

**MINUTES OF THE FORTY THIRD MEETING OF GOVERNING COUNCIL OF
NATIONAL INSTITUTE OF WIND ENERGY HELD ON 15th MARCH 2019
AT THE CONFERENCE ROOM OF MNRE, NEW DELHI**

The following were present:

1.	Shri Anand Kumar, IAS, Secretary, MNRE, New Delhi.	President of the Society & Chairman
2.	Shri Praveen Kumar, IAS Chairman & Managing Director IREDA, New Delhi.	Member
3.	Shri Bhanu Pratap Yadav, I.A.A.S., Joint Secretary (Wind Energy) MNRE, New Delhi	Member
4.	Shri Pankaj Joshi, I.A.S., Principal Secretary Energy & Petrochemicals Dept. Government of Gujarat	Member
5.	Shri Sunil Jain Chairman, Wind Energy Independent Power Producers Association (WIPPA)	Member
6.	Dr. K. Balaraman, Director General, NIWE, Chennai.	Member Secretary

ALSO PRESENT		
7.	Shri. G. Upadhyay Director (Wind), MNRE, New Delhi	
8.	Shri. Salil Kumar Dy. Secretary, MNRE, New Delhi	
9.	Dr. Rajesh Katyal Deputy Director General, WSOM, NIWE, Chennai	
10.	Shri. D. Lakshmanan Deputy Director General (F&A), NIWE, Chennai	
11.	Shri. S.A. Mathew Director, Certification & IT, NIWE, Chennai	
12.	Shri. A. Senthilkumar Director, S&R, NIWE, Chennai	
13.	Shri.J.C. David Solomon Director, T&R, NIWE, Chennai	
14.	Dr. Bimal Kumar Bhattacharya, Head AED (Senior Scientist), Space Application Centre ISRO	

The Chairman welcomed the members of Governing Council of NIWE and briefed about the new initiatives being taken-up by the Ministry in the wind energy sector and the areas in which NIWE's active role is required.

The Council thereafter took up the Agenda for discussion.

Agenda item No. 43:01: To grant leave of absence to the Members who were not present in the Meeting.

Member Secretary briefed the Council on the leave of absence of Shri Mohd Nasimuddin, IAS Principal Secretary Energy, Government of Tamilnadu; Shri S.K. Soonee, Advisor & Former CEO, Power System Operation Corporation Limited, Chairman, R&D Council, NIWE; Shri Tulsi R Tanti, Chairman, Indian Wind Turbine Manufacturers Association and Prof. Nagesh R. Iyer, Expert, (former Director CSIR-SERC) and their request for not attending the Meeting and requested for leave of absence. GC granted them leave of absence.

Agenda item No.43:02: To confirm the Minutes of the 42nd Meeting of Governing Council of NIWE held on 04-09-2018

The approved minutes of the 42nd Meeting of the Governing Council of NIWE held on 4.9.2018 held at MNRE, New Delhi were circulated to all the members. No comments were received from the members on the approved minutes of the meeting.

The Council confirmed the minutes of the 42nd meeting.

Agenda item No.43.03: To review and approve the action taken on the decisions of previous Council Meetings.

Member Secretary explained in detail the action taken by NIWE on the decisions of previous Council Meetings. Item wise observations made by GC is given below:

- a. **Action taken on the Agenda Item No. 39.4 (a),40.03 and 42.03(a):** Works carried out for the project "Wind Resource Assessment in uncovered / new areas. Work carried out for the project "Wind Resource Assessment in uncovered / new areas 2013-14/2014-15 at 100 m level in Chhattisgarh".

Member Secretary informed that for the projects sanctioned during 2013-14/2014-15 all the 4 nos. of 100 m WMS are successfully installed, commissioned and all the

requisite data are collected. Subsequently, the sites were also closed down and wind data reports were sent to MNRE/SNA. In addition to this, 10 wind masts at 100 m was also installed in the State of Chhattisgarh which was sanctioned during 2016-17 and data measurements are underway. GC noted the progress.

b. Action taken on the Agenda Item No.39.04 (i), 40.03 & 42.03(b): Wind Resource Assessment Studies on existing Telecom Towers in North Eastern.

Member Secretary informed that the wind resource studies have been taken up by NIWE both using Airtel and BSNL telecom towers.

