

MEMORANDUM OF UNDERSTANDING

BETWEEN

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

AND

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

FOR THE YEAR 2023-24

NATIONAL INSTITUTE OF WIND ENERGY CHENNAI

Memorandum of Understanding - 2023-24

1. 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.

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

As per Rule 51 of the 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)
 - Skill Development Training (SDT)
 - 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 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.

5. PART- V: SPECIFIC PARAMETERS AND TARGETS

The following are specific activities along with defined timelines which NIWE is expected to complete during 2023-24.

MoU TARGETS FOR THE YEAR 2023 - 24

Sl. No.	Targets	Deliverables	Weightage %	Timeline
I	New Initiatives			
1.	Preparation of Repowering map for wind-rich states	Resource map indicating potential repowering sites for benefit of wind turbine stakeholders	4%	31.12.2023
2.	Identification of newer green field potential wind sites for enhancing the wind turbine installations	Preparation of maps showing indicative wind potential sites for wind-rich states for the benefit of wind turbine stakeholders	4%	30.11.2023
3.	Tender for Offshore Sea bed leasing under model 3 (4GW) – Gulf of Mannar off Tamilnadu coast	Floating of bids	4%	15.07.2023
		Technical Evaluation of bids	4%	15.10.2023
		Finalization and award of work to the successful bidder	2%	31.12.2023
4.	Establishment of Blade Testing Facility for large grid connected Wind Turbines	Submission of Proposal	2%	31.07.2023
		Techno commercial feasibility and logistic study for identification of possible sites	2%	31.12.2023
		Preparation of Detailed Project Report	4%	31.03.2024
5.	WRA studies in New & Uncovered areas @ 150 m level	Installation & commissioning of 150 m WMS in various parts of the country (5 locations)	3%	31.03.2024
	WRA studies in A&N Islands	Installation of Offshore LIDAR at one location in Andaman	3%	31.03.2024
6.	International Recognition as IECRE Renewable Energy Test Laboratory	Undergo Audit by IECRE for Testing Services	3%	31.03.2024
7.	Identification of prospective wind power potential location and optimal sizing of high performance wind turbines for achieving low LCoE	Report on the performance evaluation of higher capacity wind turbines in 9 wind rich states across the country	3%	31.03.2024
8.	Simulation studies for offshore wind zones identified under model 2 & 3 at Gulf of Mannar, off Tamilnadu coast	Offshore wake study & AEP report.	2%	31.12.2023
9.	Accreditation for Inspection services as per the requirements of ISO/ IEC 17020:2012 from NABC	Obtaining Accreditation for inspection services	2%	31.01.2024

Sl. No.	Targets	Deliverables	Weightage %	Timeline
10.	Technical support to BIS for preparation of Indian standards on wind turbines	Finalization of Indian Standard for life extension of wind turbine after completion of design life	3%	31.03.2024
II	Recurring Activities			
1.	Maintaining Accreditation as per ISO/IEC 17025:2017 for testing services	To successfully undergo Desktop audit by NABL	2%	30.09.2023
2.	Maintaining Accreditation as per ISO/IEC 17065:2012 for certification services	To successfully undergo Desktop audit by NABCB	2%	31.03.2024
3.	Maintaining Accreditation for ISO 9001:2015	To successfully undergo Desktop audit by DNV	1%	31.03.2024
4.	International Training Courses (ITEC) - Offline	Proposed to be conducted Three Courses on "Wind Turbine Technology & Applications"	2%	31.03.2024
5.	International Training Courses (e-ITEC) - Online	Proposed to be conducted Two Courses on "Wind Energy Technology"	2%	31.03.2024
6.	National Training Course	Proposed to be conducted Two courses on "Wind Energy Technology"	1%	31.03.2024
7.	Publications of Papers by Scientists at reputed journals	5 research papers in peer review journals / international conferences	3%	31.03.2024
III	Carry Forward Projects			
1.	WRA studies in A&N Islands	Installation & commissioning of 100 m WMS in A&N Islands for which NoCs are obtained	3%	31.03.2024
2.	Environment Impact Assessment (EIA) study for the offshore National Test Centre at Dhanushkodi / Greening of Rameshwaram	Detailed report for identification of suitable location for offshore wind farm	5%	31.03.2024
3.	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	Indigenous development of floating buoy and integration with LIDAR along with IIT, Madras, NIOT and NIO Goa at one location in Gulf of Mannar off Tamilnadu Coast.	2%	31.03.2024

Sl. No.	Targets	Deliverables	Weightage %	Timeline
4.	RDPAC Project: Integrated Wind and Solar Resource Assessment	Installation of mats under Phase II	2%	31.03.2024
		Launch of Wind Solar Hybrid portal in line with MNRE guidelines	3%	30.09.2023
5.	Real Time SCADA controller for switching of Turbines as per the directives of Indian Air Force	Technical support to wind turbine stakeholders for implementing Real Time Controller	2%	31.03.2024
6.	Vayumitra Skill Development Programme (VSDP)	Implement the VSDP Project and achieve the target of training 5010 participants through Training of Participant (TOP) Programme (167 Nos. of Training), 690 Trainers through Training of Trainers (TOT) Programme (23 Nos. of Training) and Orientation to Assessors (OtA) Programme for 34 Assessors (2 Nos. of Training)	5%	31.03.2024
IV	Finance, Accounts & Administration			
1.	Grant in Aid - Capital – Sanctioned Rs.12.50 crores for the FY 2023-24	Utilization of Rs.12.50 Crores for different Scientific / Technical projects	5%	31.03.2024
2.	Grant in Aid – Revenue Sanctioned Rs.12.00 crores for the FY 2023-24	Utilization of Rs.12.00 Crores for project related expenses and other administrative expenses	5%	31.03.2024
3.	Internal Revenue Generation	Rs.12.50 Crores will be generated through activities such as Scientific / Consultancy services	10%	31.03.2024
	Total Weightage		100%	



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



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

Place: New Delhi

Date : 5th June 2023