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 16.11.17 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. Purushottam Jadhav	Addl. D.G.	Member
2	Shri. U. M. Pande	Sr. General Manager (Adm. & Pub.)	Chairman
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 Sri Maruti Wind Park Developers.
 - Site Vaspeth, Tal. Jath, Dist. Sangli
 - Investor M/s. Nilgiri Power Private Limited, Hyderabad- 2 MW (1x2000KW).
- 2) Developer M/s Sri Maruti Wind Park Developers.
 - Site Mendhegiri, Tal. Jath, Dist. Sangli.
 - Investor M/s. Nilgiri Power Private Limited, Hyderabad- 6 MW (3x2000KW).
- 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. NSL Wind Power Company (Sayamalal) Private Limited, Hyderabad-3 MW (2x1500KW).
- 4) Developer M/s Sri Maruti Wind Park Developers.
 - Site Jadhavwadi, Tal. Khanapur, Dist. Sangli (Jadhavwadi mast Vetted by NIWE for M/s ReGen Powertech Pvt. Ltd.).
 - Investor M/s. Clean Wind Power (Satara), New Delhi 4 MW (2x2000KW).
- 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. Dr. K H Sancheti, 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. Drug House, Pune 0.6 MW (1x600KW).
- 7) 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).
- 8) Developer M/s. Sri Maruti Wind Park Developers Pvt. Ltd..
 - Site Sanmadi, Tal.Jath & Dist. Sangli.
 - Investor M/s Renew Wind Energy (Devgarh) Private Limited, Gurgaon-9 MW (6x1500KW).

- 1) Developer M/s Sri Maruti Wind Park Developers.
 - Site Vaspeth, Tal. Jath, Dist. Sangli
 - Investor M/s. Nilgiri Power Private Limited, Hyderabad- 2 MW (1x2000KW).
 - The project was commissioned during the financial year 2015-16.
 - As per site visit on dtd. 11/08/17 at Vaspeth of DGM, MEDA Kolhapur, the WTG location wise observations are as below:-

S N			MEDA WTG No.	WTG Cap. MW		WTG itude (N	N)	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=(8-9)	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast			
]	379	MVT 95	4386	2	17	05	10.7	75	18	05.4	685	670	288/2	Valsang, Jath, Sangli		6.18	15	31.10.15	Within (+/-) 60 m elev. difference

Observation-

- There is a MEDA Mast vetted by NIWE, Chennai at Vaspeth wind mast within the 10 km radial distance of the above mentioned wind power project.
- As per site inspection report nearest reference Wind Mast for the above mentioned wind power project is at Village Vaspeth, Tal.- Jath, Dist.- Sangli (Latitude- N 17⁰ 06' 10.1" Longitude- E 75⁰ 21' 24.5" Elev.- 670 m AMSL) having WPD- 220 W/m² @ 50 m AGL.
- For the 2 MW (2x2000KW) above mentioned wind power project, all WTG 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 & it is found that project site WPD at 50m 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. Nilgiri Power Private Limited, Hyderabad for their 2 MW (1x2000KW) capacity wind power project as per above list.

- 2) Developer M/s Sri Maruti Wind Park Developers.
 - Site Mendhegiri, Tal. Jath, Dist. Sangli
 - Investor M/s. Nilgiri Power Private Limited, Hyderabad- 6 MW (3x2000KW).
 - The project was commissioned during the financial year 2015-16.
 - As per site visit on dtd. 11/08/17 at Vaspeth of 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 itude (!	N)	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=(8-9)	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast			
1	378	MVT-84	4116	2	17	03	16.4	75	15	47	724	755	233/1	Jath, Jath, Sangli		8.01	31	31.10.15	Within (+/-) 60 m elev. difference
2	378	MV2T -37	4125	2	17	00	03.8	75	16	30.4	698	755	21/2	Untwadi, Jath, Sangli		5.64	57	31.10.15	Within (+/-) 60 m elev. difference
2	378	MV2T -24	4127	2	16	57	37.3	75	17	09.3	708	755	451/1	Rawalgund, Jath, Sangli		7.70	47	31.10.15	Within (+/-) 60 m elev. difference

Observation-

- There is a MEDA Mast vetted by NIWE, Chennai at Mendhegiri wind mast within the 10 km radial distance of the above mentioned wind power project.
- As per site inspection report nearest reference Wind Mast for the above mentioned wind power project is at Village Mendhegiri, Tal.- Jath, Dist.- Sangli (Latitude- N 16⁰ 59' 37.7" Longitude- E 75⁰ 13' 21.6" Elev.- 755 m AMSL) having WPD- 208 W/m² @ 50 m AGL.
- For the 6 MW (3x2000KW) above mentioned wind power project, all WTG's 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 & it is found that project site WPD at 50m 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. Nilgiri Power Private Limited, Hyderabad for their 6 MW (3x2000KW) capacity wind power project as per above list.

