

No.42-26/1/2022-RCM/NRE-(Part-III)(1)

Government of India
Ministry of Power
NRE Section

Shram Shakti Bhawan
Rafi Marg, New Delhi-110001
Dated the 11th October, 2024

ORDER

The Central Government has sanctioned the Central Sector Scheme '**Viability Gap Funding (VGF) for Development of Battery Energy Storage Systems (BESS)**', hereinafter referred to as 'the scheme' vide letter No. 42-26/1/2022-RCM (Part1) dated 15th March 2024.

2. To enhance the integration of variable energy sources in renewable energy-rich states, the Ministry of Power has issued separate operational guidelines on 8th October 2024 for implementing the State component under the VGF scheme for the development of BESS. These guidelines aim to establish 5,000 MWh of BESS capacity across six states—Rajasthan, Tamil Nadu, Karnataka, Gujarat, Maharashtra, and Telangana—with a budgetary support of ₹1,350 Cr.

3. For implementing the State component of the Scheme, as per the Operational Guidelines, following entities are hereby designated as the BESS Implementing Agencies (BIAs):

- i) NTPC Ltd
- ii) Solar Energy Corporation of India Limited

The states may invite bids either independently or through the above designated BIAs.

4. The BIAs shall comply with the terms and conditions specified in the Operational Guidelines for the state component.

This issues with the approval of competent authority.



(Vishal Kumar)

Under Secretary to the Government of India,
Tel: 011-23718589

To,

- 1. CMD, SECI
- 2. CMD, NTPC Ltd

Copy to:

विशाल कुमार / VISHAL KUMAR
अवर सचिव / Under Secretary
विद्युत मंत्रालय / Ministry of Power
भारत सरकार / Government of India
नई दिल्ली-110001 / New Delhi-110001

The Chief Secretaries and Principal Secretaries (Energy) of Rajasthan, Tamil Nadu, Karnataka, Gujarat, Maharashtra and Telangana

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Copy for information to:

1. Secretary, MNRE
2. Chairperson, CEA,
3. PS to Hon'ble Minister of Power
4. APS to Hon'ble Minister of State for Power
5. Sr. PPS to Secretary (Power)
6. Sr. PPS to AS (Power)
7. PPS to all Joint Secretaries/EA/CE, Ministry of Power

श्रीमान श्री विशाल कुमार
ज्येष्ठ सचिव / Under Secretary
विद्युत विभाग / Ministry of Power
राज्य सरकार / Government of India
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**Operational Guidelines for State Component under
the Scheme for Viability Gap Funding for development of Battery
Energy Storage Systems**

1. Introduction

- 1.1. India has been expanding its installed RE capacity with the aim of reaching 500 GW of non fossil fuel based by 2030. RE from sources like solar and wind is variable and not available round the clock like thermal power to meet the demand. Energy Storage Systems (ESS) are necessary to address this challenge by storing excess energy when not needed and supplying it during peak demand periods. As reliance on RE increases, the grid experiences stress during evening and morning peaks when sufficient RE is not available, necessitating additional power dispatch. ESS plays a vital role in successfully integrating RE into the grid and assisting grid operators in managing these fluctuations in demand and RE supply.
- 1.2. The Central Government has been actively promoting the development of ESS such as Pump Storage Plants and Battery Energy Storage Systems. It has undertaken several initiatives such as preparing the National Framework for ESS, inclusion of ESS in the master list of infrastructure and streamlining of project approvals. States are responsible for ensuring adequate resources to minimize the stress on the Intra-State Transmission System (InSTS), while the Centre is required to manage the remaining stress on the Inter-State Transmission System (ISTS).
- 1.3. Although Battery Energy Storage Systems (BESS) have higher life cycle costs compared to Pumped Storage Plants (PSP), their faster deployment makes them ideal for near-term integration of renewable energy, especially while waiting for the completion of planned PSP capacity.
- 1.4. The Central Government, on 15th March 2024, has sanctioned the Central Sector Scheme 'Viability Gap Funding (VGF) for Development of Battery Energy Storage Systems (BESS)' hereinafter referred to as the scheme'. The Operational Guidelines issued under the scheme support Market Based Development of ISTS connected BESS, hereinafter referred to as 'Market Component'.

- 1.5. Presently, more than 70% of Variable Renewable Energy (VRE) capacity is connected at InSTS. Additionally, large capacity of distributed solar may be connected to distribution network under PM KUSUM and PM Surya Ghar Schemes. Therefore, there is a need to support State Utilities in the development of InSTS or distribution network connected BESS to encourage the development of BESS in states with high solar penetration. The State Component of the Scheme aims to facilitate RE rich states in integration of large scale RE within the State.