Airtel Telecom Towers:

It was briefed that a total 67 locations confirmed by M/s. Airtel to be utilized for WRA studies for which field visits to all the 67 locations completed. Out of 67, only 62 locations were found feasible to install the wind sensors. Installation and commissioning of wind sensors in 28 telecom towers has been completed and measurements underway. Another 9 are likely to be completed by the end of March 2019. Remaining telecom towers shall be planned in the next Financial Year 2019-20.

BSNL Telecom towers:

It was informed that NIWE has signed an MoU with BSNL at BSNL office, New Delhi. The field inspection to all the 61 BSNL telecom tower sites spread in 8 districts of Assam has been completed. Out of 61 sites 32 has been finalized, wherein the installation of wind sensors shall be planned in next Financial Year 2019-20.

GC noted the progress.

c. Action taken on the Agenda Item No.40.04 & 42.03 (c): Geotechnical and Geophysical studies off the Gujarat and Tamil Nadu Coast.

It was briefed to the Members that the field investigations for geophysical survey (302 sq.km area) has been completed for the proposed offshore wind farm project at Gulf of Khambhat off Gujarat coast. The report preparation is underway by NIOT and is likely to be completed by end of April 2019. Further, it is planned to carry out geotechnical

studies for about 3 to 5 borehole locations in the said area for which the tender process is in progress.

With regard to geophysical and geotechnical studies at Tamil Nadu coasts, it was informed that the budget sanctioned for the said projects of Rs. 11.5 crores will be fully utilized for studies and surveys in Gujarat coasts, accordingly, an additional budget of Rs. 12.5 crores will be required to carry out the geophysical and geotechnical studies and survey at Gulf of Mannar, Ramanathapuram District, Tamil Nadu.

GC noted the progress and after review approved an additional budget of Rs. 12.5 crores during 2019-20 as sought by NIWE.

- d. **Action taken on the Agenda Item No. 40.05, 42.03 (d):** Installation of Monopile substructure and platform for mounting LiDAR at Gulf of Mannar, Tuticorin, Tamil Nadu for Offshore Wind Resource Assessment.

It was informed that location of installation and commissioning of monopile platform for mounting the LiDAR at Gulf of Mannar, Tamil Nadu had to be changed from Zone A to Zone C due to local fishermen issues. All the Central requisite clearances has been obtained for the changed location at Dhanushkodi (Zone C). The project is underway.

GC noted the progress.

- e. **Action taken on the Agenda Item No. 40.06 & 42.03 (e):** Geotagging / On-line registry of wind turbines.

It was briefed that the web portal for geotagging / online registry of wind turbines has been developed based on the data received from various stakeholders / SNAs/ Manufactures and the same will be launched after approval from MNRE.

GC noted the same.

- f. **Action taken on the Agenda Item No. 40.15 & 42.03(i):** Any other item with the permission of the Chair Agenda item No. 40.15(b): Procurement of 2 Nos. of Remote Sensing Instruments (LiDAR/SODAR)

It was informed to the forum that the procurement of two SODAR has been completed. Also, the validation activities has been completed with old SODAR available with NIWE and the report has been prepared. The validation report will be sent to MNRE by 31st March 2019.

GC noted the same.

- g. **Action taken on the Agenda Item No. 41.05 & 42.03 (k):** To consider and approve the progress Met-ocean measurements (Wave, Tide, Current, Water level etc.) at Gulf of Khambhat and Gulf of Mannar through RDSPAC for fostering the growth of offshore wind in the country.

It was briefed that the project was sanctioned under RDSPAC of MNRE and recently the Project Monitoring Committee constituted by MNRE has reviewed the progress of the project. The project implementation is underway as per the time-lines mentioned in the initial proposal.

GC noted the progress.

- h. **Action taken on the Agenda Item No. 41.06 & 42.03(I):** To Consider and approve proposal on Integrated Wind Solar Resource Assessment.

It was briefed that the project was sanctioned under RDSPAC of MNRE and very recently the Project Monitoring Committee constituted by MNRE has reviewed the progress of the project. The project implementation is underway as per the time-lines mentioned in the initial proposal. Further it was informed that 120 m wind power potential map has been prepared and report submitted to MNRE for finalization. It was opined by the Members that NIWE shall prepare the wind potential map of 150 m level for which it was briefed that the work is already underway and the meso-scale map can be released within 6 months. Thereafter, the validation of the meso-map shall be undertaken based on the real-time ground measurements.

