

MEMORANDUM OF UNDERSTANDING

BETWEEN

**MINISTRY OF NEW AND RENEWABLE
ENERGY (MNRE), NEW DELHI**

AND

**NATIONAL INSTITUTE OF WIND ENERGY
(NIWE), CHENNAI**

FOR THE YEAR 2024-25

NATIONAL INSTITUTE OF WIND ENERGY, CHENNAI

Memorandum of Understanding - 2024-25

PART- I: OBJECTIVES

NIWE is an autonomous R & D institution under the Ministry of New & Renewable Energy established to serve as the technical focal point for wind power development in India, for promoting and accelerating the pace of utilization of wind energy and support the growing wind power sector in the country. Other objectives of NIWE are:

- to carry out activities such as wind resource assessment, preparing wind power density maps, wind atlas, Indian standards & its certification on wind turbines, activities related to offshore wind energy, etc., in the area of wind/ renewable energy, as may be assigned by the Ministry from time to time;
- to develop and strengthen the facilities and capabilities, evolve strategies, promote, conduct, co-ordinate and support research and development programs to achieve and maintain reliable and cost-effective technology in wind power systems;
- to undertake human resource development programs for the personnel working in the wind energy sector;
- to promote commercial exploitation of know-how; and know-why results and offer various consultancy services to the customers;
- to promote the development and commercialization of other wind energy systems.

PART-II: EXERCISE OF ENHANCED AUTONOMY AND DELEGATION OF FINANCIAL POWERS

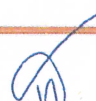
As per Rule 51 of the NIWE's Memorandum of Association (MOA), NIWE Recruitment Rules and Bye-Laws, the Director General has been delegated with full powers to incur expenditure on all NIWE activities up to the Budget Limit.

PART-III: MAIN ACTIVITIES

Whereas the Institute recognizes that the process of developments has to relate continuously to significant and notable changes that are taking place in the Wind related industry and, rapidly exploring universe of knowledge in the area. And for that purpose, the Institute has:

1. To survive on specialization, work increasingly in frontline areas that transcend disciplines. The following thrust areas form part of the effort.
 - Research and Development (R & D)
 - Wind Resource Assessment and Offshore Development (WRA&O)
 - Wind Turbine Testing (Both Large and Small)
 - Standards and Certification (S&C)
 - Skill Development Training (SDT)
 - Wind Energy & Hybrid System

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2. To have a perception and a value system appropriate to the pursuit of high engineering science to meet the critically evaluated needs of the industry
3. To programme into their activities emerging technological needs with futuristic needs
4. To maintain and foster interactive linkage with leading technological institutions and Institutes of research in India and abroad.

PART- IV: ROLES OF MNRE AND NIWE

Ministry of New and Renewable Energy [MNRE] on its part shall endeavor to provide adequate funding as per the approval of the Governing Council of NIWE for all the approved activities, besides providing direction and guidance on the thrust areas for research in accordance with the overall aim of the government.

In consideration of activities to be implemented, the Institute shall endeavor:

- To absorb the establishment related expenditure from its internal earnings that are over and above the sanctioned grant by the Ministry under this head;
- To increase the internal generation of revenue by at least 10 to 20% every year. The Institute shall project expenditure pattern for its Internal Revenue Generation and anticipated earnings during the year.
- To levy User charges including overhead/institutional charges/management fee in respect of Consultancy/Sponsored Projects, wherever the output or benefit of services are utilized by others are levied at appropriate rates as per amended GFR Rule No.47 and display the same in the website.
- To achieve self-sufficiency in the matter of meeting expenditure on account of Salary and Salary related expenditure for regular staff of NIWE.
- To seek approval of the Ministry for activities beyond DG's delegated powers including those relating to agreements with international parties.
- Ministry shall hold a quarterly review meeting with NIWE at MNRE to review Physical and Financial targets and NIWE will send achievements of the targets on monthly basis to the Ministry and will also be reviewed by GC, NIWE appropriately.
- The Institute shall follow the policy level decision(s) of GC/ MNRE with regard to programme implementation from time to time.

PART- V: SPECIFIC PARAMETERS AND TARGETS

The following are specific activities along with defined timelines which NIWE is expected to complete during 2024-25.

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NATIONAL INSTITUTE OF WIND ENERGY, Chennai

MoU TARGETS FOR THE YEAR 2024-25

Sl. No.	Targets	Deliverables	Weightage %	Timeline
I	New Initiatives			
1	Offshore Studies and Survey – 500MW Wind Farm at Sub zone 1 Gulf of Mannar, Tamil Nadu	Installation and Commissioning of Floating buoy under Lease basis and start of measurement campaign	5%	August / September 2024
		Geophysical and Geotechnical investigation	5%	February 2025
2.	Rapid EIA study for 14 Offshore sub zone off Tamil Nadu coast	Rapid EIA report	1%	March 2025
3	Development of Floating LiDar Offshore Wind Measurement System- A Demonstrative Project (IIT-Mumbai)	Development of correction algorithm and controlled lab tests	2%	March 2025
4	Field investigations on acoustic noise measurements of existing wind turbines of various technologies in different Terrain conditions (Flat, complex, semi complex) (NIWE-Internal)	Complete Noise Measurements in Terrains as per IEC 61400-11 Edn 3.0	2%	March 2025
5	Application of Turbulence Normalization for Power Performance and Validation of Method (NIWE-Internal)	Develop Calculation Tool for Power Curve Turbulence Normalisation as per IEC 61400-12-1 Edn 2.0	2%	March 2025
6	Technical support to BIS for preparation of Indian standards on wind turbines	Finalization of 2nos. of Indian standards	4%	31.03.2025
7	Preparation of pre-feasibility report for exploring possibilities for repowering by installing and commissioning of higher wind turbine capacity at WTRS, Kayathar	Preparation of detailed project report	2%	December 2024

