

STANDARD

SERVICE LEVEL AGREEMENT FOR

SERVICE AND MAINTENANCE OF DC PACKAGE OF CAPACITY

.....

IN THE 600 MW/ 1200 MWh BATTERY ENERGY STORAGE SYSTEM PROJECT

FOR 10 YEARS

AT

KOLIMIGUNDLA, NANDYAL DISTRICT, ANDHRA PRADESH

BETWEEN

..... **[Insert Name of BESS SUPPLIER]**

AND

SOLAR ENERGY CORPORATION OF INDIA LIMITED

..... **[Insert month and year]**

This Service Level Agreement (the "Agreement") is made on the[Insert Date] day of[Insert month] of[Insert year] at[Insert place]

between

..... [Insert name of the BESS Supplier] (CIN-_____), a Company incorporated under the Companies Act 1956 or Companies Act 2013, having its registered office at [Insert address of the registered office of BESS Supplier] (Hereinafter referred to as **“BESS Supplier” or “Supplier”**, which expression shall, unless repugnant to the context or meaning thereof, be deemed to include its successors and permitted assigns) as a Party of the **First Part**;

AND

Solar Energy Corporation of India Limited (CIN-_____), a Company incorporated under the Companies Act 2013, having its registered office at 6th Floor, Plate-B, NBCC Office Block Tower-2, East Kidwai Nagar, New Delhi-110023 (hereinafter referred to as **“SECI” or “Employer”** which expression shall, unless repugnant to the context or meaning thereof, be deemed to include its successors and assignees) as a Party of the **Second Part**;

The Supplier and SECI are individually referred to as ‘Party’ and collectively referred to as ‘Parties’

WHEREAS:

- A. SECI is developing a 600 MW/ 1200 MWh standalone utility Battery Energy Storage System (BESS) project (the "Project") located at Kolimigundla, Nandyal District, Andhra Pradesh;
- B. SECI had initiated a Competitive Bid Process for Selection of BESS Supplier for 600 MW/1200 MWh Battery Energy Storage System (BESS) on the terms and conditions contained in the Request for Proposal (herein after referred to as ‘RfP’ issued by SECI vide RfP No..... dated..... including its subsequent amendments and clarifications, if any.
- C.[Insert name of the Supplier] has been selected in the Competitive Bidding Process for Design & Engineering, Manufacturing, Testing at manufacturers works, Inspections, Packing and Forwarding, Supply, Receipt, Unloading and storage at site, services, permits, licences, installation and incidentals, insurance at all stages, erection, testing and commissioning and interconnection works till the PCS output terminals of the BESS for(Insert awarded capacity of DC Package), and performance demonstration with associated equipment and materials along with 10 (Ten) years maintenance agreement from the date of commissioning.

- D. SECI has issued the Notification of Award No..... dated.....in favour of the[Insert the name of Supplier] for the above mentioned work for 600MW/1200MWh Battery Energy Storage System Standalone Project in the State ofas per the terms and conditions contained in the RfP, and draft of this Service Agreement, including amendments and clarifications thereto circulated at the time of the bidding and other bidding documents as well as the conditions contained in the aforementioned Notification of Award.
- E. In terms of the RfP and the Bidding Documents, the Supplier has furnished the Performance Bank Guarantee/ Payment on Order Instrument/ Insurance Surety Bond in the sum of Rs.....in favour of SECI as per the format provided as a part of the Bidding Documents and a copy of the Bank Guarantee/ Payment on Order Instrument provided is in Schedule – 1/ Schedule – 2/ Schedule – 3 to this Agreement and shall provide a replacement CPG for Service and Maintenance Contract period as per the terms and condition of the RfP
- F. SECI has engaged a third-party contractor,[Insert name of BOS Contractor] (hereinafter referred to as "BOS Contractor"), to act as the Operations & Maintenance (O&M) Contractor for the Balance of System (BOS) i.e. entire Project, excluding the BESS components supplied by the Supplier;

Now therefore, in consideration of the premises and mutual agreements, covenants and conditions set forth herein, it is hereby agreed by and between the Parties as follows:

1 DEFINITIONS AND INTERPRETATION

1.1. Definitions

To ensure clarity and consistent interpretation throughout this Agreement, the following definitions apply:

“Acceptance Tests” or “AT”	The series of tests conducted at the Project site to verify that the BESS, after installation and commissioning, meets the agreed-upon technical specifications and performance guarantees. This typically includes Site Acceptance Tests (SAT) and Performance Acceptance Tests (PAT).
“AC Package”	RfP issued by the Employer for Supply, Installation, Testing, Commissioning of Balance of BESS Plant Facilities (i.e. excluding scope of supply of BESS Supplier under the DC Package)
“Agreement” or “Service Level Agreement” or “SLA”	shall mean this Service Level Agreement including its recitals and Schedules, Appendixes amended or modified from time to time in accordance with the terms hereof;
“Balance of System” or “BOS”	All project components and systems other than the core BESS, including but not limited to the substation, grid interconnection infrastructure (beyond the PCS output terminals), SCADA system, control room, site security, and general site civil works.
“Battery Energy Storage System” or “BESS”	The complete integrated system supplied by the Supplier, comprising battery modules/racks, power conversion systems (PCS), energy management systems (EMS), thermal management systems, fire suppression systems, containerized enclosures (if applicable), safety and auxiliary systems, associated balance of plant equipment, cabling, and all necessary interfaces for grid connection and operation.
“BOS Contractor”	<p>The third-party EPC and O&M contractor responsible for the Balance of System (BOS) for the Project, who will also be the main O&M provider for the overall Project.</p> <p>In case the Employer’s Contract with the third-party EPC and O&M contractor identified as such in the Agreement expires/is terminated during the currency of this Contract, the term shall refer to Employer/Employer’s representative wherever referred to in the</p>

	document, until the Employer notifies the appointment of another third-party Contractor for the O&M of Balance of System (BOS) for the Project. This Contract shall stand updated to identify the name of such third-party Contractor notified by the Employer.
“Commissioning”	The comprehensive process of energizing, functionally testing, tuning, and verifying the BESS's readiness for commercial operation. This includes all necessary interconnection works up to the PCS output terminals, culminating in the successful completion of Acceptance Tests
“Competent Court of Law”	shall mean any court or tribunal or any similar judicial or quasi-judicial body in India that has jurisdiction to adjudicate upon issues relating to this Agreement;
“Maintenance”	All scheduled (preventive) and unscheduled (corrective) maintenance, inspections, repairs, replacements (including parts and labor), and software/firmware updates required to ensure the BESS consistently operates at or above its guaranteed performance levels for the duration of the maintenance period. This specifically covers the battery cells/modules, containers, PCS, and EMS
“Consents, Clearances and Permits”	shall mean all authorizations, licenses, approvals, registrations, permits, waivers, privileges, acknowledgements, agreements, or concessions required to be obtained from or provided by any concerned authority for the purpose of setting up of the generation facilities and/ or supply of power;
“Contract Year”	shall mean the period beginning from the Effective Date and ending on the immediately succeeding March 31 and thereafter each period of 12 months beginning on April 1 and ending on March 31 provided that: (i) in the financial year in which commissioning of the first part capacity of the Contracted Capacity would occur, the Contract Year shall commence from the date of commissioning of first capacity and end on the immediately succeeding March 31, and thereafter each period of twelve (12) months commencing on April 1 and ending on March 31, and

	(ii)provided further that the last Contract Year of this Agreement shall end on the last day of the Term of this Agreement
“DC Package”	BESS Supplied by the BESS Supplier under the RfP
“Degradation Curve”	The agreed-upon graphical or mathematical representation outlining the expected natural decline in the BESS's usable energy capacity over time and/or cycle count under normal operating conditions
“Downtime”	Any period during which the BESS, or a critical component preventing its full functionality, is unable to deliver its rated power or energy due to a fault, malfunction, or required corrective maintenance not caused by the Employer or a Force Majeure event. Downtime begins from the time a fault is reported to the Supplier and ends when the BESS is restored to full operational capability
“Response Time (RT)”	The maximum time from the Employer's notification of a fault to the Supplier's initiation of remote troubleshooting or dispatch of personnel/resources
“Energy Management System (EMS)”	The intelligent control system, including hardware and software, responsible for monitoring, controlling, optimizing, and dispatching the BESS's charging and discharging cycles, ensuring efficient operation and integration with the grid or local loads.
“Expiry Date”	shall mean the date occurring as on ten (10) years from the Date of Commissioning.
“Mean Time To Repair” or “MTTR”	The average time taken to repair a failed BESS component and restore it to operational status after the diagnosis has been made
“Performance Guarantees”	The minimum operational specifications and degradation limits that the BESS is contractually obligated to meet throughout the comprehensive maintenance period, as detailed in Appendix A
“Power Conversion System” or “PCS”	The bidirectional inverter system responsible for converting DC power from the batteries to AC power for the grid/loads during discharge, and converting AC power from the grid/loads to DC power for battery charging. This includes all associated power electronics, controls, and protection systems