GC noted the progress and advised that appropriate number of 100/120/150 m masts to validate 150 m map be installed.

- i. **Action taken on the Agenda Item No. 40.07 :** Procuring LVRT testing facility and initiating testing of LVRT.

Member Secretary informed the status to the council and said that a separate agenda is placed in the present GC.

GC noted the same.

- j. **Action taken on the Agenda Item No. 40.08 II a:** Establishment of Centre for Excellence in Wind Power Forecasting at NIWE, Chennai.

Member Secretary informed the status to the council and briefed that Tamilnadu wind forecasting project was awarded GOLD in National e-Governance award. Members of GC appreciated the efforts of NIWE on the forecasting.

Wind forecasting for Gujarat and Karnataka was started in April 2018 and October 2018 respectively on a pilot basis. It is requested to continue the pilot forecasting for another year to improve the forecast modelling.

GC noted and approved the same with advise to improve accuracy of forecasting to 90% in these states.

- k. **Action taken on the Agenda Item No. 40.08 2.II(b):** Development of indigenous wind power forecasting model.

Member Secretary informed the status to the council. GC noted the same.

Further, based on the suggestion of GC member from WIPPA it was decided that a group of subject matter experts from NIWE, MNRE and officials from the seven windy states of India may visit California, USA to understand the California model of Renewable Energy and Load Forecasting and Integration and make a detailed report to the Ministry. This will help build a strong forecasting model for the country.

GC after detailed discussion approved the same.

- l. **Action taken on the Agenda Item No. 40.13:** Establishment of Renewable Energy Demo Lab at Wind Turbine Test Station at Kayathar.

Member Secretary informed the status to the council.

GC noted the same.

- m. **Action taken on the Agenda Item No. 41.07:** Bench marking of costs for assessment of Capital Costs and O&M Costs for Wind Energy Technologies for estimating Tariff as per the requirements of CERC / SERC.

Member Secretary requested for short closure of the project as valuable data is not readily available.

Member Secretary informed the status to the council.

GC noted the same and approved the short closure of the project.

- n. **Action taken on the Agenda Item No. 41.08:** To consider and approve the progress on preparation of Indian Wind Turbine Certification Scheme.

Member Secretary informed the status to the council.

GC noted the same.

- o. **Action taken on the Agenda Item No. 41.11(i):** Establishment of Small Wind Turbine Hub Facility for Design and Component Testing at the Renewable Demonstration Lab in Wind Turbine Research Station(WTRS), Kayathar with a budgetary cost of Rs.7.52 crores (excluding GST).

Member Secretary informed the status to the council.

GC noted the same.

- p. **Action taken on the Agenda Item No. 41.11(ii):** Small Wind Turbine International Conference with a budgetary cost of Rs.65.00 Lakhs (excluding GST).

Member Secretary informed the status to the council.

GC noted the same.

- q. **Action taken on the Agenda Item No. 41.11(iii):** Testing facility for active power control, reactive control, frequency response and other grid requirements in wind turbine .

Member Secretary informed the status to the council.

GC noted the same.

- r. **Action taken on the Agenda Item No. 42.06:** To consider and approve Mobile App for Solar and Wind Applications.

Member Secretary informed the status to the council.

GC noted the same. Further, NIWE was advised to take feedback from stakeholders and strengthen the Mobile App to make it user friendly for all the stakeholders and lay public. It was suggested that this App could be the nominee for National e-Governance Award for the ensuing year.

- s. **Action taken on the Agenda Item No. 42.07:** To consider and approve charging processing fee for wind and solar data.

The proposal for the charging the processing fee for wind and solar time series data was discussed and approved by the Council. The same will be applicable from data of approval of the 43rd GC Minutes.

- t. **Action taken on the Agenda Item No. 42.08:** To consider and approve to host IEC TC 88 and IECRE meetings during the year 2020 Chennai.

Member Secretary informed the status to the council and briefed that BIS has informed that it would take care of necessary approval from MoCA, MEA & MHA, issuing intimation etc., and asked NIWE to host both TC 88 and IECRE meeting at suitable venue in Chennai along with arrangement for lunch & refreshments, local conveyance, kits, badges, etc.

