

MINUTES OF THE MEETING

DEVELOPMENT OF WIND/ SOLAR POWER PROJECTS IN LADAKH REGION

A meeting was held under Chairmanship of Sh. Bhanu Pratap Yadav, Joint Secretary, MNRE on 6th December, 2019 in the Conference Hall, DC Office, Near Polo Ground, Leh to explore the possibilities of setting up Wind Power projects in Ladakh region, including setting up of wind masts for validation of the wind resource and other implementation related issues. Besides officers from MNRE, NIWE, SECI, LREDA, Ladakh administration, the meeting was also attended by members of IWTMA, InWEA, OEMs and IPPs. The list of participants is attached at **Annexure-I**.

While welcoming the participants, Sh. Bhanu Pratap Yadav, Joint Secretary, MNRE mentioned that the Government of India had enhanced the RE target of 150 GW by 2022 to 450 GW by 2030 and hence, there is a need to work cohesively among various States, the wind power developers, OEMs, STUs and policy makers to achieve the target. Further, he added that the very purpose of the meeting was to discuss the roadmap, challenges in exploiting the RE resources available at Ladakh region especially the Wind Energy and to find appropriate solutions. Joint Secretary had also opined that the defence establishments at Kargil/ Ladakh regions who are completely relying on the diesel gensets for their energy demands may also explore the possibility of utilizing the Wind/ Solar power for their needs.

Thereafter, Dr. K. Balaraman, Director General, NIWE made a detailed presentation on the Wind and Solar resource assessment studies carried out by NIWE, Chennai at Ladakh and Kargil Region. During the discussion, DG, NIWE highlighted that the site Chushul at Ladakh region had shown very good wind power potential for developing commercial scale wind power projects subject to making additional logistics arrangements including evacuation. Further, DG, NIWE had shared the details of the proposed locations for installing the met. Masts for carrying out the wind measurements. During the presentation, it was also informed that Ladakh has a good wind resource due its valley terrain and temporal variation and at a 50m hub height, the estimated installable wind power potential considering sloping and land constraints is around 5311 MW @ 50 m (J&K). At 120m hub height, by removing slopes, high altitudes and other land constraints, the potential are more than 100,000 MW.

Subsequently, Mr. D.V. Giri, Secretary General, IWTMA made a brief presentation on the installation of wind power projects in Ladakh region, wherein he insisted for incentives and other facilities to accelerate wind turbine installations in Leh.

After detailed deliberations on various issues, the following decisions were taken:

- a) NIWE to share the presentation to all the stakeholders by publishing the same in their website.
- b) All the stakeholders to provide requisite inputs to NIWE, Chennai for finalizing the locations for installing met masts at Ladakh/ Kargil region. Further, a working group consisting of NIWE, project developers (IPPs), OEMs is to be formed to finalize the locations including to decide upon the type of WTGs to be deployed in Ladakh/ Kargil region.
- c) NIWE to consider to install at least two WMS at the location (Pang-Debring) identified by SECI for the development of Solar power project in Ladakh Region.
- d) After the identification of potential locations for the development of Wind/ Wind-Solar power projects, NIWE along with SECI will work together to plan the needed grid evacuation infrastructure development including logistics details in co-ordination with BRO (Border Roads Organization).
- e) LREDA/ KREDA with the help of Ladakh/ Kargil Administration to discuss with various defence establishments at Ladakh and Kargil region to understand their energy needs and explore the possibility of utilizing the Wind/ Solar power for their needs with an intention to reduce their diesel consumption and carbon footprint.

As a follow up meeting, it was decided to convene the second meeting at NIWE, Chennai during second week of January, 2020 with the stakeholders.

The meeting ended with a vote of thanks to the chair

Annexure 1

S.No	Name & Designation,	Organisation
1.	Mr. Bhanu Pratap Yadav, Joint Secretary	MNRE, New Delhi
2.	Dr. Balaraman, Director General	NIWE, Chennai
3.	Mr. Sachin Kumar Vaishya	Deputy Commissioner/CEO, Leh
4.	Mr. S.K. Mishra, Director (PS)	SECI
5.	Mr. Sunil Gupta, Scientist 'D'	MNRE, New Delhi
6.	Col Rohan Lewis	HQ 14 Corps
7.	Dr. Tsewang Thinglas (Project director)	Ladakh Renewable Energy Development Agency (LREDA,LEH)
8.	Mr. A. Hari Bhaskaran, Deputy Director (Technical)	NIWE, Chennai
9.	Flt Lt. Utsav,	AFS, Leh
10.	Wg Cdr. PN Chengappa	SATCO AFS Leh
11.	Mr. Prem Kumar	ET, SECI
12.	Mr. Prashant Upadhyay,	SECI
13.	Mr. Debajyoti	SECI
14.	Mr. Ali Naqi, (Staff Officer)	Kargil Renewable Energy Development Agency (KREDA)
15.	Mr.Asif Kakpori, Consultant LREDA	Ladakh Renewable Energy Development Agency (LREDA,LEH)
16.	Mr.Mawang kermeles	Information Department, Leh
17.	Mr. D.V.Giri, Secretary General	IWTMA
18.	Mr. Manish K. Singh. Secretary General	InWEA
19.	Mr. K.Kiran Kumar Reddy, Chairman	Axis Energy
20.	Mr. Amar variawa Director-Public Affairs.	Vestas India
21.	Mr. A. Gurunathan Head-Public Affairs	Siemens Gamesa
22.	Mr. B.V.Ganeswara Rao. Asstt. Manager	Axis Energy
23.	Mr. S. Madhusudhan Rao. Vice Pressdent- Projects	Axis Energy
24.	Mr. C.B.P.Roy. Sr. G. M Wind Resource	Suzlon Energy LTd
25.	Mr. Jagannath Panda.AC,	IWTMA