“Service Request”	A formal notification from the Employer to the Supplier detailing an issue, fault, or specific maintenance requirement related to the BESS
“State of Health” or “SoH”	A measure of the current maximum available energy capacity of the battery pack relative to its initial rated capacity, expressed as a percentage
“State of Charge” or “SoC”	The current energy level of the battery pack relative to its usable energy capacity, expressed as a percentage

2 OBJECTIVE

This Agreement defines the services and service levels for monitoring and maintenance of the BESS performance guarantees, ensuring reliability, and safety of the system supplied by the Supplier under the Supply Contract. The price quoted by the Supplier towards meeting the Supplier's obligations for the services and service levels identified under this SLA shall include all parts, labour, and travel expenses.

3 SCOPE OF WORK

The Supplier shall undertake the following scope of work, ensuring full compliance with all relevant international and local codes, standards, and best industry practices. Crucially, the Supplier shall actively coordinate with the BOS Contractor/Employer/Employer's representative at all stages to ensure seamless integration and project success:

3.1 Project Management & Coordination:

- 3.1.1 Appoint a dedicated Project Manager to serve as the primary point of contact for the BoS Contractor/Employer/Employer's representative.
- 3.1.2 Establish a clear communication protocol and single point of contact for interface management with the BOS Contractor/Employer/Employer's representative.
- 3.1.3 Conduct meetings with the Employer and BOS Contractor, as and when required, to align on Preventive/Corrective Maintenance schedules under this Agreement and resolve interdependencies during operation of the Employer's BESS Facilities.
- 3.1.4 Manage all interfaces with the BOS Contractor regarding civil, electrical, mechanical, data communication (from EMS to SCADA) and control system integration points as part of Maintenance Schedules under the SLA.

3.2 Establishment of Environment, Health and Safety Protocols

- 3.2.1 Coordinate with BOS Contractor for overall plant safety and security in an integrated manner.
- 3.2.2 The Supplier shall be solely liable for and, at its sole cost and expense, arrange for the removal, transportation, disposal, investigation, cleanup or other remedial action (in all cases by licensed, insured, competent and professional contractors in a safe manner and in accordance with Applicable Laws) of e-waste with respect to equipment supplied by the BESS Supplier under the Supply Contract.
- 3.2.3 The scope includes compliance with all applicable environmental regulations such as those prescribed under the Environment (Protection) Act, 1986, the Hazardous and Other

Wastes (Management and Transboundary Movement) Rules, 2016, the Central Pollution Control Board (CPCB) guidelines, Battery Waste Management Rules, 2022 and directions issued by the Ministry of Environment, Forest and Climate Change (MoEF&CC) from time to time. All hazardous substances/waste supplied under the Supply Contract shall be managed in compliance with these norms.

- 3.2.4 Maintenance of a copy of all approved Engineering documents including detailed AC/DC schematics, cable sizing, protection coordination, grounding, lightning protection, Container layouts, HVAC sizing, fire suppression system design, structural calculations for foundations and equipment mounting, detailed foundation designs, equipment pads, trenches, and fencing within the BESS footprint (up to the agreed demarcation points with the BOS Contractor), EMS architecture, network diagrams, communication protocols (e.g., Modbus, DNP3, IEC 61850) etc. for integration with Employer's SCADA via the BOS Contractor's control system.

All documentation shall be shared with the Employer/Employer's representative as and when required for routine Plant Operation.