GC noted and approved the same. However, GC advised NIWE to seek sponsorships for meeting the expenditure.

- u. **Action taken on the Agenda Item No. 42.10:** To consider and approve preparation of Detailed Project Report for MANIREDA (North – East).

It was briefed to the forum that NIWE has submitted the DRAFT Detailed Project Report for installation of 5 MW wind solar hybrid project at Phangrei site, Ukhrol District, Manipur to MANIREDA and MNRE for their comments and for finalization.

GC noted the same.

- v. **Action taken on the Agenda Item No. 42.11:** To consider and approve Minutes of the 26th Meeting of the Finance Committee of NIWE held on 01.05.2018.

Member Secretary informed the status to the council.

GC noted the same.

- w. **Action taken on the Agenda Item No. 42.12:** To consider and approve the Annual Report along with Audited Accounts of NIWE for the year 2017-18.

Member Secretary informed the status to the council.

GC noted the same.

- x. **Action taken on the Agenda Item No. 42.13:** National Blade Test Facility.

Member Secretary informed the status to the council.

GC noted the same.

- y. **Action taken on the Agenda Item No. 42.13(iii):** Creation of a Special Training program for two to three weeks for Turbine Maintenance called Vayu Mitra in line with Surya Mitra.

Member Secretary informed the status to the council.

GC noted the same.

The need for Solar Testing Laboratory in NIWE was discussed in length and GC after detailed deliberation advised NIWE to send a proposal to Ministry for Establishment of Solar Testing Lab with accredited facility at NIWE Kayathar campus in self-sustainable manner for consideration and approval of Ministry.

Shri.Upadhyay, Director (WE) emphasized the need for having NIWE Centre at Gujarat for Offshore, Hybrid, Forecasting, etc. in view of the expanding activities of NIWE. GC after detailed discussion approved the proposal in principle and advised NIWE to send a detailed proposal in this regard for consideration and approval of Ministry. Shri. Pankaj Joshi, I.A.S., Principal Secretary, Energy & Petrochemicals Dept., Government of Gujarat was requested to allocate required land for this purpose.

GC also advised NIWE to ensure that contracts on account of Housekeeping, garden, etc. should be service contract basis without mentioning required numbers of manpower and directed NIWE to implement the same in its new contracts. GC also directed a manpower audit of NIWE be conducted by MNRE.

Agenda item No. 43.04: To consider and approve signing of MOU for the year 2019-20 between NIWE and MNRE

This Agenda item stands withdrawn from the GC and will be placed for the consideration and suggestions of MNRE. Subsequently, with MNRE approval shall be finalized.

Agenda item No. 43:05: To consider and approve the recommendations of 28th Meeting of the Finance Committee of NIWE

The Member Secretary briefed the GC about the recommendations of the 28th FC meeting held on **11th March 2019** and sought approval on the recommendations.

Member Secretary informed that FC, NIWE approved the budget request of Rs.93.57 crores [Rs.55.26 Capital and Rs.38.31 Revenue] budget for the year 2019-20. JS(WE), MNRE informed that NIWE has been approved budget of Rs.17 Crores (Rs.10.5 crores Capital and Rs.6.5 crores Revenue) for the year 2019-20 and mentioned that the budget sought by NIWE needs to be looked into in detail for finding ways of funding. GC after discussion approved the budget of Rs.17 crores and advised NIWE to send a detailed budget break up for the remaining part for detailed examination of JS (WE) and AS&FA, MNRE.

The GC after discussions noted the recommendations of the 28th FC meeting held on **11th March 2019** which inter-alia included the following & deliberated for decision item wise:

1. To approve Rapid EIA for the 1 GW Off shore wind block off Gujarat Coast at a cost of Rs.2.71 crores to be got done through National Institute of Oceanography, Goa [NIO- a CSIR Lab] on nomination basis.
2. To accord in principle approval for the National Blade Test Centre for testing large wind turbine blades
3. To approve establishment of wind and solar data resource and analytics centre at the total cost of Rs.3.90 Crores
4. To approve medical facilities for all the staff including retired/retiring officials.