2. State Component Overview

- 2.1. The definitions shall be as per the scheme guidelines approved on 15th March 2024.
- 2.2. **Viability Gap Funding(VGF):** VGF of upto 30% of capital cost for BESS or Rs 27 lakh per MWh whichever is lower, shall be provided by the Central Government under State Component. The VGF shall be a non-recurring expenditure and shall be fully funded from central grant.
- 2.3. **Commissioning Period:** The projects are required to be commissioned within a period as defined in the TBCB Guidelines issued for BESS Projects.
- 2.4. **Eligible Entities.** State Distribution Licensees, State Transmission Utilities and State Generating Companies or the Agencies authorized by them, of the States covered under **Annexure A**, shall be eligible.
- 2.5. **Eligibility.** Eligible Entities are required to invite bids (either by themselves or through BIAs) and sign BESPA within 9 months from the date of issue of these guidelines , to be eligible under the State Component. Capacities, not requested within 60 days from date of issue of these Guidelines or where BESPA is not signed before the time period mentioned above, will be reallocated to other RE rich states.
- 2.6. **Disbursement schedule:** The VGF amount to the eligible projects shall be disbursed in five tranches as detailed below.

Milestone	% VGF disbursed
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On financial closure, subject to submission of bank guarantee and possession of 90% of the total land required for the project by the developer.	10
On Commercial Operation Date (COD)	45
Completion of 1st year from COD	15
Completion of 2nd year from COD	15
Completion of 3rd year from COD	15
Total	100

- 2.7. The State Component of the scheme has a budgetary allocation of Rs 1,350 Crore and is aimed at supporting a BESS capacity of 5000 MWh.

3. Implementation Model

- 3.1. BESS capacity shall be allocated to the States with more than 3 GW installed solar capacity at InSTS level.
- 3.2. The BESS capacity must have at least of 4-hour discharge duration in a day i.e within 24 Hour period, with any configuration.
- 3.3. Bidding may be conducted either by eligible entities themselves or by BIAs following a transparent process.
- 3.4. The bidding documents issued by Central Government under section 63 of Electricity Act namely the Guidelines for Procurement and Utilization of Battery Energy Storage Systems as part of Generation, Transmission and Distribution assets, along with Ancillary Services issued vide Gazette notification dated 10.03.2022, including its subsequent amendments and clarifications, shall be followed.
- 3.5. States desirous of availing State Component are required to inform their interest to Central Electricity Authority (CEA) ~~on~~ within 60 days from the date of issue of these Guidelines, specifying the implementing agency, location(s) and size of BESS capacity planned for implementation. For the BESS projects to be set up through BIA, the request should also be sent to BIA within 60 days from the date of issue of these

Guidelines.

- 3.6. CEA shall submit the report for unutilized capacities and the BESPA not signed, to Ministry of Power, within 15 days from the closing date as per timeline mentioned in clause 2.5 and 3.5.
- 3.7. The land, InSTS / distribution system required for connecting the BESS capacity and charging power shall be provided by the respective Eligible Entities.
- 3.8. The trading margin to be paid to BIAs, including the cost of providing payment security, shall be seven paise per kWh of energy discharged. The trading margin payments will be calculated based on the BESS output energy.
- 3.9. The payment security mechanism shall be as per Electricity (Late Payment Surcharge & Related matters), Rules 2022 as amended from time to time.

4. Selection of BESS Developers

- 4.1. **Bidding Process:** BESS projects shall be awarded using the Tariff Based Competitive Bidding (TBCB) process.
- 4.2. **Project Developer Capacity Limits:** To ensure wider participation, a single project developer should be awarded a maximum of 50% of the total capacity offered in a Bid, for the projects with capacity of more than 500 MWh .
- 4.3. **Project Developer Eligibility:** It shall be ensured that both public and private sectors participate in the bid and that there is at least one bid from a private sector participant in every tranche, failing which the bid shall be cancelled and tender will be floated afresh.
- 4.4. **Contract Period:** The contract period shall be pre-specified in the RfS document, in line with the provisions of BESS TBCB Guidelines. The contract shall be awarded on Build Own Operate (BOO)/ Build Own Operate Transfer (BOOT) basis.
- 4.5. **Contract:** The BIA/Eligible Entity shall initiate the bidding process and will sign a Battery Energy Storage Purchase Agreement (BESPA) with the successful bidder for the specified

contract period.

- 4.6. Bidding Parameter:** Developers shall compete based on the annualized fixed cost they offer, expressed in rupees per Megawatt (MW) per Month subject to a tariff cap after factoring in the VGF specified in the RfS.

