

RESEARCH SCHEME ON POWER (RSoP)

INVITATION FOR RESEARCH PROPOSAL



1 About the Scheme

The Research Scheme on Power, popularly known as RSoP, was initiated by the Ministry of Power, Government of India in 1961. The scheme is administered by CPRI and aims to support need-based and application-oriented research in the power sector, including solutions to operational and technological problems encountered by the Indian power system. Projects should be pertinent to the electric power sector and should have substantial research content and an element of innovation. The scheme is jointly managed by the Central Electricity Authority (CEA), New Delhi and Central Power Research Institute (CPRI), Bengaluru, under the guidance of the Standing Committee on R&D (SCRD).

2 Technology Focus

RSoP proposals should preferably address technologies at Technology Readiness Level (TRL) 3-4 and should clearly indicate the entry TRL, target TRL, measurable deliverables and a credible pathway for prototype development, validation, further scale-up and eventual pilot demonstration or adoption. Involvement of an industry, utility, manufacturer or ultimate beneficiary is encouraged to facilitate validation and subsequent deployment.

3 Objectives

- To develop and integrate indigenous technologies in identified areas
- To promote modern and advanced technologies
- To support prototype development and progression of technologies from TRL 3-4
- To facilitate validation, scale-up and future pilot-scale demonstration
- To enhance the quality, reliability and performance of power systems
- To improve technologies, materials, processes, tools and skills applicable to the power sector

4 Priority Consideration

Priority will be given to proposals having potential for generation of IPR, patents, prototypes or product/process development. Standalone simulation studies or studies of purely academic interest without identifiable technology-development and validation outcomes will not ordinarily be encouraged under the scheme. The list of thrust areas is available at : <https://cpri.res.in/en/content/thrust-areas-research-0>

5 Who Can Apply & Funding

Proposals are invited from Power Utilities, CPSUs and State PSUs, Academia, recognised R&D Institutions, manufacturers and other eligible organisations. The Ministry of Power contribution through CPRI shall be restricted to a maximum of Rs. 5 crore for each project, subject to the approved scope, admissible expenditure and availability of funds. Any amount above the ceiling shall be arranged by the implementing institution, industry, utility, user organisation or other permissible sources. Proposals with technical and financial particulars may be submitted in the prescribed format available on the CPRI website.

Maximum funding for
each project is capped at :

Rs. 5 Crore

Preferred TRL:

3-4



Contact

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R&D SCHEMES OF MINISTRY OF POWER BEING IMPLEMENTED THROUGH CPRI R&D UNDER NATIONAL PERSPECTIVE PLAN

INVITATION FOR RESEARCH PROPOSAL



1 About the Scheme

The Ministry of Power (MoP), Government of India, under the 'R&D Schemes of MoP being implemented through CPRI', promotes research, development, demonstration and indigenous technology development for the benefit of the Indian power sector. R&D under the National Perspective Plan (NPP) is directed towards applied research with emphasis on product and process development, technology scale-up, pilot-scale demonstration, field implementation, validation, adoption and absorption of new technologies in the power sector. The scheme is jointly managed by the Central Electricity Authority (CEA), New Delhi and Central Power Research Institute (CPRI), Bengaluru, under the guidance of the Standing Committee on R&D (SCRD).

2 Technology Focus

The programme supports larger, collaborative and nationally important projects in advanced, emerging and traditional areas of generation, transmission, distribution, renewable energy, energy storage, digitalisation, energy efficiency and environmental management. Proposals should generally address technologies at TRL 5 and above and should aim at scaling laboratory or prototype technologies into engineering systems, pilot plants or field-demonstration projects with clearly defined technical, economic and adoption outcomes.

3 Objectives

- To scale up promising indigenous technologies and integrate them into power-sector applications
- To undertake more pilot-scale demonstration and field-validation projects
- To advance technologies to higher TRLs and demonstrate technical and economic viability
- To promote modern and advanced technologies for nationally relevant problem solving
- To facilitate product development, commercialisation, deployment and adoption by utilities and industry
- To enhance the quality, reliability and performance of power systems

4 Priority Consideration

Priority will be given to proposals having clear arrangements for engineering development, pilot demonstration, field validation, generation of IPR/patents, product development and adoption. Standalone simulation studies or studies of purely academic interest without identifiable scale-up or demonstration outcomes will not ordinarily be encouraged under the scheme. The list of thrust areas is available at : <https://cpri.res.in/en/content/thrust-areas-research-0>

5 Collaboration & Funding

Proposals are invited for collaborative R&D projects involving industry, manufacturers, power utilities, CPSUs, State PSUs, academic institutions and identified user partners. The collaborating organisations should be capable of supporting technology development, pilot-scale demonstration, field validation and subsequent deployment. The collaborating industry shall contribute 50% of the total project cost and will have the first right to commercialise the technology developed under the project. The Ministry of Power's contribution through CPRI shall be limited to a maximum of Rs. 5 crore per project. Where 50% of the total project cost exceeds Rs. 5 crore, the Ministry of Power's contribution will remain capped at Rs. 5 crore, and the remaining amount shall be arranged by the implementing institution, collaborating industry, utility or user partner. The Industry contribution may be relaxed for critical technologies as per direction of MoP. Proposals may be submitted in the prescribed format available on the CPRI website.

Maximum funding for MoP share for each project is capped at :

Rs. 5 Crore

[Funds over and above Rs 5 cr has to be arranged by the PI]

Industry to Contribute:

50%

of Total Project Cost

(can be relaxed based on the criticality of the technology)

Preferred TRL:

5 and Above



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For further details of the scheme and application format, kindly refer to the website: <https://cpri.res.in/en/content/research-scheme>