Agenda item No. 43:06: To consider and approve the Minutes of 27th R&D Council meeting of NIWE

Member Secretary, GC NIWE briefed GC on the deliberations for the 27th R&D Council Meeting of NIWE held on 08.03.2019 and sought approval for its recommendations as outlined in the minutes.

The GC after discussions approved the minutes of the 27th R&D Council meeting held on **8th March 2019**. Further, GC directed that the Grid Emulator test facility may be developed as a research facility in collaboration with Indian premier academic institutions and BHEL.

Agenda item No. 43:07: To consider and approve the Rapid EIA for the 1 GW offshore wind block off Gujarat Coast.

Member Secretary explained the Proposal and need for having the Rapid EIA for the 1 GW Off shore wind block off Gujarat Coast at a cost of Rs.2.71 crores to be got done through National Institute of Oceanography, Goa [NIO- a CSIR Lab] which is a renowned lab in the area as outlined in the Agenda item and informed FC after detailed discussion approved the proposal of NIWE.

The GC after discussion approved the proposal Rapid EIA for the 1 GW Off shore wind block off Gujarat Coast at a cost of Rs.2.71 crores to be carried out through National Institute of Oceanography, Goa [NIO- a CSIR Lab] on nomination basis.

GC advised NIWE that the last payment terms of 20% shall be split into 10% after submission of report and balance 10% after acceptance of report and also to explore the possibility for negotiation of cost quoted by NIO.

Agenda item No. 43:08: To consider and approve Proposal for Establishment of Blade Test Centre (Large Wind Turbine)

Member Secretary explained the need for having National Blade test centre for testing large wind turbine blades in the country and informed FC accorded in principle approval to the proposal.

The GC advised that a detailed industry survey for the requirements of such a facility and the financial model to make the facility self-sustainable be worked out and reviewed by the Research Council before the proposal is formulated.

Agenda item No. 43:09: To consider and approve Establishment of Wind and Solar Data Resource Centre and Analytics Laboratory in NIWE, Chennai

Member Secretary explained the proposal for establishment of wind and solar data resource and analytics centre at the total cost of Rs.3.90 Crores as outlined in the agenda and sought approval of GC and informed FC has approved the same.

The GC after discussion approved the proposal of NIWE at the total cost of Rs.3.90 Crores.

Agenda item No. 43:10: To consider and approve medical facilities for all staff including retired and retiring officials.

It was decided that NIWE shall take Medical Insurance facility for all employees including retired and retiring employees.

Agenda item No. 43:11: To consider and approve Proposal to allow NIWE to provide the Certification related services in co-operation with the Internationally Accredited Certification bodies as per the needs of the Indian Wind Industry

Member Secretary explained about the Proposal upgrading skill sets of NIWE to provide the Certification related services in co-operation with the Internationally Accredited Certification bodies as per the needs of the Indian Wind Industry. The Cooperation Agreement is proposed on the same lines as the present Cooperation

Agreement NIWE has with M/s TUV Rheinland, GmbH and shall be non-exclusive. The proposed validity period shall be for five years. NIWE shall float an "Expression of Interest"- EOI for identifying the accredited certification bodies so that Type & Project certification services can be offered to the Indian wind industry from the year 2020 onwards.

The GC after discussion approved the proposal of NIWE to extend the cooperation with the other International Certification bodies and to offer certification services by NIWE jointly.

Agenda item No. 43:12: To consider and approve Concept note for establishing Skill Development Centre at WTTS, Kayathar

Member Secretary explained the need to establish an exclusive Skill Development Centre to create mass trained work force in job oriented and practical training courses with existing Wind Turbine Research Station at Kayathar and also mentioned that the proposed Centre would also be useful in conducting various training courses particularly for ITI and Diploma holder for operation and maintenance area to make available the local trained man power. The land of WTTS/WTRS may be used for the above proposed Centre with the benefit of existing Wind Turbines for the complete Practical training.

GC after detailed discussion approved the following directives:

- a. A HR training calendar for the period 2019-20 may be prepared and sent to MNRE by 31st March 2019.
- b. VAYU MITRA : The O&M training may be devised in line with Surya Mitra program. The theory sessions are taken in NIWE and the practical sessions are handled at OEMs facilities through an internship agreement.
- c. A training programme may be designed in modular sections not extending more than one month, in such a way that completion of three modules would make them eligible for a Certificate and six modules eligible for a Diploma.
- d. The details of probable number of trainees for the period 2019-20 through Vayu Mitra, Engineering Graduates, Diploma Engineers and foreign trainees may be indicated.

