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3. Joint Secretaries/ Advisers/Scientist-G, /Economic Advisers
4. PS to Minister (NRE)
5. Sr. PPS to Secretary (MNRE)
6. All State Nodal Agencies.
7. Additional Secretary (Energy), NITI Aayog, New Delhi.
8. Director (PF-II), Ministry of Finance , Department of Expenditure, North Block, New Delhi -110 001.
9. Director Generals, NISE, Gurgaon, NIBE, Kapurthala, NIWE, Chennai.
10. Managing Director, IREDA, New Delhi.
11. Managing Director, Solar Energy Corporation of India, New Delhi
12. NIC Cell (for publishing on the Ministry's website)



9/12/2021

(Dr. Anil Kumar)
Scientist D

Ministry of New and Renewable Energy

Subject: Guidelines for Implementation of Renewable Energy Research and Technology Development (RE-RTD) Programme

In pursuant to the Renewable Energy Research and Technology Development Policy notified by the Ministry of New and Renewable Energy on 21.02.2019 *vide* OM. No. 223/90/2017-R&D dated 21.02.2019, this document elucidates the guidelines for implementation of the MNRE's Renewable Energy Research and Technology Development (RE-RTD) Programme.

I. Project Proposals

Research and Technology Development project proposals in the area of New and Renewable Energy can be submitted for financial support by scientists / engineers / technologists working in industry / academic institutions / registered societies / R&D institutions / laboratories having adequate infrastructure/facilities/ Government Institutes / PSUs / Private Industries. Proposals may be submitted through any of the following four routes for consideration by the Ministry:-

- i. MNRE will, on a periodic basis, notify "Call for Proposals" for Research and Technology Development (RE-RTD) projects through advertisement in scientific / technological journals and the MNRE website. Proposals will be invited against identified challenges, research problems / topics in new and renewable energy (the update Renewable Energy Research and Development Priorities are **APPENDIX-I**;
- ii. Interested institutions/ individuals may also submit proposals in relevant areas of research aside from the Calls for Proposals at any time to this Ministry. Such proposals will be evaluated for financial support on a case to case basis according to their relevance to the Ministry's research priorities and suitability for financial support;
- iii. Based on the need, Ministry may also consider soliciting proposals from identified experts, institutions and industry capable of implementing technology development activities in relevant areas; and
- iv. In addition, eligible laboratories may also send proposals for financial support as laid down under National Laboratory policy on Testing, Standardisation and Certification for RE sector 2017.

II. Proposal Appraisal

Research and Development Division, MNRE will serve as the Secretariat and will be responsible for appraisal of the Proposals. The steps followed for appraisal of proposals would be:

- i. Initial Screening by the R&D Division in consultation with concern technology group to assess the relevance of proposal;
- ii. Evaluation of eligible proposals shall be carried out by subject experts to facilitate broad based consultation. The R&D Division would seek comments/recommendations on the eligible proposals from at least three experts in the case of projects with budget up to Rs.1.0 crore and five experts in the case of projects with budget more than Rs.1.0 crore. Projects supported by at least two experts in the first case and three experts in the second case with a score of 60% or higher will be considered. The minimum qualifying rating of each attribute should not be less than 50% of the rating earmarked for each aspect of project evaluation;
- iii. Proposal recommended by at least three experts will be put up for approval of the R&D Project Appraisal Committee (RDPAC). The RDPAC will be chaired by Secretary, MNRE, co-chaired by JS (R&D) MNRE along with an eminent scientist and comprise of experts from various new and renewable energy areas and other relevant S&T departments;
- iv. The Evaluation criteria to be considered by experts and the RDPAC would include: i) Relevance and quality of the proposal; ii) Availability of clear statement of quantified objectives and deliverables; and iii) Technical feasibility at the end of development iv) Technology Readiness Level of the proposed proposal/project and v) reasonability of the project cost (cost of equipment, consumables etc); and
- v. The experts are not involved to evaluate those projects which pertain to their Institute.