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8	Preparation of Wind speed and Temperature Coherence Analysis Report	Preparation of Temperature Analysis Report	3%	July 2024
9	Installation and Commissioning of 120/150m met mast at Odisha for promoting Wind Energy in the state	Installation & commissioning of two numbers of 120/150m met mast at Odisha	3%	31.03.2025
10	Installation and Commissioning of 120/150m Met mast or LiDAR at Tamilnadu Coast in line of sight from floating Lidar buoy planned at Zone 1 to better understand correlation between the Offshore measurements vis-à-vis land measurements.	Obtaining NoC, AAI & MoD clearance for Installation & commissioning of 120/150 m Met mast or LiDAR at Tamilnadu Coast	3%	31.03.2025
11	Preparation of prefeasibility studies using Meso scale data for two potential sites for exploring possibilities of installing Technology Demonstration Wind & Solar Project using 200/250 kW Wind Turbine at Lakshadweep Island and submitting the report to SECI	Preparation of report for potential wind sites	2%	31.07.2024
12	Preparation of prefeasibility studies using Meso scale data / existing data at Mao, Manipur site for exploring possibilities of installing Technology Demonstration Wind & Solar Project using 200/250 kW Wind Turbine	Preparation of the updated report for potential wind sites	2%	31.12.2024
13	Measurement of wind resources at 5 locations through wind mast/LiDAR in NE states	Installation and commissioning of measurement set up in coordination with concerned state Govts.	3%	31.03.2025
14	WRA studies in New & Uncovered areas @ 150 m level.	Obtaining NoC, AAI & MoD clearance and Installation & commissioning of 150 m WMS in various parts of the country (5 locations)	5%	31.03.2025

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15	Preparation of a technology catalogues for wind sector covering the WOEG, Components and parts for India	Publication of the catalogues	3%	31.05.2025
16	Preparation of a domestic manufacturing and supply chain report along with road map for Atmanirbhar Bharat in wind sector	Publication of the report	3%	31.03.2025
17	Preparation of a global policy and regulatory landscape for offshore wind sector	Publication of the report	3%	31.03.2025
18	Finalization of DPR for the Dhanuskodi offshore wind Research and demonstration project	Final DPR	3%	31.03.2025
19	Preparation of DPR for the blade testing facility	Final DPR	3%	31.03.2025
II	Recurring Activities			
1.	Renewal of accreditation as per ISO/IEC 17025:2017 for testing services	To successfully undergo onsite reassessment audit by NABL	2%	30.09.2024
2.	Maintaining Accreditation as per ISO/IEC 17065:2012 for Certification Services	To successfully undergo Office Assessment / Witness Assessment	3%	31.03.2025
3.	Maintaining Accreditation as per ISO/IEC 17020:2012 for Inspection Services	To successfully undergo Office Assessment / Witness Inspection	2%	31.03.2025
4.	International Training Courses (ITEC) – Offline	Proposed to be conducted Two Courses on "Wind Turbine Technology & Applications"	3%	31.03.2025
5.	National Training Course	Proposed to be conducted Two courses on "Wind Energy Technology"	2%	31.03.2025
6.	Publications of Papers by Scientists at reputed journals	5 research papers in peer review journals / international conferences	3%	31.03.2025

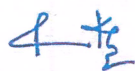
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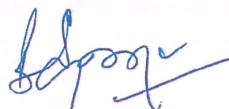
III	Carry Forward Projects			
1.	Preparation of prefeasibility studies using Meso scale data for one / two potential sites for exploring possibilities of installing Technology Demonstration Wind & Solar Project using 200/250 kW Wind Turbine at A&N islands and submitting the report to SECI	Preparation of report for potential wind sites	3%	31.03.2025
2.	Real-time SCADA controller for switching Turbines as per the directives of the Indian Air Force.	Technical support to wind turbine stakeholders for implementing Real-Time Controller in the Kutch region in Gujarat and Jaisalmer in Rajasthan	4%	31.03.2025
3.	WRA studies in New & Uncovered areas @ 150 m level.	Obtaining NoC, AAI & MoD clearance for Installation & commissioning of 150 m WMS in various parts of the country (5 locations) Installation and commissioning of at least 2 sites.	3%	31.03.2025
4.	Vayumitra Skill Development Programme (VSDP)	Implement the VSDP Project and achieve the target of training 3420 participants through Training of Participant (ToP) Programme (114 Nos. of Training), 494 Trainers through Training of Trainers (ToT) Programme (16 Nos. of Training).	3%	31.03.2025
5.	RDPAC Project: "Met-Ocean Measurements (Wave, Tide, Current, Water level etc.,) at the Gulf of Khambhat and Gulf of Mannar for fostering the growth of Offshore wind in the country	Report on one year wind measurement campaign	3%	March 2025

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IV	Finance, Accounts & Administration			
1.	Grant in Aid – Capital & Revenue - Sanctioned Rs.30.50 crores for the FY 2024-25	Utilization of Rs.30.50 Crores for different Scientific / Technical projects	5%	31.03.2025
2.	Internal Revenue Generation	Rs.12.50 Crores will be generated through activities such as Scientific / Consultancy services	5%	31.03.2025
	TOTAL		100%	



**Director General
National Institute of Wind Energy
(NIWE), Chennai**



**Secretary
Ministry of New & Renewable Energy
(MNRE), New Delhi**

Place:

8/7/2024.
Delhi.

Date :

08/07/2024