Agenda item No. 43:13: To consider and approve the Justification for procurement of LVRT Test Facility

The Member Secretary explained the need to provide the Industry with a user friendly service at lesser cost and informed NIWE during the past one year has made tremendous efforts to build an LVRT facility as a National Test Facility. JS(WE) briefed that

during a meeting with CEA, CERC and POSOCO on the issue gaps in implementation of CEA order regarding Grid/LVRT/HVRT were identified and need was felt to come out with operational guidelines/implementations protocol, draft of which will be prepared in early April.

The GC after detailed discussion approved the closure of present procurement of LVRT tender and directed that the new specification for the National Test Facility in line with the CEA regulation of 6th February, 2019 including both LVRT and HVRT may be procured through fresh commercial tendering process. On finalization of the tender the same may be sent to GC for consideration and approval.

Agenda item No. 43:14: To consider and approve the Proposal on “Wind Turbine Testing Program: Building Quality Assurance & Capacity

The Member Secretary explained the proposal of NIWE to participate in intra/inter-laboratory comparison programs / proficiency testing with reputed/accredited institute like UL, DEWI, DTU & Fraunhofer labs so as to establish the Quality Assurance and capacity.

The GC after detailed discussion approved the proposal.

Agenda item No. 43:15: Any other item with the permission of the Chair

A. To consider and approve introduction of FCS for the scientific staff of NIWE – reg.

Member Secretary explained about the existing promotion scheme of scientific staff of NIWE and requested for introduction of Flexible Complimentary Scheme [FCS] for Scientific staff of NIWE as approved by the DoPT vide O.M.No.AB-14017/37/2008-Estt(RR) dated 10th September 2010.

GC after discussion did not approve the same as in absence of strong monitoring mechanism, all employees can be promoted to highest rank and asked NIWE to revise their RRs to align with DoPT guidelines.

B. To consider and approve the nomination of NIWE Officers for attending the scheduled to be held at Pretoria (South Africa) during next meeting of IEC TC 88 on Wind Energy 6th and 7th May 2019 and IECRE on WE-OMC meeting on 9th and 10th May 2019.

Member Secretary informed about the next meeting of IEC TC 88 on Wind Energy and IECRE on WE-OMC meeting and the nomination of NIWE Officers for the meeting scheduled at Pretoria (South Africa) from 6th to 10th May 2019.

GC approved the nomination of NIWE Officers for the meeting.

C. To consider and approve Charging Processing fee for Wind and Solar Data

Member Secretary informed that as advised by GC in 42nd meeting, NIWE has sent the proposal to MNRE for its consideration. In response to the same, Ministry has agreed the proposal for charging time series wind and solar data. Further, MNRE has desired that the rates for the same may be prescribed by Governing Council of NIWE.

GC after detailed discussion approved the same.

D. To consider and approve conducting International Conference on “Wind and Solar Resource Assessment’s current practice and advancement”.

Member Secretary explained about the proposal for International Conference for Rs.25 lakhs on wind and solar resource assessment facilitated by NIWE, Chennai.

GC after detailed discussion approved the same.

E. New Campus for NIWE

Member Secretary explained to GC about the efforts taken by NIWE to get about 50 acres of land close to Chennai for NIWE expansion activities. He also mentioned that Secretary, MNRE has written to Chief Secretary, Government of Tamilnadu in this regard and even after several follow ups no reply received. It was also mentioned to GC that in Kayathar, NIWE has about 100 acres of land wherein it has wind farm and other facilities including demo lab.

GC after detailed discussion advised NIWE to expedite the process for identification of land to build the second campus in Chennai or explore the possibility of creating second campus at Kayathar.

F. Centre for Research in IIT Madras

JS (WE) explained the need for creation of a Center for Wind Research in IIT Madras. The GC after deliberation advised to explore the possibility of such Center initially through execution of R&D projects under present R&D Scheme.

As there were no other items to be discussed, the meeting ended with a vote of thanks to the Chair.

Chairman, GC, NIWE