3.3 *Maintenance Activities for Service Level Objectives*

- 3.3.1 The Supplier shall perform, as a minimum, following set of activities to achieve service level objectives as specified in this Agreement:

Service Component	Description
Preventive/ Scheduled Maintenance	Scheduled inspections and servicing as per OEM guidelines
Corrective Maintenance	Response to faults or failures, including component replacement
Performance Reporting	Annual reports on KPIs, energy throughput, availability, Schedules serviced and Actions taken etc.

3.3.2 Performance Reporting

The Annual Report shall include:

- Energy throughput (charge/discharge)
- Availability & downtime logs
- EMS alerts and alarm trends
- Preventive maintenance completed

- Any corrective actions taken
- Degradation metrics
- Year-to-date performance summary
- Capacity degradation report

3.3.3 Maintenance of Spare Parts:

The Supplier shall ensure availability of OEM recommended spare parts at site, (including but not limited to List of Mandatory Spares provided as Annexure to this Agreement) to ensure guaranteed system availability.

3.3.4 Permits & Licenses:

Assistance with, or direct procurement of (as mutually agreed), all necessary permits, licenses, approvals, and no-objection certificates from local, state, and national authorities required specifically for any additional BESS components necessitated during the terms of the SLA. Coordinate closely with BOS Contractor, who is responsible for overall project permits.

3.3.5 Training:

Provide comprehensive training to the personnels designated by on the operation, routine monitoring, safety procedures, and first-level troubleshooting of the BESS and its sub-systems (batteries, PCS, EMS).

4 SCOPE OF SERVICE AND MAINTENANCE UNDER THE SLA

The Supplier shall provide 10 (Ten) years of service and maintenance services for the entire BESS, commencing from the date of successful Commissioning. Maintenance services shall cover all aspects of the battery packs/racks/container, PCS, and EMS, ensuring optimal performance, reliability, and longevity. The Supplier shall coordinate all maintenance activities with the BOS Contractor to ensure minimal disruption to overall project operations.

4.1 Service Level Objectives

Service Area	SLA Metric	Target
BESS Availability	As per availability formula specified in this document	$\geq 98.0\%$
System Round Trip Efficiency	As per RtE formula specified in this document	$\geq 86\%$ at the PCS AC terminals including the Auxiliary Consumption
EMS Monitoring	Monitoring uptime	99 % uptime
Preventive Maintenance	Schedule adherence	100% adherence to PM schedule
Fault Response Time	On-site response (critical issue)	< 4 hours
Issue Resolution	Resolution of critical faults	< 24 hours
	Resolution of non-critical issues	< 48 hours
	Submission of RCA and corrective action taken report	Within 7 days of resolution of fault.
Reporting	Report delivery time	Within 5 business days of Year-end
Cybersecurity	EMS security audit frequency	Half yearly
	Patch/update implementation	Within 7 days of release

4.2 Preventive Maintenance (PM):

4.2.1 Scheduled Inspections: Regular, pre-scheduled on-site inspections of all BESS components.

4.2.2 The Supplier shall carry out Preventive Maintenance activities as per the recommendation of the OEM to ensure achievement of Service Level Objectives, as

specified in this document. The Preventive Maintenance Schedule, shall however, include at least following activities:

Frequency	Activity
Quarterly	Chiller/HVAC check, fire suppression system test, battery module checks
Bi-annually	Thermal imaging, electrical inspections, firmware/software updates
Annually	Comprehensive inspection and report, grid interface check; Environmental/Hazardous Substance and Waste Management

4.2.3 The detailed PM schedule (e.g., quarterly, semi-annual, annual) will be mutually agreed upon in Appendix B, with active input and coordination from the BOS Contractor.

4.2.4 Routine Servicing: Proactive servicing including:

- i. **Batteries:** Voltage balancing, impedance checks, thermal management system checks (coolant levels, pump function, filter cleaning/replacement).
- ii. **Containers:** Structural integrity checks, door/seal maintenance, ventilation system cleaning, fire suppression system checks (pressure, sensor calibration).
- iii. **PCS:** Fan cleaning/replacement, capacitor checks, busbar inspections, filter replacements, protection relay testing.
- iv. **EMS:** Hardware checks, cable integrity, sensor calibration, data storage verification.

