

F.No. 48-15/7/2025-NRE SECTION
Government of India
Ministry of Power
(NRE Section)

Shram Shakti Bhawan,
Rafi Marg, New Delhi
Dated, the 9th June, 2025

To,

1. Chairperson, CEA
2. Principal Secretaries of Energy of the Government of Rajasthan, Gujarat, Maharashtra, Tamil Nadu, Karnataka, Andhra Pradesh, Madhya Pradesh, Telangana, Uttar Pradesh, Haryana, Kerala, Punjab, Chhattisgarh, Odisha and Uttarakhand
3. CMD, NTPC
4. CMD, Grid India

Subject - Viability Gap Funding (VGF) Scheme for development of Battery Energy Storage Systems (BESS) supported through Power System Development Fund (PSDF).

Sir/ Madam,

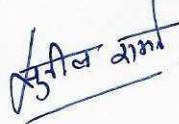
Considering the requirement of Energy Storage in the country, with the approval of Minister of Power, it has been decided to provide VGF to 15 number of States and NTPC (as per enclosed Operational Guidelines) @ Rs. 18 Lakhs per MWh for development of 30 GWh BESS capacity supported through PSDF, which amounts to total financial support of Rs. 5400 Crores from PSDF.

2. This allocation includes 25 GWh of BESS capacity allocated to 15 States to facilitate them in meeting their Energy Storage System requirements. In addition, 5 GWh of BESS capacity is allocated to NTPC, which is to be developed for optimum utilization of existing thermal generation and transmission infrastructure as well as to facilitate meeting non-solar hour electricity demand in a reliable and economic manner .
3. All the concerned States and NTPC are required to submit proposal to NLDC, the nodal agency for PSDF, as per the extant Guidelines / Procedure for funding of the projects under PSDF, within 30 days from the date of issuance of this letter.
4. This issues with the approval of competent authority.

*✓
15/6/25*

Encl: as above

Yours faithfully,



(Sunil Kumar Sharma)
Director (NRE/ RCM)

Copy for information to:

- i. Technical Director, NIC Cell for uploading on MOP's website under "Current Notices" with the heading of "Viability Gap Funding (VGF) Scheme for development of Battery Energy Storage Systems (BESS) supported through Power System Development Fund (PSDF)."
- ii. PS to Minister of Power
- iii. APS to Minister of State for Power
- iv. Sr.PPS to Secretary (Power)
- v. Sr.PPS to Additional Secretary(SN)
- vi. Controller of Account, MoP
- vii. All JSS/CEs and equivalent Officers of the Ministry of Power.
- viii. Pay and Accounts Officer, MoP

Ministry of Power
NRE Section
Shram Shakti Bhawan, New Delhi

**Guidelines for Viability Gap Funding (VGF) Scheme for
development of Battery Energy Storage Systems
(BESS) supported through Power System Development
Fund (PSDF).**

1. Introduction

1.1 Objective: Development of 30GWh BESS capacity for deployment to ensure grid integration of RE and reliable electricity supply.

1.2 Energy storage systems are essential for integration of variable renewable energy (vRE) sources in the electricity grid. With an installation target of 393 GW (293 GW Solar and 100 GW Wind) by 2030, vRE will constitute approx. 50% of the installed generation capacity by 2030.

1.3 Increasing share of RE also necessitate flexible operation of thermal generation plants. The variability of renewable generation requires thermal generators to back down during periods of high RE availability, especially during solar hours. However, during evening peak hours, when solar generation is not available, thermal plants are essential to meet the evening peak. Therefore, BESS may also be installed with thermal power stations to leverage existing generation and transmission infrastructure efficiently.

1.4 As per CEA, 37GWh BESS capacity is required by 2027 and the requirement will increase to 236 GWh by 2031-32. BESS capacity of 13.2 GWh has been approved under the ongoing VGF scheme for development of BESS.

2 Scheme Overview

2.1 Viability Gap Funding (VGF): VGF of Rs 18 lakh per MWh, shall be provided and is aimed at supporting a BESS capacity of 30 GWh.

2.2 Scheme Budget: This scheme has a budgetary allocation of Rs 5,400 Crore. The VGF shall be a non-recurring expenditure and

[Signature]

shall be fully funded from Power System Development Fund (PSDF). The disbursement of funds shall be as per procedure applicable for PSDF. The VGF for each project shall be disbursed to the Eligible Entity/ REIA, once CEA certifies the achievement of the disbursement schedule milestone and submission of the required BG.