- 3) Developer M/s. TS Wind Power Developer, Satara.
 - Site Kas (Saighar), Tal. Javali, Dist. Satara (Vetted by NIWE for T S Wind Power Developer).
 - Investor M/s. NSL Wind Power Company (Sayamalal) Private Limited, Hyderabad 3 MW (2x1500KW).
 - The project was commissioned during the financial year 2014-15.
 - As per site visit report dated. 5/6/16, S. N. Sawant, Technician, MEDA, Girye visited Saighar & submitted the WTG location wise observation as below.

Sr. No.	Final file no.	WTG Location No.	MEDA WTG No.	WTG Cap. MW		WTG tude (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 = 8-9	15	16
					Deg	Min	Sec	Deg	Min	Sec					Pvt. Mast	NIWE/ MEDA Mast			
1	329	S-5	4388	1.5	17	45	28.3	73	47	25.3	1194	1179	2	Sahyadrinagar, Javali, Satara	3.06	2.86	15	31.3.15	Within (+/-) 60 m elev. difference
2	329	S-6	4389	1.5	17	45	22.7	73	47	35.8	1179	1179	2	Sahyadrinagar, Javali, Satara	3.28	2.86	52	31.3.15	Within (+/-) 60 m elev. difference

- Nearest Wind Mast for the above mentioned wind power project is at location –Kas, Tal & Dist. Satara (Latitude- N 17° 44' 22.2" Longitude- E 73° 48' 32.4" Elev.- 1232 m masl) having WPD- 277.00 watt/m² @ 50 m AGL declared by NIWE Chennai for MEDA.
- Developers reference Wind Mast for the above mentioned wind power project is at location –Saighar, Tal Javli & Dist. Satara (Latitude- N 17° 50° 51.1° Longitude- E 73° 48° 14.5° Elev.- 1237 m masl) having WPD- 214.46 watt/m² @ 50 m AGL vetted by NIWE Chennai for M/s T.S.Wind Power Developers, Satara vide their Report on Verification of Procedure of Wind Monitoring at Saighar, Satara reference no. C-WET/WRA/CF-012/2012-13 dtd. 16/4/2012.
- As per wind classification procedure, all WTGs are within effective area (10 km radial distance) of site Kas WRA Station Kas Tal & Dist Satara declared by NIWE Chennai for MEDA having WPD- 277.00 watt/m2 @ 50 m AGL MEDA 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 II letter to M/s. NSL Wind Power Company Pvt. Ltd, Hyderabad, for their 3.00MW (2x1500KW) capacity wind power project.
- ➤ Minutes of Hearing: Shri Amit Lakhanpal from M/s T.S. Wind Power Developers present on behalf of M/s. NSL Wind Power Company Pvt. Ltd, Hyderabad. He requested to consider their own mast located at Saighar, Tal Javli & Dist. Satara (Latitude- N 17° 50′ 51.1" Longitude- E 73° 48′ 14.5" Elev.- 1237 m amsl) having WPD- 214.46 watt/m2 @ 50 m AGL vetted by NIWE Chennai instead mast location −Kas, Tal & Dist.Satara (Latitude- N 17° 44′ 22.2" Longitude- E 73° 48′ 32.4" Elev.- 1232 m amsl) having WPD-277.00 watt/m2 @ 50 m AGL declared by NIWE Chennai for MEDA. No objection raised by representative of other developers present for the hearing.