5. Disbursement of VGF

- 5.1.** The BIA/Eligible Entity shall be required to obtain a Bank Guarantee of value equal to the VGF to be disbursed, prior to its release to the BESS developer, as specified in the RfS. This Bank Guarantee shall be liable for encashment to recover the VGF amount in the event of non-fulfillment of the scheme conditions specified in the Bidding Documents. The Bank Guarantee for the VGF sanctioned up to COD may be released within three years of COD.
- 5.2.** The VGF for each project shall be disbursed to the BIA/Eligible Entity in the State, once CEA certifies the achievement of the disbursement schedule milestone and submission of the required Bank Guarantee.

6. BIA/Eligible Entity Responsibilities

- 6.1.** The BIA/Eligible Entity shall be responsible for:
- (i) issuing the RfS, inviting bids, and selecting BESS developers for the allocated quantum (in MWh) and entering into contracts with the selected BESS developers;
 - (ii) ensuring and certifying that the bidding process complies with the Scheme guidelines and that all specified conditions are met;
 - (iii) acting as purchaser of energy storage services and entering into a BESPA with the developer for the contract period and BESSA with Eligible Entities, as applicable;
 - (iv) submit to CEA, all the requisite information for monitoring of the project including the audited Statement of Expenditure (SoE) and Utilization Certificate (UC) in the prescribed format of GFR 19 (A) as amended from time to time;
 - (v) comply with the provisions of General Financial Rules, 2017, as amended from time to time;
- 6.2.** The VGF amount (Grant-in-Aid) is also subject to the Chapter 9 of the General Financial Rules, 2017, as amended from time to

time, read with the Government of India's decisions incorporated there-under, and any other guidelines which may be issued in this regard.

- 6.3. Assets acquired wholly or substantially out of Central Government Grants shall not be disposed of during the contract period without obtaining the prior approval of the sanctioning authority of Grants-in-Aid {Rule 230(9)}. Shareholding of the bidding entity in the SPV/ project company executing the BESS project shall not fall below fifty-one per cent at any time prior to Commercial Operation Date (COD).
- 6.4. The accounts of BIA/Eligible Entity shall be audited by C&AG or by any person authorized by him on his behalf in accordance with the provisions laid down in Section 14 of the C&AG (DPC, 1971) and as amended from time to time.
- 6.5. The accounts of BIA/eligible entity shall be open for inspection by the sanctioning authority and audit, both by the Comptroller & Auditor General of India under the provision of C&AG (DPC) Act, 1971 and internal audit party by the Principal Accounts Office of the Ministry or Department whenever it is called upon to do so.

7. Monitoring of the Scheme

- 7.1. CEA will monitor the implementation of the scheme as well as the progress of the awarded projects under the Scheme through a Management Information System (MIS) portal and submit monthly reports to the Ministry of Power. The monitoring parameters shall include details of physical and financial progress vis-a-vis the agreed milestones. The performance levels may also be verified by CEA on at least quarterly basis.
- 7.2. Upon commissioning of the Project, CEA shall submit a report containing details of the major assets created along with cost incurred for the Scheme.

8. Public Financial Management System (PFMS)

- 8.1. The release of capital subsidy from the Ministry of Power to the BIA/eligible entity shall be done through PFMS and the BIA/eligible entity shall use PFMS for fund flows under the scheme.

8.2. The Project Developers receiving funds under the Scheme shall be registered/mapped in PFMS.

8.3. The BIA/eligible entity shall:

- (i) mandatorily enter details like receipts, expenditures, etc. in PFMS portal;
- (ii) ensure that all Project Developers to whom funds are to be released are properly registered/mapped in PFMS;
- (iii) submit status of unspent grant lying with it to the Ministry on an annual basis;
- (iv) maintain books of accounts both for receipt of funds from the Ministry and release to Project Developers for each project; and
- (v) ensure that funds are kept in interest-bearing account and the interest accrued shall be credited to the Central Government, and it shall not be invested in any other bank/branch, whether for short term or medium term, including fixed deposits.

9. Amendment to the Operational Guidelines

9.1. These guidelines may be amended with the approval of Secretary, Ministry of Power, to address implementation challenges without materially altering the scheme.

9.2. The implementation model in these guidelines may be modified by the Ministry of Power, if required.

Annexure A: State wise BESS Capacity Allocation

S.No	State	BESS Allocation (MWh)
1	Tamil Nadu	1,000
2	Gujarat	1,000
3	Karnataka	1,000
4	Rajasthan	1,000
5	Telangana	500
6	Maharashtra	500
	Total	5,000