their 6.0 MW (3x2000KW) capacity wind power project as per above list.

9) Developer - M/s. Sri Maruti Wind Park Developer.

- Site - Mendhegeri, Tal. Jath, Dist. Sangli (Mendhegeri mast- Declared by NIWE & Vetted by NIWE for INOX Wind Infrastructure Service Ltd).
- Investor - M/s. D J Malpani, Ahmednagar- 04 MW (2x2000KW).
- The project is commissioned during the financial year 2015-16.
- As per site visit on dtd. 16/02/2017 at Saighar of Mr. 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 Latitude (N)			WTG Longitude (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 = 8-9	15	16
					Deg	Min	Sec	Deg	Min	Sec						Pvt. Mast	NIWE/ MEDA Mast		
1	357	MV2T-06	4137	2	17	01	00.7	75	18	22.6	673	745	73	Muchandi, Jath, Sangli	-----	9.40	-72	03.10.15	Above (+/-) 60 m elev. difference
2	357	MV2T-12	4138	2	17	01	14.8	75	18	23.2	671	745	73	Muchandi, Jath, Sangli	-----	9.60	-74	31.10.15	Above (+/-) 60 m elev. difference

- As per ZEC dated 18.05.17, all WTGs are within effective area (10 km radial distance) of referred wind mast. However more than 50% WTGs of above wind power project are above (+/-) 60 m elevation difference of referred wind mast. So, it was advised to M/s. D J Malpani, Ahmednagar to approach NIWE, Chennai for obtaining the project specific Annual Wind Power Density report from NIWE addressed to MEDA.
- In view of above NIWE has sent final report on revised WPD map at 50m agl of Mendhegeri site, Jath village, Sangli distract vide letter no.NIWE/WRA/028/2017 -18 dtd. 19.7.2017 to MEDA. The site specific WPD estimation is carried out for M/s INOX Wind Infrastructure Services Limited, Noida and is found to be 158.9 W/m² at 50 agl at P90 confidence level with all relevant corrections.

Loc-Id	Average WPD (W/m ²) at 50 m height
MV2-T-06	158.9
MV2-T-12	

- Committee's observations:- As per NIWE report of specific WPD estimation for 4.0 MW (2x2000KW) wind power project of M/s. D J Malpani, Ahmednagar at Mendhegeri site, Jath village, Sangli distract the Average WPD (W/m²) at 50m height are found 158.9 W/m² which is less than 250 W/m².

Hence, 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. D J Malpani, Ahmednagar for their 4.0 MW (2x2000KW) capacity wind power project.

Committee Recommendation- 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. D J Malpani, Ahmednagar for their 4.0 MW (2x2000KW) capacity wind power project as per above list.

10) Developer - M/s. Winwind Power Energy Pvt Ltd.

- Site - Vaspeth, Tal. Jath, Dist. Sangli (Vaspeth mast- MEDA Mast vetted by NIWE).
- Investor - M/s. Siva Renewable Power & Energy Ltd, Chennai- 04 MW (4x1000KW).
- The project is commissioned during the financial year 2015-16.
- As per site visit on dtd. 20/06/2017 at Vaspeth of PO, Divisional office MEDA, Kolhapur vetted by DGM, MEDA, Kolhapur , 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 Longitude (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 = 8-9	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast			
1	377	S-01	4420	1	17	8	20	75	19	41	660	660	156/2	Sanamdi, Jath, Sangli	0.257	4.992	00	31.10.15	Within (+/-) 60 m elev. difference
2	377	S-04	4421	1	17	7	54	75	19	21	650	660	156/1	Sanamdi, Jath, Sangli	1.143	4.824	-10	31.10.15	Within (+/-) 60 m elev. difference
3	377	S-16	4423	1	17	7	47	75	19	36	650	660	156/1	Sanamdi, Jath, Sangli	1.164	4.358	-10	31.10.15	Within (+/-) 60 m elev. difference
4	377	S-22	4422	1	17	7	29	75	19	41	642	660	155	Sanamdi, Jath, Sangli	1.613	3.928	-18	31.10.15	Within (+/-) 60 m elev. difference

- There is a NIWE, Chennai declared Vaspeth 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 - Vaspeth, Tal.- Jath, Dist.- Sangli (**As per site inspection report, Latitude- 17° 06' 10 N'' Longitude- 75° 21' 25 E'' Elev.- 660m AMSL**) having **WPD- 220 W/m² @ 50 m AGL** by C- 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 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. Siva Renewable Power & Energy Ltd, Chennai for their 4.0 MW (4x1000KW) capacity wind power project as per above list.