Committee Recommendation:

- Submission in hearing made by representatives of Investors / Developers placed on record as above. No objection raised by representatives of other Developers / Investors present for hearing. In view of this, committee discussed and evaluated the said proposal with respect to above points. Committee concluded to issue the letter to M/s. NSL Wind Power Company Pvt. Ltd, Hyderabad, to obtain project specific wind power density report from NIWE for their 3.00MW (2x1500KW) capacity wind power project.
- In view of above NIWE has sent final report on WPD map at 50m agl of Kas (Saighar) site in Satara district, Maharashtra vide letter no.NIWE/WRA/042/2017 -18 dtd. 28.09.2017 to M/s TS Wind Power Developers, Pune. The site specific WPD estimation is carried out for M/s TS Wind Power Developers, Pune and is found to be 246.7 W/m² at P90 confidence level with all relevant corrections.
- Minutes of Hearing: Shri Amit Lakhanpal from M/s T.S. Wind Power Developers present on behalf of M/s. NSL Wind Power Company Pvt. Ltd, Hyderabad, no objection raised by them. Further, no objection raised by other developer present in the hearing.
- ➤ Committee Observation It is observed that, difference between reference wind mast & WTG elevation is within (+/-) 60 mtr. Further it is also observed that, all WTGs are located within 10 km radius from MEDA mast. WTGs locations no S05 & S06 is nearest to MEDA wind mast (2.86 & 2.49 Km) whereas from saighar wind mast (Private developer mast) is about 10.4 & 10.16 km from WTGs locations.

As per the wind zone classification procedure "If a wind power project falls within the effective areas of two different wind masts having different values of annual mean WPD, then the annual mean WPD of the nearest wind mast shall be considered for that project". Hence, it was observed that, there was no need to take project specific wind power density report for the said project locations.

> 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 recommend to issue the **wind zone** - II letter to M/s. NSL Wind Power Company (Sayamalal) Private Limited, Hyderabad for their 3 MW (2x1500KW) capacity wind power project as per above list.

- 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. Clean Wind Power (Satara) Pvt Ltd: 6.00 MW (3 x 2000 KW).
- Only one WTG i.e 2.0 MW (1 x 2000kW) project is commissioned during the financial year 2016-17.
- 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.	MED A WTG No.	WTG Cap. MW	WTG Latitu de (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	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			
		****	1201								0.00	0.66	2=1		0.46		• • •		****
1		HC 16	4381	2.0	17	33	22.2	74	43	20.4	838	866	371	Mohi, Khanapur, Sangli	9.46	-	-28	Not Comm.	Within (+/-) 60 m elev. differen ce
2	WPP -13- 2000 -456	HC 19	4382	2.0	17	17	1.6	74	42	49.4	852	866	775	Khanapur, Khanapur, Sangli	3.46		-14	23.12.16	Within (+/-) 60 m elev. differen ce
3	WPP -13- 2000 -473	HC 20	4383	2.0	17	16	40.7	74	42	57.6	852	866	775	Khanapur, Khanapur, Sangli	4.04	-	-14	Not Comm.	Within (+/-) 60 m elev. differen ce

Observation-

- 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 2016-17. WTGs having the details at Sr. No. 1 & 3 above are found erected but not yet 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 balanced 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 balanced two WTGs mentioned at Sr. No. 1 & 3 above.

- In view of above, M/s. Clean Wind Power (Satara) Pvt Ltd vide their letter no. CWP-Satara/MH/Wind/109 dtd. 1.9.17 informed that, they have commissioned 4 MW (2 x 2000 kW) wind power projects at Site Jadhavwadi, Tal. Khanapur, Dist. Sangli. Also, request to MEDA to kindly issue wind zone letter for two commissioned locations i.e. HC-19 and HC-20 at the earliest and consider the locations HC-16 separately for issuing wind zone letter.
- As per site visit on dtd. 12/10/2017 at Jadhavwadi, PO, Divisional office Kolhapur visited the site & submitted the WTG location wise observation as below. This report is endorsed by GM, MEDA, Kolhapur

Sr. No.	Final file no.	WTG Locatio n No.	MED A WTG No.	WTG Cap. MW	WTG Latitu de (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	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 -456	HC 19	4382	2.0	17	17	1.6	74	42	49.4	852	866	775	Khanapur, Khanapur, Sangli	3.46		-14	23.12.16	Within (+/-) 60 m elev. differen
2	WPP -13- 2000 -473	HC 20	4383	2.0	17	16	40.7	74	42	57.6	852	866	775	Khanapur, Khanapur, Sangli	4.04	-	-14	31.3.17	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.
- Nearest reference Wind Mast for the above mentioned wind power project is at Village Jadhavwadi, Tal.- Khanapur, Dist.- Sangli (Latitude- N 17⁰ 18' 02.2" Longitude- E 74⁰ 41' 10.7" Elev.- 860 m AMSL) having WPD- 218.72 W/m² @ 80 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.
- 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.
- For the 4 MW (2x2000KW) above mentioned wind power project, all WTG's 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 & as per NIWE report it is found that project site WPD at 80m are found <=250W/m².