III. **Project Approval**

Proposals recommended by the RDPAC will be put up for the standard financial approval process as per Government of India's General Financial Rules (GFR) by the R&D Division. Upon obtaining Financial concurrence and Administrative approvals as per procedure, the project will be sanctioned. The sanction letter will contain clearly approved objectives, head-wise budget with yearly break-up, duration, terms and conditions, deliverables/output and other condition of Grant as per GFR; and the project grant shall be utilized as per the "General Terms & Conditions of the grant for Research and Technology Development projects" as enclosed at *APPENDIX-2*

IV. **Financial Support**

For Financial support, the following general principles will be followed: -

- i. Research Proposal from academic institutions, universities, research institutes, government/non-profit research organisations etc. would be eligible for financial support up to 100% of the total project cost. The financial support to the private institutes/ research organization would be restricted up to 50% of the project cost;

- ii. However, having focus on applied research, the Ministry will encourage research and technology development proposals in collaboration with industry. The proposals from industry will have a component of co-financing the research proposal. Generally financial support for such proposals will be limited to 50% of the project cost;
- iii. Start-ups, entrepreneurs etc. will also be eligible for financial support up to 50% cost of the project for technology development;
- iv. Ministry may also provide up to 70% of the project cost to Industry/ Private Institutes/ Research Organization/Start-ups for upgrading the technology from Low Technology Readiness Level (TRL) to High TRL with the endorsement of RDPAC Committee and evaluations of experts.
- v. Proposals which are being funded by any other arm of the Government of India or have received grants from any other national/international body will have to submit a strong case to demonstrate why they need additional financial support from the Ministry;
- vi. The project proponents of the approved projects will receive financial support as per the standard financial norms and upon submitting necessary documentation as per GFR-2017;
- vii. In a collaborative project, only one entity can apply for funding and the eligibility criteria will only apply to the applicant entity, i.e. the lead applicant. If the application is successful, only the applicant will enter into a funding agreement. The lead applicant will be responsible for the performance of the project;
- viii. For implementation of the project, the temporary manpower i.e SRF, JRF and RA etc. shall be hired in the R&D project based on their expertise/professional qualification in RE field depending upon availability. The hiring of the manpower will be purely on temporary basis with a condition that there will be no liability of such staff for confirmation by government. The staff services shall discontinue immediately after the project duration expires. However, the emoluments of personnel on the regular roles of the institutes would not be borne in the project.
- ix. The Pattern of release of CFA will on milestone basis. In order to facilitate procurement of equipment early, upto 50% of the total assistance minus the institutional overheads would be released initially along with the sanction depending on the requirements of equipment in the project. For projects where equipment cost exceeds 50% of the project cost, higher initial release may be considered by the Ministry. The balance assistance minus the institutional overheads would be sanctioned as per the annual allocation based on the progress/milestone achieved in the project. The utilization of the grants released towards purchase of equipment may be within 1 year of date of release, subsequent grant will be released after full utilization of previous release and submission of required documents etc and;

- x. The institutional overheads would be released only after successful completion of the project and review by a Project Monitoring Committee and on receipt of the project completion report and financial due diligence as per GFR.
- xi. The overhead charges will be restricted up to 8% of the project cost for the projects costing up to Rs. 1 crore. In case of the projects costing Rs. 1-5 crores the overhead charges will be 8 % of the project cost or Rs. 15 lacs whichever is less. In case of the projects costing more than 5 crores the quantum will be decided on a case to case basis.
- xii. Contingencies and Consumables amount are based on the recommendations of the Expert Committee, to be provided where the research work involves field work or/and project has many investigators/institutions and larger manpower.
- xiii. No re-appropriation of funds is allowed between Capital Assets and Grant in Aid Heads and any underutilization of funds under these heads needs to be refunded to the Ministry at the end of financial year.
- xiv. Honorarium, sitting fees and TA/DA to the members/experts will be applicable as per direction of Ministry of Finance updated time to time.

V. **Intellectual Property Rights (IPR)**

Matters pertaining to IPR shall be dealt in accordance with the guidelines contained in the DST circular issued with the concurrence of Ministry of Finance, Department of Expenditure *vide* their O.M. No.33(5)PF-II99, dated 22nd February, 2000 or subsequent circulars which may be issued by DST/ MOF on the subject.

