

F.No. 12/2/2019-NT
Government of India
Ministry of New and Renewable Energy

“Gravity Storage” - Invitation of Preliminary Project Proposals

1. Background

The Ministry of New and Renewable Energy has been supporting a research programme on different aspects of renewable energy and energy storage. With increasing share of renewables, there would be requirement of Energy Storage for absorbing fluctuations and for grid balancing. For different application segments, the demands from the storage system would vary. Gravity based energy storage has been proposed as a potential solution with unique advantages of short response time and flexibility. In such systems electricity is used to lift mass to higher elevation thereby storing potential energy and lowering this mass discharges the energy which can again be converted to electricity. Globally, a number of entities are working in this segment.

In the above background, the Ministry of New and Renewable Energy invites Preliminary project proposals on “Gravity Storage”. The preliminary proposals will be examined by a Committee duly constituted for the purpose, and shortlisted proposals will be invited to submit final proposal.

2. Objective

The overarching research objective is to develop state of the art technical know-how and develop a prototype system that has commercialization potential in the short term. Specific objectives are as follows:-

- i. Design and develop cost-competitive gravity storage system; and
- ii. Develop proto-type system integrating renewable energy with gravity storage.

3. Nature of the research Proposal

The proposal should target end to end complete technological solutions. Proposing institution may consider evolving multidisciplinary, multi institutional and multi partner approach including industry with clearly identified and complementary role of each member.

4. Eligibility for submission of the Proposal

Academic institutions and research organizations, government agencies, industry or any other competent group.

5. Intellectual Property and Commercialization

The projects will be guided by the declared policy of Department of Science and Technology with respect to Intellectual Property (IP) guidelines and allow the IP to be shared among the team of investigators and funding agencies.

6. Preliminary project proposal

The preliminary research proposal may be submitted in the prescribed format as given at MNRE website (https://mnre.gov.in/sites/default/files/rd_formats/rnd-tech-dpf-a1.pdf). The proposals should be sent to the Ministry of New & Renewable Energy (MNRE) at the following address so as to reach within 30 days of publication of this advertisement:-

Shri Dipesh Pherwani
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Ministry of New and Renewable Energy
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