4.2.5 Software & Firmware Management: Regular updates, patches, and security enhancements for EMS software and PCS firmware to ensure optimal performance, cybersecurity, and compatibility with evolving grid requirements. Coordinate these updates with the BOS Contractor to ensure compatibility with overall plant control systems.

4.2.6 Performance Optimization: Ongoing analysis of BESS performance data to identify opportunities for efficiency improvements and proactive adjustments. Share relevant performance data and optimization proposals with the BOS Contractor.

4.3 Corrective Maintenance (CM) & Repairs:

- **Fault Diagnosis:** Rapid and accurate remote and/or on-site diagnosis of any fault, malfunction, or abnormal behavior of the BESS or its sub-components. The BESS Supplier shall collaborate with Employer/Employer's representative for initial triage and data sharing.
- **Repairs & Replacements:** Full responsibility for all repairs and replacements of faulty, damaged, or degraded components, including:

- **Batteries:** Individual battery cells, modules, racks, or strings that fail to meet performance specifications or show excessive degradation beyond the agreed Degradation Curve. This includes removal of faulty components and installation of new ones.
- **Containers:** Structural repairs, sealing, insulation, paintwork, and full functionality of internal systems (HVAC, fire suppression, lighting, security).
- **PCS:** Repair or replacement of faulty inverter modules, control boards, power electronics, cooling systems, and communication interfaces.
- **EMS:** Hardware repairs, software debugging, network communication issues, and configuration errors.
- **Root Cause Analysis (RCA):** For critical or recurring failures, the Supplier shall conduct a thorough RCA and propose corrective and preventative actions. **RCA reports shall be shared with the Employer and BOS Contractor.**

4.4 **Battery Degradation Management:**

- The Supplier guarantees that the BESS will maintain its usable energy capacity in accordance with the Degradation Curve specified in Appendix A.
- If the BESS's usable energy capacity falls below the guaranteed Degradation Curve at any point during the 10-year maintenance period, the Supplier shall, at its own cost, implement corrective measures (e.g., augmentation, replacement of battery modules) to restore the BESS's capacity to meet or exceed the guaranteed level. **These measures shall be planned and executed in coordination with the BOS Contractor to minimize operational impact.**

4.5 **Spare Parts Management:**

- The Supplier shall be fully responsible for the procurement, inventory management, and timely availability of all necessary spare parts required for the scope of maintenance under the SLA, minimizing Downtime. This includes the cost of all spare parts required for repairs and replacements under this Agreement.
- A critical spare parts list and availability commitments shall be detailed in Appendix C. **The Supplier shall inform the BOS Contractor of critical spare parts movements to ensure site security and readiness.**

4.6 **Remote Monitoring & Support:**

- Provide 24/7/365 remote monitoring of the BESS performance, alarms, and status.
- Remote troubleshooting and diagnosis capabilities to resolve issues without on-site intervention where possible.
- A dedicated technical support hotline/portal for the **Employer and BOS Contractor's O&M team.**

4.7 **Reporting & Documentation:**

- **Annual Performance Reports:** Detailed reports on BESS performance (Availability, energy throughput, efficiency, SoH trends), maintenance activities performed (preventive and corrective), resolved issues, and identified anomalies. **Reports shall be provided to both the Employer and BOS Contractor.**
- **Maintenance Logs:** Comprehensive logs of all service requests, repairs, parts replaced, and resolutions. **Access to these logs shall be provided to the BOS Contractor.**
- **RCA Reports:** For critical failures, detailed reports outlining root cause, actions taken, and preventative measures. **Reports shall be provided to both the Employer and BOS Contractor.**
- **Documentation Updates:** Provision of updated operation and maintenance manuals, single-line diagrams, and software documentation as changes occur. **All updates shall be shared with the BOS Contractor for their O&M documentation.**

5 SERVICE LEVELS & LIQUIDATED DAMAGES

The Supplier commits to the following specific Service Levels for maintenance and support under the SLA, monitored against the metrics defined herein. All communication regarding service requests and fault notifications shall be routed through the BOS Contractor as the primary site O&M contact. The Supplier shall be liable for Liquidated damages to the Employer as specified in this document, on account of non-fulfilment of performance guarantees/service obligations by the Supplier under the SLA. These Liquidated Damages represent a genuine pre-estimate of loss and not a penalty.