VI. **Monitoring, Reporting and Validation**

Monitoring and evaluation of the research and technology development activities will be undertaken through Project Monitoring Committees (PMCs) of the respective renewable energy technology area. PMCs will comprise of subject area experts and will be chaired by an eminent Scientist in the relevant area. IFD representative may also be included in the PMC, if required. The PMCs will be responsible for: -

- i. Continuously monitoring project implementation;
- ii. Recommending next release, mid-course corrections, budget revisions, realigning of objectives to enable delivery of the envisaged project outcomes in a timely manner;
- iii. Assessing the performance of the supported projects, and appraising the annual work plan for the current year on the basis of the deliverables/outcomes; and
- iv. Evaluate the achievements of completed projects and give recommendations for corrections and further work, if any.
- v. PIs and Co-PIs cannot be the members of PMC

VII. Project Completion Process

All efforts to be made to complete the projects in time through rigorous monitoring and feedback.

- i. Extension of the duration without increase in outlay can be granted with the approval of Secretary, MNRE;
- ii. Extension of the duration with additional financial assistance will be considered on recommendation of PMC and the approval of Secretary, MNRE. In both the cases, the approval will be granted subject to justification for the same;
- iii. All projects on completion will be presented by the respective PIs before the PMC; and
- iv. Completed project reports after satisfactory review by the PMC and after being approved by competent authority shall be posted on MNRE website.

VIII. Awards for Innovation

In order to encourage innovation in new and renewable energy, the Ministry will award prizes on annual basis. The award will consist of a citation and cash prize of Rs. 5,00,000/- (Rupees Five Lakh); Rs. 3,00,000/- (Rupees Three Lakh) and Rs 2,00,000/- (Rupees Two Lakh). A committee will be constituted under the Chairmanship of Secretary, MNRE to formulate guidelines for awards and act as jury for selection of candidates for the award.

IX. Financial Outlay

The budget provision for the Research and Technology Development (RE-RTD) programme for the control period shall be as under:

Financial Year	Budget Provision (in Rs. Crore)
2021-22	40.00
2022-23	45.00
2023-24	47.00
2024-25	47.00
2025-26	49.00
Total (For 5 years)	228.00

X. Control Period


The Guidelines shall come into effect from the date of notification and shall remain effective till 31st March 2026 unless notified otherwise.

XI. **Review and Amendment**

The guidelines will be reviewed, as and when required and any modification to these guidelines, if necessary, shall be carried out with the approval of the Secretary, MNRE.

2. This issues with the approval of Hon'ble Minister of Power and New and Renewable Energy.

Yours Faithfully

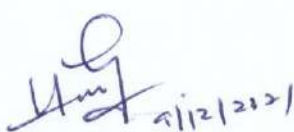

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To

All Officers of MNRE.

Copy to:

1. PS to Minister for New and Renewable Energy & Power
2. Secretary, Department of Science & Technology
3. Secretary, Department of Scientific and Industrial Research and Director General, Council of Scientific and Industrial Research
4. Secretary, Department of Bio-technology
5. Secretary, Ministry of Environment Forests & Climate Change
6. Secretary, Ministry of Earth Sciences
7. Secretary, Department of Atomic Energy
8. Secretary, Department of Space and Chairman, ISRO
9. Secretary, Department of Information Technology
10. Secretary, Department of Agriculture Research.
11. Secretary, Defence Research and Development Organization
12. Chief Executive Officer, NITI Aayog, New Delhi.
13. Chairman & Managing Director, National Research & Development Corporation (NRDC)
14. Chairman, University Grants Commission
15. Director (PF-II), Ministry of Finance , Department of Expenditure
16. Director General, National Institute of Solar Energy
17. Director General, National Institute of Wind Energy
18. Director General, SSS - National Institute of Renewable Energy
19. Managing Director, IREDA, New Delhi.
20. Managing Director, Solar Energy Corporation of India, New Delhi.
21. Indian Council for Agricultural Research (ICAR), New Delhi
22. All State Nodal Agencies implementing MNRE's Programme
23. Chairman, National Innovation Foundation, Ahmedabad, Gujarat
24. NIC Cell (for publishing on the Ministry's website)


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