सत्यमेव जयते

भारत सरकार / Government of India

विद्युत मंत्रालय / Ministry of Power

केंद्रीय विद्युत प्राधिकरण / Central Electricity Authority

ऊर्जा भंडारण प्रणाली प्रभाग / Energy Storage System Division

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विषय: National Workshop on RE integration through ESS Phase-II to be held on 30.04.2026 in hybrid mode – reg.

Renewable Energy (RE) and Energy Storage Systems (ESS) are required to tackle global warming and mitigate Climate Change effect. Central Electricity Authority (CEA) has estimated that around 16GW/82GWh by 2026-27, 74GW/411GWh by 2031-32 and 320GW/2380GWh by 2047 of ESS is required in the country. In order to achieve the required ESS capacity for a stable Grid operation, all the RE & ESS stakeholders, i.e. Project Developers, Project Owners, Industry Associations, Research and Development (R&D) institutions as well as Generation, Transmission and Distribution Utilities, must work in close coordination.

2. Therefore, to build a cordial ecosystem for ESS development, a National level Workshop on 'RE integration through ESS' has been envisaged to be conducted in a phased manner in the five different regions of the country. The first phase of the workshop was successfully conducted in the month of May, 2025 at NRPC, New Delhi and its report is available on the CEA website and be accessed directly via the link: "https://cea.nic.in/wp-content/uploads/notification/2025/06/Workshop_Report.pdf".

3. ***Now, second phase of this workshop is being scheduled in hybrid mode on 30.04.2026 at the Western Regional Power Committee (WRPC), Mumbai. Tentative Agenda is attached herewith.*** This phase of the workshop will include deliberations on safety, construction, and connectivity standards for RE and BESS, along with the transition from conventional DG sets to rooftop solar (RTS) integrated with BESS. Technical sessions will focus on use cases of BESS, grid-forming inverters, and methodology for determining the optimum sizing of BESS at distribution substations. The workshop will also highlight practical learnings from operational and under-construction BESS projects. In addition, insights from private sector participation, end-of-life management strategies for BESS, and emerging research on BESS will also form part of the discussions.

4. The interested Stakeholders may register through the below google form:
https://forms.gle/cmdZNAC73mpTP57L9

Meeting link to join the workshop virtually will be shared with the registered Stakeholders in due course of time.

5. This issues with the approval of the Chief Engineer (ESSD), CEA.

संलग्न: Agenda of the workshop.

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(डॉ. वीपिन कुमार/Dr. Veepin Kumar)
उप निदेशक/ Deputy Director

सेवा में,

1. All the Stakeholders.

जानकरी हेतु प्रतिलिपि:

1. SA to Chairperson.
2. SA to Member (Planning).
3. PS to CE (ESSD).
4. Director (IT), with a request to upload a copy of this letter **on the CEA website.**

Agenda of National Workshop Ph-II

Renewable Energy Integration through Energy Storage Systems

Date: 30th April, 2026.

Event Schedule			
S.No.	**Time**	**Topic**	**Presenter**
i.	9:30 AM-10:00 AM	Registration	
ii.	**10:00-10:10 AM**	**Lamp lighting ceremony & Welcome address by Chairperson, CEA**	
iii.	**10:10-10:15 AM**	**Start of the Session by CE (ESSD)**	
1.	10:15 -11:15 AM	**Salient Aspects of upcoming:** 1. Safety Standards for BESS. 2. Construction Standards for RE and BESS. 3. Connectivity Standards for RE & BESS.	Dr. Veepin Kumar & Sh. Deepak Choudhary Deputy Director, CEA
2.	11:15 – 11:45 AM	DG Set Replacement of Buildings with RTS & BESS.	Dr. Veepin Kumar, Deputy Director, CEA. & Prof. Himanshu Jain, IIT Roorkee.
11:00- 11:15 AM: Networking Tea & Snacks to be served during the sessions			
3.	11:45 AM-12:15 PM	1. Use Cases of BESS- Ancillary Services. 2. Case study of BRPL Kilokari plant.	Sh. Abhishek Ranjan, CEO, BRPL.
4.	12:15 PM-12:45 PM	Grid Forming Inverters.	Dr. Veepin Kumar, Deputy Director, CEA. & Prof. Animesh Sahoo, IIT Dharwad.
5.	12:45 – 1:15 PM	Determination of Optimum Size of BESS at Distribution Substations.	Prof. Soumya Ranjan Mohanty, IIT BHU
1:15 PM- 2:15 PM: Lunch Break			
6.	2:15 PM–3:15 PM	1. Learnings from In-Operation GSECL (Gujarat) Solar+Storage Hybrid project: 35MW Solar PV with 12MW/ 57 MWh BESS located at Kutch Lignite Thermal Power Station. 2. Learnings from in operation BESS project at Rajnandgaon, Chhattisgarh -	1. GSECL 2. SECI/CSPDCL (30 Minutes each)

		100 MW(AC) Solar PV Project with 40 MW/120 MWh BESS.	
7.	3:15 PM-4:15 PM	1. Learnings from Under Construction MSEDCL Pilot Projects of 300 MW/600 MWh Standalone BESS. 2. Learnings from 500 MWh BESS project under State Component of VGF Scheme.	1. MSEDCL (45 Minutes total)
8.	4:15PM-5:15 PM	Presentation on BESS by Private Companies.	1. FIMER i. Sh. Chandra Sekhar ii. Rachakonda S R 2. RE-Plus (Truck Storage) (30 Mins each)
4:30 PM – 5:00PM: Tea Snacks to be served during the sessions			
9.	5:15 PM – 6:15 PM	1. BESS- End of the Life management by MoEFCC. 2. Emerging Research in BESS by IIT Bombay	1. MoEFCC 2. IIT Bombay (30 Minutes each) To be confirmed
10.	6:15 PM – 6:30 PM	**Concluding Remarks by Member (Planning), CEA.**	