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

- Site:- Ameni, Tal. Shahuwadi, Dist. Kolhapur (Ameni mast- Vetted by NIWE for M/s. Kenersys India Pvt Ltd, Pune).
- Investor:- M/s. Giriraj Enterprises:- 2.0 MW (1 x 2000 KW).
- The project is commissioned during the financial year 2016-17
- As per site visit on dtd. 06/05/2017 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 Latitude (N)			WTG Longitude (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-03	Kolhapur/ Bhendwad e/Kenersys / 2.0MW/D/ 15-16/4465	2.0	16	57	4.6	73	57	23.3	754	865	1452	Shirgaon, Shahuwadi, Kolhapur	6.04	-	-111	31/3/17	Above (+/-) 60 m elev. difference

Observation-

- There is a NIWE, Chennai vetted Ameni wind mast within the 10 km radial distance of the above mentioned wind power project for M/s. Kenersys India Pvt Ltd.
- Nearest reference Wind Mast for the above mentioned wind power project is at Village – Ameni, Tal.- Shahuwadi, Dist.- Kolhapur (**As per site inspection report, Latitude- N 16° 59' 53.82" Longitude- E 73° 55' 49.14" Elev.- 865 m AMSL**) having **WPD- 164.0 W/m² @ 50 m AGL & 203.3 W/m² @ 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.
- Further, it is also mentioned in NIWE report that, NIWE mast was located around 5 km at Kotholi & the mast height was 20m i.e within the 10 km radial distance of the above mentioned wind power project. The mast details given on NIWE website is - **Latitude- 16° 57' 54.2 N" Longitude- 73° 58' 28.4 E" Elev.- 782 m AMSL**) having **WPD- 180 W/m² @ 50 m AGL**
- However, NIWE has sent a report on preparing WPD map at 50m & 80 m agl of 03 locations at Ameni, Dist. Kolhapur. The site specific WPD estimation is carried out for M/s Kenersys India Pvt Ltd, Pune and it is found that project site WPD at 50m & 80m are 164.0 W/m² & 203.3 W/m² respectively
- On the basis of above NIWE report, previously we recommended Wind Zone-I letter to 2 WTGs locations of wind power project of M/s. Giriraj Enterprises for their 04 MW (2x2000KW) under Site Ameni, Tal. Shahuwadi, Dist. Kolhapur.
- For 02 MW (1x2000KW) above mentioned wind power project, all WTGs are within effective area (10 km radial distance) of referred wind mast and overall 100% WTG location co-ordinates of wind power project are **above (+/-) 60 m** elevation difference of referred wind mast.

- It is observed that, elevation difference (in meter) between reference wind mast and above mentioned WTGs elevation is above within limit.
- As per approved procedure, if a wind power project falls
 - iii) Within the effective area, if 50% or more than 50% of WTG location co-ordinates of a wind power project are falling above or below 60m elevation difference with reference to the mean sea level of the wind mast, then either MEDA can advise the developer/investor to approach C-WET to obtain project specific annual mean WPD report from C-WET; or the developer/investor can request MEDA for permission to approach C-WET to obtain project specific annual mean WPD report from C-WET. MEDA may allow developer/investor to approach C-WET only in those cases which fall under this criterion.
 - iv) The classification of such wind power projects into wind zone class will be done on the basis of the project specific annual mean WPD issued by C-WET, a copy of which will be marked by C-WET to MEDA.
 - iii) C-WET will lay down appropriate methodology for the issuance of the project specific annual mean WPD.
- However, we have previously received NIWE report on preparing WPD map at 50m & 80 m agl of Ameni, Dist. Kolhapur. The site specific WPD of 03 locations estimation is carried out for M/s Kenersys India Pvt Ltd and it is found that project site WPD at 50m & 80m are 164.0 W/m² & 203.3 W/m² respectively. So, as per wind zone classification procedure, there is not requiring to developer/investor to approach NIWE (C-WET) to obtain project specific annual mean WPD report of 02 MW (1x2000KW) above mentioned wind power project at Ameni, Tal. Shahuwadi, Dist. Kolhapur site.
- 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/m²) 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.*

- 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/m²) at 80m height are found <=250W/m²

- **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.

12) Developer - M/s. Windwind Power Energy Pvt Ltd.