5.1 Round-Trip Efficiency (RTE) Guarantee:

5.1.1 **Guarantee:** The BESS shall maintain a minimum annual AC-to-AC Round-Trip Efficiency of **86%, including Auxiliary power consumption**, measured at the PCS input/output terminals.

5.1.2 **Measurement:** Calculated based on energy throughput data at inverter AC terminals (Source: BESS EMS/SCADA), **jointly verified by Supplier and BOS Contractor**. In case of loss of data/data gaps in the BESS EMS/SCADA, energy throughput data shall be estimated from the MV Switchgear metering panel after accounting for cable losses from Inverter AC terminals to Switchgear.

5.1.3 **Liquidated Damages:** If the annual RTE falls below the guaranteed percentage, the Supplier shall pay the Employer liquidated damages, calculated quarterly, as follows:

$$P = \Delta E \times R$$

where:

$$\Delta E \text{ is } B \times \left(\frac{1}{\eta_{\text{actual}}} - \frac{1}{\eta_{\text{benchmark}}} \right)$$

B is the total energy scheduled for dispatch during the quarter.

$\eta_{\text{benchmark}}$ is the benchmark round trip efficiency ____%. (*Determined at the time of the commissioning (Refer Annexure B of the RfP document: Plant Commissioning, PG Test Procedure)*)

η_{actual} is the round-trip efficiency demonstrated during the quarter

R is the reference rate of Rs 4.5 per kWh (INR/kWh)

5.2 System Availability Guarantee:

5.2.1 **Guarantee:** The BESS shall maintain an annual Availability of not less than **98%**, where Availability is the percentage of hours that the BESS is available during the year. The availability guarantee shall begin upon facility commissioning and shall be calculated as follows:

$$\left[1 - \left(\frac{\sum \text{Accountable BESS Outage duration in hours} \times We}{8760} \right) \right] \times 100$$

where:

- Weightage is $\frac{\text{Outage Capacity}}{\text{Rated Capacity}}$ where Outage and Rated Capacity shall be in Energy terms, i.e MWh. Rated Capacity in a given year shall correspond to the daily throughput capacity guarantee for the beginning of the year.
- Accountable BESS outages are outages caused or necessitated by the BESS equipment that result in reduced capacity or loss of essential function of the BESS. These outages may be initiated by failure of components, loss of battery capacity (to the extent that End of Battery Life is not reached), operation of protective devices, alarms, or manual action. Such outages include both forced outages due to equipment problems and scheduled outages for BESS maintenance.
- Accountable BESS outage duration is the elapsed time of accountable BESS outages from the instant the BESS experiences reduced capacity or is out of service to the instant it is returned to service or full capacity. If the BESS experiences reduced capacity but is determined by the Employer to be available for service, even if the Employer elects not to immediately return the equipment to full capacity, such time will be discounted from the outage duration.
- The BESS shall be under an accountable outage if any of Procurement Specific ratings cannot be met. The BESS shall also be under an accountable outage if a scheduled (or required) charge cycle cannot be completed.
- The data required for assessment of the availability of the BESS shall be collected through the BESS EMS/Plant's integrated SCADA system.
- Grid Outage hours shall be subtracted from the total no. of hours in a year

The BESS shall be capable of unattended operation, with provision of remote monitoring and control.

5.2.2 **Liquidated Damages:** If annual Availability falls below the target, the Supplier shall pay the Employer liquidated damages, calculated annually, calculated as follows:

$$P = \Delta E \times R$$

where:

$$\Delta E \text{ is } B \times (A_{\text{guaranteed}} - A_{\text{actual}})$$

B is the total energy scheduled for dispatch during the Year

$A_{\text{guaranteed}}$ is the guaranteed availability as specified elsewhere in the document (refer Annexure B of the RfP: Scope of Works)

A_{actual} is the availability demonstrated during the Year

R is the reference rate of Rs 4.5 per kWh (INR/kWh)

5.3 Usable Energy Capacity Guarantee:

5.3.1 **Guarantee:** The BESS shall retain a minimum usable energy capacity (in MWh) in accordance with the Degradation Curve set forth in **Appendix A**.