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 recommend to issue the wind zone - I letter to M/s. Clean Wind Power (Satara) Pvt Ltd for their 4.0 MW (2 X 2000 KW) capacity wind power project as per above list.

- 5) 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. Dr. K H Sancheti, Pune 0.6 MW (1x600KW).
 - The project was 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 tude (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 = 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, Javali, 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 17⁰ 50' 53.08 N" Longitude 73⁰ 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- 17⁰ 54' 26.3 N'' Longitude- 73⁰ 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
- ➤ Minutes of hearing No one is present from M/s. T S Wind Power Developer / M/s. Dr. K H Sancheti. 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 discuss & evaluated the said proposal with respect to above points. Also, it is observed that, above project is located within 10 km radial distance of NIWE/MEDA mast at Kas, Satara and NIWE vetted mast at Saighar, Satara for M/s. T S Wind Power Developer. However, the zone is changing from zone-I to zone-II, if we consider the NIWE/MEDA mast at Kas for above project. In view of this, Committee recommended that, it is tobe mentioned in letter to be issued to investor (cc to NIWE) for submission of project specific wind power density report for the said project. After receiving the project specific wind power density report from NIWE for their 0.6 MW (1x600KW) capacity wind power project of location no. S-4, Gut no 02, at Village- Sahyadrinagar, Tal. Javali, Dist. Satara necessary action will be taken for this project.
- In view of above, NIWE has sent final report on WPD map at 50m agl of Kas (Saighar) site in Satara district, Maharashtra vide letter no.NIWE/WRA/042/2017 -18 dtd. 28.09.2017 to M/s TS Wind Power Developers, Pune. The project specific WPD estimation is carried out of location no. S-4 for M/s TS Wind Power Developers, Pune and is found to be 246.7 W/m² at P90 confidence level with all relevant corrections.
- Further, it is also mentioned in NIWE report that, NIWE/MEDA mast (25m high) 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

• Moreover, M/s. T S Wind Power Developer vide its letter 7.11.2017 informed that NIWE has denied to addressed the project specific Annual Wind Power Density report to MEDA.

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 letter to NIWE for submission of project specific Annual Wind Power Density report for the said project location addressing to MEDA as per wind zone guidelines.

- 6) 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 was 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.

	Sr. No.	Final file no.	WTG Location No.	MEDA WTG No.	WTG Cap. MW		WTG tude (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
Γ	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			
Γ																				
	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 17⁰ 50' 53.08 N" Longitude 73⁰ 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- 17⁰ 54' 26.3 N". Longitude- 73⁰ 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. 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
- ➤ **Minutes of hearing** No one is present from M/s. T S Wind Power Developer / M/s. Drug House. 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 discuss & evaluated the said proposal with respect to above points. Also, it is observed that, above project is located within 10 km radial distance of NIWE/MEDA mast at Kas, Satara and NIWE vetted mast at Saighar, Satara for M/s. T S Wind Power Developer. However, the zone is changing from zone-I to zone-II, if we consider the NIWE/MEDA mast at Kas for above project. In view of this, Committee recommended that, it is tobe mentioned in letter to be issued to investor (cc to NIWE) for submission of project specific wind power density report for the said project. After receiving the project specific wind power density report from NIWE for their 0.6 MW (1x600KW) capacity wind power project of location no. M-02, Gut no. 12B/10, at Village- Manti, Tal. Javali, Dist. Satara necessary action will be taken for this project.
- In view of above NIWE has sent final report on WPD map at 50m agl of Kas (Saighar) site in Satara district, Maharashtra vide letter no.NIWE/WRA/042/2017 -18 dtd. 28.09.2017 to M/s TS Wind Power Developers, Pune. The project specific WPD estimation is carried out of location no. M-02 for M/s TS Wind Power Developers, Pune and is found to be 246.7 W/m² at P90 confidence level with all relevant corrections.
- Further, it is also mentioned in NIWE report that, NIWE/MEDA mast (25m high) 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
- Moreover, M/s. T S Wind Power Developer vide its letter 7.11.2017 informed that NIWE denied to the project specific Annual Wind Power Density report addressed to MEDA.

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 letter to NIWE for submission of project specific Annual Wind Power Density report for the said project location addressing to MEDA as per wind zone guidelines.