- Site - Mendhegiri, Tal. Jath, Dist. Sangli (Mendhegiri, mast- MEDA Mast declared by NIWE).
- Investor - M/s. Global Metal & Energy Pvt Ltd - 10 MW (5x2000KW).
- The project is commissioned during the financial year 2016-17.
- As per site visit on dtd. 09/05/2017 at Mendhegiri of Mr. Vijay 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 Latitude (N)			WTG Longitude (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. between 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 = 8-9	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast			
1	368	GME-01	4482	2	17	02	4.9	75	08	15.0	712	745	104	Washan, Jath, Sangli	-----	9.7	-13	25.3.17	Within (+/-) 60 m elev. difference
2	368	GME-02	4481	2	17	01	55.1	75	08	29.0	716	745	99	Washan, Jath, Sangli	-----	9.6	-29	25.3.17	Within (+/-) 60 m elev. difference
3	368	GME-03	4480	2	17	02	19.0	75	09	8.9	702	745	22/2	Washan, Jath, Sangli	-----	9.4	-43	25.3.17	Within (+/-) 60 m elev. difference
4	368	GME-05	4479	2	17	02	9.1	75	09	35.1	706	745	47	Washan, Jath, Sangli	-----	9.2	-39	25.3.17	Within (+/-) 60 m elev. difference
5	368	GME-06	4478	2	17	02	26.9	75	09	38.0	694	745	43/2	Washan, Jath, Sangli	-----	9.2	-51	25.3.17	Within (+/-) 60 m elev. difference

- There is a NIWE, Chennai declared Mendhegiri 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 - Mendhegiri, Tal.- Jath, Dist.- Sangli (**As per site inspection report, Latitude- 16° 59' 37.60 N" Longitude- 75° 13' 21.60 E" Elev.- 745 m AMSL**) having **WPD- 208 W/m² @ 80 m AGL** declared by C-WET, 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 co-ordinates of wind power project are **within (+/-) 60 m** elevation difference of referred wind mast.
- 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/m²) 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.*

- However, 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^2) at 80m height are found $\leq 250 \text{ W/m}^2$

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. Global Metal & Energy Pvt Ltd to confirm the distance of their WTGs **10.00 MW (5 x 2000 KW)** capacity wind power project at Site Mendhegiri, Tal. Jath, Dist. Sangli from reference wind mast. Also conform that, there is no any existing wind mast available within 10 km.

13) Developer - M/s. Sri Maruti Wind Park Developer.

- Site - Jadhavwadi, Tal. Khanapur, Dist. Sangli (Jadhavwadi mast- Vetted by NIWE for M/s. ReGen Powertech Pvt ltd, Chennai).
- Investor - M/s. Orange Maha Wind energy Pvt Ltd - 10 MW (5x2000KW).
- The project is commissioned during the financial year 2016-17.
- As per site visit on dtd. 09/05/2017 at Jadhavwadi of Mr. Vijay 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 Latitude (N)			WTG Longitude (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. between 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 = 8-9	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast			
1	369	K-01	4347	2	17	14	27.0	74	41	41.0	876	860	493	Posewadi, Khanapur, Sangli	6.67	----	16	17.3.17	Within (+/-) 60 m elev. difference
2	369	K-03	4346	2	17	14	53.0	74	41	08.5	876	860	661,665	Posewadi, Khanapur, Sangli	5.80	----	16	17.3.17	Within (+/-) 60 m elev. difference
3	369	G-67	4360	2	17	17	05.1	74	40	58.8	875	860	67	Jakhinwadi, Khanapur, Sangli	1.79	----	15	17.3.17	Within (+/-) 60 m elev. difference
4	369	GA-55	4344	2	17	13	53.5	74	41	51.6	864	860	518, 519, 520	Khanapur, Khanapur, Sangli	7.74	----	04	17.3.17	Within (+/-) 60 m elev. difference
5	369	UN-47	4385	2	17	15	47.6	74	45	58.7	805	860	428	Benapur, Khanapur, Sangli	9.45	----	-55	17.3.17	Within (+/-) 60 m elev. difference

- Nearest reference Wind Mast for the above mentioned wind power project is at Village - Jadhavwadi, Tal.- Khanapur, Dist.- Sangli (**As per sit inspection report, Latitude- 17⁰ 18' 02.2 N'' Longitude- 74⁰ 41' 10.7 E'' Elev.- 860 m AMSL**) having **WPD- 218.72 W/m² @ 80 m AGL** vetted by C-WET, Chennai, for M/s. Regen Powertech Pvt Ltd.
- As per wind classification procedure, all WTGs are within effective area (10 km radial distance) of referred wind mast and overall 100% WTG location co-ordinates of wind power project are **within (+/-) 60 m** elevation difference of referred wind mast.
- 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/m²) 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.*

- As per NIWE report of specific WPD estimation for 10.0 MW (5 X 2000 KW) wind power project of M/s. Orange Maha Wind energy Pvt Ltd at Jadhavwadi, Dist. Sangli the Average WPD (W/m^2) at 80m height are found $\leq 250 \text{W/m}^2$
- **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. Orange Maha Wind energy Pvt Ltd, for their **10.0 MW (5 X 2000 KW)** capacity wind power project as per above list.