2.3 Commissioning Period: The projects are required to be commissioned within a period of 18 months from the date of signing of Battery Energy Storage Purchase Agreement (BESPA) / Power Purchase Agreement (PPA).

2.4 Eligible Entities: State utilities or agencies authorized by States Governments or Central Government shall be eligible. (refer **Annexure**).

2.5 Disbursement schedule: The VGF amount to the eligible projects shall be disbursed in three tranches as detailed below.

Milestone	% VGF disbursed
On financial closure, subject to submission of bank guarantee.	20
On Commercial Operation Date (COD)	50
Completion of 1st year from COD	30
Total	100

2.5 Storage Duration: The BESS capacity should preferably be with 2-hour discharge duration and average 1.5 cycles in a day i.e within 24 Hour period. However, the Eligible Entity may vary the duration, no of cycles as required.

3. Implementation Model

3.1. Bidding Process: BESS projects shall be awarded using the Tariff Based Competitive Bidding (TBCB) process under section 63 of the Electricity Act, 2003.

3.2 Contract Period: The contract period shall be specified in the RfS document, in accordance with the BESS TBCB Guidelines. The contract shall be awarded on Build Own Operate (BOO)/ Build Own Operate Transfer (BOOT) basis preferably for a contract period of 12 to 15 years.

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3.3 Bidding Parameter: Developers shall compete based on the annualized fixed cost they offer, expressed in rupees per Megawatt (MW) per Month or on Rs/kWh after factoring in the VGF specified in the RfS.

3.4. Eligible Entities are required to invite bids, either by themselves or through Renewable Energy Implementing Agencies designated by Central Government, following the bidding guidelines issued under section 63 of the Electricity Act, 2003. The BESPA / PPA shall be signed within 9 months from the date of issue of these guidelines, to be eligible for VGF.

3.5 States / NTPC desirous of availing the VGF are required to submit their proposal to the Central Electricity Authority (CEA) 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 screening and approval for VGF funding through PSDF.

3.6 The project may be connected at InSTS or ISTS. The land and InSTS grid connectivity shall be provided by the respective Eligible Entities.

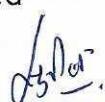
3.7 The payment security mechanism shall be as per Electricity (Late Payment Surcharge & Related matters), Rules 2022 as amended from time to time. CEA will monitor the implementation of the scheme as well as the progress of the awarded projects under the Scheme through a Management Information System (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.

3.8. Bank Guarantee: The Eligible Entities/REIAs shall be required to obtain a Bank Guarantee (BG) of value equal to the VGF to be disbursed, prior to its release to the developer, as specified in the RfS. This BG shall be liable for encashment to recover the VGF amount in the event of non-fulfilment of the scheme conditions specified in the Bidding Documents. The BG for the VGF sanctioned up to COD may be released within one year of COD.

4. Eligible Entity/REIA Responsibilities

4.1. The Eligible Entity/REIA shall be responsible for:

- (i) inviting bids, and selecting the developer(s) for the allocated



quantum and entering into contracts with the selected developer(s);

- (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 or output of BESS and entering into a BESPA / PPA with the developer for the contract period and BESSA / PSA 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;

4.2. 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.

4.3. 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).

4.4. The accounts of Eligible Entity / REIA 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.

4.5. The accounts of Eligible Entity / REIA 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.

5. Notwithstanding the aforementioned provisions at para 3 and 4, NTPC may implement its allocated capacity under section 62 of the Electricity Act 2003, as per CERC Regulations/ Orders.

Ans/No. 5

6. Amendment to the Operational Guidelines

6.1. These guidelines may be amended with the approval of Secretary, Ministry of Power, to address implementation challenges.

