

Guidance Note on Powerthon-2022

Key aspects and the Governance framework

A. Background

Under the “Revamped Distribution Sector Scheme (RDSS)” introduced by the Ministry of Power a framework for promoting advanced technologies across power distribution sector has already been approved. Under this a two-pronged strategy i.e, leveraging the existing network of Technology solutions providers (TSP) to test and scale up use cases at Discom(s) and creating power distribution focused incubators for continuous innovation in the sector. REC Ltd has been entrusted as Designated Agency and has signed an MoU with Society for Innovation and Entrepreneurship (SINE) under IIT Bombay as ‘incubator cum technology partner, for support in implementing the strategy.

Accordingly, to execute the former part of the strategy of leveraging the existing network of TSPs, it was envisaged to adopt a framework, to enable selection of both established TSPs and Start-ups. This notion had set in motion, the need for conducting a hackathon.

B. About Powerthon-2022:

The key objective of Powerthon-2022 is to create a forum for participation of Technology solutions providers, startups, educational institutions, research institute, equipment manufacturers, state power utilities and other state and central power sector entities, brief them on the current challenges faced across the power distribution sector and primarily invite applications from TSPs to participate in the Powerthon-2022. Herein, the TSPs can showcase their technology driven solutions to solve the complex problems. The solutions can be based on any advanced emerging technologies like AI/ML, Blockchain, IoT, VR/AR etc.

After various discussions with 14 discoms across 10 states, problem statements have been categorized across 9 key broad aspects for pilot testing:

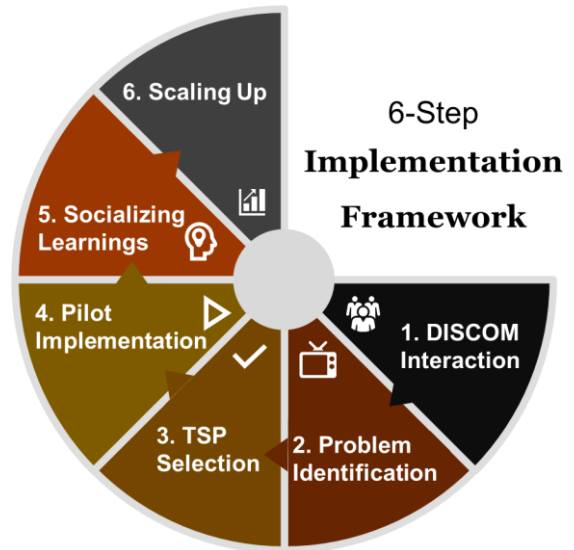
Key Distribution aspects covered under problem statements	
1. Demand/Load forecasting	2. Vegetation management
3. AT&C loss reduction	4. Consumer experience enhancement
5. Energy theft detection	6. RE integration
7. Prediction of DT failure	8. Power purchase optimization
9. Asset inspection	10. Open category*

**An “open category” has been also created at the Powerthon-2022 website, for the applicants to apply for any relevant problem areas that may not be covered under the 9 key aspects.*

C. Implementation Framework for Powerthon-2022:

A six-step implementation framework shall be adhered to for the selection of TSPs for Proof of Concept (PoC) implementation. The framework has been devised for leveraging advanced technologies to address key challenges faced by DISCOMs and enable continuous innovation in the power sector. Comprehensive stakeholder interaction shall be conducted on problem statement deliberation which will be followed by detailed TSP selection process based on best fit solution for Discoms.

A competition will be conducted by the empaneled incubator to select TSPs to address the problem statements via PoC. The selected POCs shall pilot tested at DISCOM testbed and a tri-partite agreement will be signed between DISCOM, Incubator and the TSPs upon finalization.



D. Key governance aspects of Powerthon-2022:

- 1. Application Registration:** In response to the problem statements mentioned hereinbefore, the applicants may apply at the Powerthon-2022 website by filling the online form. The application form captures key aspects like; TSP General Profile with basic details, TSP product profile, TSP's target intervention areas for Powerthon-2022, past experiences, solution architecture, timelines and workplan etc. Each applicant can apply for a maximum of 3 problem areas.
- 2. Screening and selection process of applicants for PoC and Pilot:**
 - a. Initial Screening:** The applications submitted will be initially screened based on the extent of information filled and basic relevance of the proposed product/service to the targeted problem statement(s).
 - b. Technical Screening:** Post initial screening, the shortlisted applications will be evaluated by technical committee on various technical aspects. The technical committee may comprise of individuals from central/state power sector nodal agencies, Discoms, research institutions etc. Individualized discussions shall ensue between DISCOMs and shortlisted applicants to address any queries, followed by TSPs final presentation and submission of POC before technical committee.
 - c. Screening by Expert Committee for POC:** The final shortlisting of TSP for POC will be done by the expert committee and the selected TSPs shall submit the final POC for technical and expert committee's review.

- d. **Screening of TSP for final Pilot:** The submitted POCs, will be evaluated by the Technical Committee to assess the implementation feasibility and conformity to the problem statements. Subsequently the Expert Committee will shortlist the TSPs for the pilot implementation at DISCOMs
3. **Post POC contractual arrangements:** Upon POC finalization, a tri-partite agreement will be signed between DISCOM, Incubator and the TSPs, covering key aspects like Roles and responsibilities, Scope of work, Milestones, timelines and expected outcome, Mechanism of disbursement of grant for the pilot implementation, payment milestones and schedules etc.
4. **Pilot Allocation:** For each problem statement, 2-3 TSPs, with a mix of established companies and Start-ups will be shortlisted based on their approved POCs, each TSP may be allowed to undertake a maximum of 3 pilot projects under this initiative.
5. **Fund Allocation:** In case the TSP shortlisted for POC is a Start-up, it will be provided a FEE of INR 5 Lakh upon POC acceptance. The TSPs selected for pilot implementation at DISCOMs will be provided with a maximum grant of up to INR 20 lakhs and no financial assistance will be provided to non-startup TSPs. A corpus of INR 4 Cr provisioned from Revamped Distribution Sector Scheme (RDSS) shall be deployed to manage implementation of this program for a period of 1 year.

E. Key timelines for Powerthon-2022

Key Activities	Start Date	End Date
1. Formation of Expert Committee	7th Feb 2022	28th Feb 2022
2. Call for Application	15th Feb 2022	9th March 2022
3. First level screening by Technical and Expert committee	10th March 2022	18th March 2022
4. One-to-one discussion between DISCOMs and Shortlisted applicants	19th March 2022	24th March 2022
5. Final Technical presentation by applicants before Technical and expert committee	25th March 2022	1st April 2022
6. Announcement of winners by Expert committee	8th April 2022	8th April 2022
7. POC Submission	9th April 2022	30th April 2022
8. Examination of POC by expert committee	1st May 2022	09th May 2022
9. Announcement of Final winners & location of testbed	10th May 2022	15th May 2022
10. Start of Pilot execution at DISCOMs	16th May 2022	31st May 2022

Note: The timelines are tentative and may vary