

MEMORANDUM OF UNDERSTANDING

BETWEEN

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

AND

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

FOR THE YEAR 2022-23

NATIONAL INSTITUTE OF WIND ENERGY,
CHENNAI

Memorandum of Understanding - 2022-23

1. PART- I OBJECTIVES

NIWE is an autonomous R & D institution under the Ministry 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/ solar resource assessment, preparing wind energy density maps, wind/ solar 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, know-why results and offer various consultancy services to the customers;
- to promote the development and commercialization of other wind energy systems.

2. PART-II EXERCISE OF ENHANCED AUTONOMY AND DELEGATION OF FINANCIAL POWERS

As per Rule 51 of NIWEs 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.

3. 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)
 - Information, Training and Customized Services (ITCS)
 - Wind Energy & Hybrid System

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.

4. 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 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 is 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 Project, 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.

5. PART- V: SPECIFIC PARAMETERS AND TARGETS

The following are specific activities along with defined timelines which NIWE is expected to complete during 2022-23.

TARGETS FOR THE YEAR 2022 - 23

Sl. No.	Targets	Deliverables	Weightage %	Timeline
I	New Initiatives			
1	Greening of Islands - Rameshwaram	EIA, Logistic study and Power Evacuation study. – first draft (Total duration 18 months)	5%	31.03.2023 & ongoing
2		Preparation of DPR for the project and Signing MoU/ PPA with TANGEDCO	5%	31.03.2023
3	Environment Impact Assessment (EIA) and Marine Spatial Planning (MSP) study for offshore wind farm development at Gulf of Mannar, off Tamil Nadu Coast.	Detailed report for identification of suitable location for offshore wind farm	5%	31.03.2023
4	Finalizing offshore blocks for offshore development tender under both model-1, model-2 and model-3		5%	31.07.2022
5	Guidelines for processing the applications of study/survey under the offshore development	Revision of existing Guidelines including SoP for processing application	3%	31.08.2022
6		Development of online portal for processing applications	7%	31.08.2022
7	Phase-1 clearance for offshore block of Tamil Nadu and phase-2 clearances as per the needs of bidders	Obtaining clearances from all the Ministries, departments and other stakeholders	5%	31.03.2023 & ongoing
8	Identification of prospective wind power potential location and optimal sizing of high performance wind	Report on the performance evaluation of higher capacity wind turbines	3%	15.08.2022

	turbines for achieving low LCoE	in the State of Karnataka		
9	Technical feasibility report preparation for the development of wind power project for one site in Non-Windy State	Report for the state of Odisha	3%	31.12.2022
10	Organize one National Level ILC under GOI-MNRE's National Lab Policy	To conduct one Inter-Lab Comparison by NIWE for laboratories & other service providers for achieving harmonization in interpretation of Standards.	2%	28.02.2023
11	Participate in one International level Proficiency Testing	Participation in Proficiency Test operated by IECRE-MEASNET group	2%	31.03.2023
12	Paper & Publications by the Scientists at reputed journals	Publication of 5 research papers in peer review journals / international conferences	7%	31.03.2023
13	Preparation of documentation as per ISO/IEC 17020:2012 in connection with obtaining accreditation for Inspection services of NIWE.	Submission of application along with requisite documentation as per ISO/IEC 17020: 2012 to NABCB (QCI), Govt. of India.	3%	31.12.2022
14		One project will be taken up for WTG Inspection	3%	31.10.2022
15	WTG Certification Project	One project will be taken up	2%	31.12.2022
16	Two - International Training Courses	Two International Training Course to be conducted on "Wind Turbine Technology and Applications" and on "Solar Resource Assessment and Development of Solar Power Plant"	4%	31.03.2023

17	Technical support to BIS for preparation of Indian standards on wind turbines.	Finalization of 2 nos. of Indian standards	2%	31.03.2023
18	Establishment of the automatic data collection system to collect RE related data and RE data analytics application	Development of data imputation model	1%	31.08.2022
		Development of script/model for automatic data downloading	1%	31.08.2022
		Development of cloud prediction model	1%	31.03.2023
19	Forecasting services	To develop a concept paper for providing State/ Central level forecasting services along with stakeholders' consultation	3%	30.09.2022
20	Centralized Working Environment for entire NIWE and Establishment of Indigenous File Management and office productivity tools for use of entire NIWE employee using open source tools	Upgradation of a Centralized working environment	1%	31.05.2022
		Upgradation of IT service portal version 1.0	1%	30.06.2022
		Development of file management tools	1%	31.07.2022
		Development of conference application	1%	31.08.2022
		Development of expenditure portal	1%	30.09.2022
21	RLMM Portal	Launch of upgraded RLMM portal	3%	30.09.2022
22	Development of an indigenous application for successful implementation of Vaayumitra program	Development & improvement of indigenous application for Vaayumitra programme	2%	31.03.2023 & on going
23	Vayumitra Skill Development Programme (VSDP)	OtA - 2 Nos. of Training with 34 Assessors	5%	31.03.2023 & on going
		ToT - 23 Nos. of Training with 690 Participants for VSDP training		

		TOP - 73 Nos. of Training with 2190 Participants VSDP training		
II	On-Going Projects			
1	RDPAC Project: Integrated Wind and Solar Resource Assessment through mapping measurements	Completion of Phase I locations 23 Nos and preparation of 1 year data analysis report	1%	31.12.2022
		Launch of 150m wind power potential map	2%	31.03.2023
2	RDPAC Project: "Met-Ocean Measurements (Wave, Tide, Current, Water level etc.,) at Gulf of Khambhat and Gulf of Mannar for fostering the growth of Offshore wind in the country	Installation and Commissioning of Integrated Floating Buoy for mounting LiDAR together with Oceanographic sensors (Wind, Wave, Current etc.,) at one location in Gulf of Mannar, Off Tamil Nadu coast.	3%	31.03.2023
3	WRA studies in A&N Islands	Installation & commissioning of 100 m WMS in A&N Islands for which NoCs are obtained	3%	31.03.2023
4	NABL accreditation of NIWE Testing services	Accreditation under NABL	2%	31.03.2023
5	DST DTU (Denmark Technical University) Project – Hybridize (Three year research project starting in 2019-22)	To complete the testing of the installed WTGs and design of components	2%	31.03.2023
		Total Weightage	100%	


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

Place: New Delhi


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

Date : 30/8/2022