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

Annexure Allocation of BESS Capacity under the Scheme

S.N.	State / Entity	BESS Capacity Allocation (MWh)
1	Rajasthan	4000
2	Gujarat	4000
3	Maharashtra	4000
4	Tamil Nadu	1500
5	Karnataka	2000
6	Andhra Pradesh	2000
7	Madhya Pradesh	1500
8	Telangana	1500
9	Uttar Pradesh	1500
10	Haryana	500
11	Kerala	500
12	Punjab	500
13	Chhattisgarh	500
14	Odisha	500
15	Uttarakhand	500
16	NTPC	5,000
	TOTAL	30,000

13/10/2023

Shram Shakti Bhawan,
Rafi Marg, New Delhi-110001
Dated the 04th Aug, 2025

To,

Principal Secretaries of Energy of the Government of Rajasthan, Gujarat, Maharashtra, Tamil Nadu, Karnataka, Andhra Pradesh, Madhya Pradesh, Telangana, Uttar Pradesh, Haryana, Kerala, Punjab, Chhattisgarh, Odisha and Uttarakhand

Subject: Amendment in Operational Guidelines for viability Gap Funding Scheme for development of Battery Energy Storage System supported through Power System Development Fund (PSDF)-reg.

Sir / Madam,

I am directed to invite reference to the Operational Guidelines for Viability Gap Funding Scheme for development of Battery Energy Storage System supported through Power System Development Fund (PSDF) issued vide letter F.No 48-15/7/2025-NRE section dated 09.06.2025 and to convey that the following amendments are made in the Operational Guidelines:

2. Clause 3.6 of the said Operational Guidelines is modified as under:

"3.6 The project may be connected at InSTS or ISTS. The responsibility for arranging grid connectivity and land shall be as per the RfS document."

3. A new clause 3.9 has been inserted in the Operational Guidelines as under:

"3.9 The Application Software of the Energy Management System (EMS) of the BESS shall be developed indigenously within India"

4. A new clause has been inserted in Guideline 4. Eligible Entity / REIA Responsibilities as under:

"4.1 (ii) (b). ensuring that the BESS installed is of requisite quality as per best industry practices and refurbished battery cells are not used in the project."

This issues with the approval of the competent authority.

Yours faithfully,

*43 At 21hr
4/8/25*
(Sunil Kumar Sharma)
Director (NRE/RCM)
Email: sunil.sharma24@gov.in

Copy for information to

1. Chairperson, CEA
2. CMD, NTPC
3. CMD, Grid India
4. Sr.PPS to Secretary (Power)
5. Sr PPS to Addl Secretary (R&R)
6. All Joint Secretaries and equivalent Officers of MoP
7. PSO to CE (R&R)/ PA to Director (NRE), Ministry of Power

F.No. 48-15/7/2025-NRE Section
Government of India
Ministry of Power
(NRE Section)

Shram Shakti Bhawan, Rafi Marg
New Delhi-110001,
Dated the 22nd September, 2025

To,

The Principal Secretaries (Energy) of the Government of Rajasthan, Gujarat, Maharashtra, Tamil Nadu, Karnataka, Andhra Pradesh, Madhya Pradesh, Telangana, Uttar Pradesh, Haryana, Kerala, Punjab, Chhattisgarh, Odisha and Uttarakhand.

Subject: Amendment in Guidelines for Viability Gap Funding for development of Battery Energy Storage System (BESS) funded through PSDF -regarding

Sir,

I am directed to invite reference to the Guidelines for Viability Gap Funding for development of Battery Energy Storage Systems supported through Power System Development Fund (PSDF) dated 09.06.2025 and to convey that the following amendments are made to the Guidelines.

2. A new clause 2.3A is hereby inserted in the said guidelines, after Clause 2.3 (Commissioning Period), which is as under:

“2.3(A) Financial Closure: The BESS Developer shall attain Financial Closure within 6 months from the date of signing of BESPA.”

3. Clause 3.8 of the Guidelines is amended as under:

3.8. Bank Guarantee: The Eligible Entities / REIAs shall be required to obtain a Bank Guarantee (BG) or Insurance Surety Bond (ISB) of the value equal to the VGF to be disbursed, prior to its release to the developer, as specified in the RfS. This BG / ISB shall be liable for encashment to recover the VGF amount in the event of non-fulfilment of the scheme conditions specified in the Bidding Documents. The BG/ ISB for VGF sanctioned up to COD shall be released within one year of COD. No BG/ ISB is required against the disbursement of the last tranche of VGF post completion of one year

of operation.

4. This issues with the approval of competent authority.

Yours faithfully,

(Vishal Kumar)

Under Secretary to the Government of India,
Email: usnre-mop@gov.in.

Copy for information to

1. Chairperson, CEA
2. CMD, Grid India
3. Sr.PPS to Secretary (Power)
4. Sr PPS to Addl Secretary (R&R)
5. PSO to CE (R&R)/ PA to Director (NRE), Ministry of Power