- 7) 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).
 - The project was 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 tude (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 = 8-9	15	16
					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- 17⁰ 54' 26.3 N'' Longitude- 73⁰ 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.
- ➤ **Minutes of hearing** No one is present from M/s. T S Wind Power Developer / M/s. Drug House. 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 discuss & evaluated the said proposal with respect to above points. It is observed that nearest reference Wind Mast elevation for the above mentioned wind power project is at Saighar, Satara district is mentioned in NIWE (C-WET) report and undertaking submitted by M/s. Navalakha Developers, Pune is 1237m AMSL. However, as per site inspection report, elevation of mast mention is - 1229m AMSL. So, there is a difference of

elevation between mast (1237/1229 m AMSL) & WEG location (1170 m AMSL) are observe – 67 m and -59 m respectively. Also, it is observed that, above project is located within 10 km radial distance of NIWE/MEDA mast at Kas, Satara and NIWE vetted mast at Saighar, Satara for M/s. T S Wind Power Developer. However, the zone is changing from zone-I to zone-II, if we consider the NIWE/MEDA mast at Kas for above project. In view of this, Committee recommended that, it is tobe mentioned in letter to be issued to investor (cc to NIWE) for submission of project specific wind power density report for the said project. After receiving the project specific wind power density report from NIWE for their 0.6 MW (1x600KW) capacity wind power project of location no. - G-05, at Village- Ganje, Tal. Javali, Dist. Satara necessary action will be taken for this project.

- In view of above NIWE has sent final report on WPD map at 50m agl of Kas (Saighar) site in Satara district, Maharashtra vide letter no.NIWE/WRA/042/2017 -18 dtd. 28.09.2017 to M/s TS Wind Power Developers, Pune. The project specific WPD estimation is carried out of location no. G-05 for M/s TS Wind Power Developers, Pune and is found to be 246.7 W/m² at P90 confidence level with all relevant corrections.
- Further, it is also mentioned in NIWE report that, NIWE/MEDA mast (25m high) 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- 17⁰ 54' 26.3 N". Longitude- 73⁰ 49' 59.1 E" Elev.- 1302 m AMSL) having WPD- 175 W/m² @ 50 m AGL.
- Moreover, M/s. T S Wind Power Developer vide its letter 7.11.2017 informed that NIWE denied to the project specific Annual Wind Power Density report addressed to MEDA.

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 letter to NIWE for submission of project specific Annual Wind Power Density report for the said project location addressing to MEDA as per wind zone guidelines.

- 8) Developer: M/s. Sri Maruti Wind Park Developers
- Site:- Vaspeth, Tal. Jath & dist. Sangli (Vetted by NIWE Chennai for MEDA).
- Investor: M/s. Renew Wind Park Energy (Devgharh) Pvt. Ltd 9.00 MW (6x1500KW).
- The project was commissioned during the financial year 2013-14.

M/s. Renew Wind Park Energy (Devgharh) Pvt. Ltd vide their letter dtd. 8.9.2017 has proposed following Amendment for 9.00 MW (6x1500KW) Wind Power Project into Wind Zone class.

S.N.	Details as per Wind Zone letter no. WRA/WZ-301/M/s. Srimaruti/M/s. Rnew Wind/2016-17/5183 dtd.17-12-16	Proposed Amended
1	Loc. No. RVP 3 - 1906	Loc. No. RVP 3 – 190 / C
2	SPV Name :- M/s. Renew Wind <u>Park</u> Energy (Devgharh) Pvt. Ltd	SPV Name :- M/s. Renew Wind Energy (Devgharh) Pvt. Ltd

Committee's observations:-

• There is typographic mistake in Gut No. Committee verified the Gut No. in undertaking of company. The Developer/Investor has not brought into notice the mistake in Gut no. during the hearing dtd. 18.08.16 & 19.08.16 of the case.

Suggestion:- 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 **amendment** letter to M/s. Renew Wind Park Energy (Devgharh) Pvt. Ltd for their 9.00 MW (6x1500KW) capacity wind power project.

Committee's Recommendations:- As per the procedure for classification of wind power projects into wind zone class, committee discussed and evaluated the above proposal. In view of written submission by developer for amendment as above, committee recommend to issue the amendment letter to M/s. Renew Wind Energy (Devgharh) Pvt. Ltd., for their 9.00 MW (6x1500KW) capacity wind power project.