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

- Site - Nandurpathar, Tal. Parner, Dist. Ahmednagar (Nandurpathar mast- Vetted by NIWE for M/s. T S Wind Power Developer).
- Investor - M/s. D J Malpani, Sangamner – 7.2 MW (3x2400KW).
- The project is commissioned during the financial year 2016-17.
- As per site visit on dtd. 06/05/2017 at Nandurpathar of Mr. Babu B Bhagat, Sr. 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 Longitude (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 = 8-9	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast			
1	370	NP-04	4452	2.4	19	10	12.1	74	15	09.4	877	906	1136	Pemdarwadi, Junnar, Pune	5.29	----	29	31.3.17	Within (+/-) 60 m elev. difference
2	370	NP-05	4453	2.4	19	10	03.9	74	15	06.7	880	906	1134	Pemdarwadi, Junnar, Pune	5.02	----	26	31.3.17	Within (+/-) 60 m elev. difference
3	370	NP-09	4455	2.4	19	09	20.6	74	15	23.4	898	906	912	Pemdarwadi, Junnar, Pune	4.01	----	08	31.3.17	Within (+/-) 60 m elev. difference

- Nearest reference Wind Mast for the above mentioned wind power project is at Village - Nandurpathar, Tal.- Parner, Dist.- Ahmednagar (**As per site inspection report, Latitude- 19° 07' 29.5 N'' Longitude- 74° 14' 11.4 E'' Elev.- 906 m AMSL**) having **WPD- 187.91 W/m² @ 80 m AGL** vetted by C-WET, Chennai, for M/s. T S Wind Power Developer.
- Further, it is also mentioned in C-WET report that, C-WET mast was located around 9.8 km at Pimpalgaon i.e within the 10 km radial distance of the above mentioned wind power project. The mast details given on NIWE website is - **Latitude- 19° 07' 30.2 N'' Longitude- 74° 19' 45.5 E'' Elev.- 875 m AMSL**) having **WPD- 157 W/m² @ 50 m AGL**
- As per wind classification procedure, all WTGs are within effective area (10 km radial distance) of referred wind mast and overall 100% WTG location co-ordinates of wind power project are **within (+/-) 60 m** elevation difference of referred wind mast.
- 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/m²) 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.*

- As per NIWE report of specific WPD estimation for 7.2 MW (3 X 2400 KW) wind power project of M/s. D J Malpani, Sangamner, at Nandurpathar, Dist. Ahmednagar the Average WPD (W/m^2) at 80m height are found $\leq 250 \text{W/m}^2$
- **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. D J Malpani, Sangamner, for their **7.2 MW (3 X 2400 KW)** capacity wind power project as per above list.

15) Developer - M/s Sri Maruti Wind Park Developer.

- Site - Mendhegiri, Tal. Jath, Dist. Sangli (MEDA Mast Vetted by NIWE).
- Investor - M/s. Energon MH Wind Power Private Limited- 16 MW (8x2000KW)
- M/s. Gamesa Renewable Private Limited request to amend the corrected location number issue the Wind Zone letter no. IDD-WRA/WZ-323/M/s. Srimaruti/M/s.Energon/2016-17/5184 dtd. 17.12.2016 as per submission alongwith necessary documents. The details submission are as follows-
Existing content in serial no. 4 & 8 of table-

Sr. No.	WTG Location No.	MEDA WTG No.	WTG Cap. MW	Forest Comp/ Survey/Gut No.	Village/Taluka/District
4	J97/2-234	4311	2.0	54/1B	Amrutwadi/Jat/Sangli
8	J97/2	4313	2.0	92	Khojanwadi/Jat/Sangli

Amended content in serial no. 4 & 8 shall be read as-

Sr. No.	WTG Location No.	MEDA WTG No.	WTG Cap. MW	Forest Comp/ Survey/Gut No.	Village/Taluka/District
4	J97/ 1 -234	4311	2.0	54/1B	Amrutwadi/Jat/Sangli
8	J97/2- 59	4313	2.0	92	Khojanwadi/Jat/Sangli

Other terms & conditions of letter dtd. 17-12-2016 will remain same.

Committee's observations:- In view of written submission by developers for amendment committee discussed, verified the submitted documents and evaluated the proposal.

Committee Recommendation- 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 amendment letter to M/s. Energon MH Wind Power Private Limited.