5.3.2 **Measurement:** Capacity shall be measured annually through a mutually agreed capacity test cycle, **witnessed by the Employer and BOS Contractor**.

5.3.3 **Liquidated Damages:** If the measured usable energy capacity falls below the guaranteed Degradation Curve, the Supplier shall pay the Employer liquidated damages of **Rs. 8,000 per kWh** for the shortfall in capacity, or at the Employer's option, undertake augmentation/replacement of battery modules at no cost to the Employer to restore the guaranteed capacity within 90 days.

5.4 Response Time (RT) – Faults (*All types of faults*):

- **Notification:** Employer or BOS Contractor to notify Supplier immediately.
- **Target:** Remote diagnosis initiated within **2 hours** of fault notification (24/7/365), **coordinating site access with BOS Contractor**.
- **Penalty:** Rs. 1,000 per hour exceeding RT, up to a maximum of 10% of Annual SLA Contract Value.

5.5 Mean Time To Repair (MTTR)

Definition: Time from commencement of troubleshooting/on-site work to restoration of BESS to full operational status.

5.5.1 Critical Faults:

- **Definition:** BESS operation becomes a safety hazard due to electrical fault or fire incident, or critical component failure rendering the system non-functional. **Target:** **02 days** starting from the day of Fault notification (the day of notification to be included if fault is notified prior to 1200 hours noon).
- **Penalty:** Rs. 1,00,000 per day exceeding target time frame, up to a maximum of 10% of Annual SLA Contract Value.

5.5.2 Major Faults:

- **Definition:** Partial BESS operation, significant capacity outage (>20% capacity reduction), or recurring minor faults impacting reliability.
- **Notification:** Employer or BOS Contractor to notify Supplier.
- **Resolution Target:** **03 days** starting from the day of Fault notification (the day of notification to be included if fault is notified prior to 1200 hours noon).
- **Penalty:** Rs. 50,000 per day exceeding target time frame, up to a maximum of 10% of Annual SLA Contract Value.

5.5.3 Minor Faults/Routine Maintenance:

- **Definition:** Non-critical alarms, minor anomalies, or scheduled preventive maintenance activities.
- **Notification:** Employer or BOS Contractor to notify Supplier.
- **Resolution Target:** As per agreed PM schedule or within **10 business days** for minor corrective actions (the day of notification to be included if fault is notified prior to 1200 hours noon).
- **Penalty:** Rs. 10,000 per day exceeding target time frame, up to a maximum of 10% of Annual SLA Contract Value.

Note:

1. In case this service Level on account of a Critical Fault is met, penalty imposed, if any, on account of Clause 5.4 for the same Fault shall be waived.

The applicability of penalties on account of Response Time (Clause 5.4) and MTTR (Clause 5.5) shall be subject to the Contractor not meeting the System Availability Guarantees under Clause 5.2.

5.6 Reporting Timeliness:

- **Annual Performance Reports:** Delivered by the 30th business day of the following year.
- **RCA:** Reports for Critical and Major Faults shall be submitted by the Contractor within 4 weeks of the notification of Fault, failing which the Contractor shall be liable for a penalty of Rs. 1,000 per week, up to a maximum of 5% of Annual SLA Contract Value.

6 EMPLOYER'S AND BOS CONTRACTOR'S RESPONSIBILITIES

The Employer, and through the Employer, the BOS Contractor, shall provide necessary support and fulfil their responsibilities to enable the Supplier to perform its obligations effectively:

- 6.1 **Site Access:** The Employer shall ensure that the **BOS Contractor** provides the Supplier's authorized personnel and contractors safe, unrestricted, and timely access to the Project site and the BESS for all installation, commissioning, maintenance, inspection, and repair activities.
- 6.2 **Utilities:** The Employer shall ensure the availability of necessary auxiliary power, lighting and other utilities at the site as required for performance of Supplier's Responsibilities under this SLA, **including coordination with the BOS Contractor for these services.**
- 6.3 **Site Security:** The Employer shall ensure overall site security, including perimeter fencing and general access control to the Project site, through the **BOS Contractor**. The Supplier is responsible for the security of its work area and equipment during its work.
- 6.4 **Notification:** The Employer or **BOS Contractor** shall promptly notify the Supplier of any BESS faults, alarms, abnormal behaviour, or concerns via the agreed communication channels.
- 6.5 **Non-Interference:** The Employer and **BOS Contractor** shall not interfere with, modify, or attempt to repair the BESS or any of its components without the explicit prior written consent of the Supplier, except in cases of immediate danger or as otherwise agreed. Unauthorized intervention may result in the invalidation of warranties and comprehensive maintenance obligations for affected components.
- 6.6 **Information Sharing:** The Employer shall ensure that the **BOS Contractor** provides the Supplier with relevant information regarding grid conditions, dispatch instructions, and any changes in overall project operational requirements that may impact BESS performance or maintenance.
- 6.7 **Safety:** The Employer shall ensure its personnel and the **BOS Contractor's** personnel and contractors adhere to all safety guidelines and procedures provided by the Supplier and applicable site safety regulations.
- 6.8 **Operational Coordination:** The **BOS Contractor** shall coordinate with the BESS Supplier for all planned outages, operational schedules, and dispatch instructions relevant to the BESS, ensuring that the BESS operation aligns with the overall Project requirements and grid dispatch signals.

7 PAYMENT TERMS

- 7.1 **Maintenance Charges:** The comprehensive maintenance Charges for the 10-year period shall be as per the SLA Price Schedule submitted with the Financial bid enclosed as Annexure to this document.
- 7.2 **Invoicing & Payment:** Invoices for maintenance services shall be submitted by the BESS Supplier, on quarterly basis, and shall be payable by the Employer.
- 7.3 **Taxes:** All applicable taxes shall be borne by the party as per applicable law.

8 INSURANCE

- 8.1 **Comprehensive General Liability Insurance:** With a minimum coverage of Rs. 20 lakhs per occurrence, covering bodily injury and property damage arising from the Supplier's operations in course of servicing the SLA.
- 8.2 **Worker's Compensation Insurance:** As required by applicable law for all its personnel involved in the Project.
- 8.3 **Employer and BOS Contractor as Additional Insured:** The Employer and BOS Contractor shall be named as an additional insured on the Supplier's liability policies.
- 8.4 **Proof of Insurance:** The Supplier shall provide certificates of insurance to the Employer and BOS Contractor upon request.

9 INDEMNIFICATION

9.1 **Supplier's Indemnification:** The Supplier shall indemnify, defend, and hold harmless the Employer, BOS Contractor, its officers, directors, employees, and agents from and against all claims, liabilities, damages, costs, and expenses (including reasonable attorneys' fees) arising out of or in connection with:

- Any bodily injury, death, or damage to property caused by the Supplier's negligence, wilful misconduct, or breach of this Agreement.
- Any defects in the design, materials, or workmanship of the BESS components supplied by the Supplier.
- Any claims of infringement of intellectual property rights related to the BESS or services provided by the Supplier.

9.2 **Employer's/BOS Contractor's Indemnification:** The Employer shall ensure that the **BOS Contractor** (and the Employer, to the extent applicable) shall indemnify, defend, and hold harmless the Supplier, its officers, directors, employees, and agents from and against any and all claims, liabilities, damages, costs, and expenses (including reasonable attorneys' fees) arising out of or in connection with:

- Any bodily injury, death, or damage to property caused by the Employer's or **BOS Contractor's** negligence, wilful misconduct, or breach of their respective agreements related to the Project.
- Any claims arising from the operation of the BESS outside its design parameters or not in accordance with the Supplier's instructions, when such operation is controlled by the **BOS Contractor** or Employer.
- Any claims arising from components or systems outside the Supplier's scope of supply and work.

10 LIMITATION OF LIABILITY

10.1 General Limitation: Except for obligations of indemnification under Section 9, payment of liquidated damages as specified in section 5, or liability for gross negligence, fraud, or wilful misconduct, neither party shall be liable to the other for any indirect, incidental, consequential, special, punitive, or exemplary damages, including without limitation, loss of production, loss of use, loss of revenue, loss of profits, or loss of data, even if advised of the possibility of such damages.

10.2 Annual Maintenance Liability Cap: The total aggregate liability of the Supplier for all claims arising out of or in connection with the **maintenance services** under the SLA in any given maintenance year shall not exceed **100%** of the SLA Contract Value for that particular year.

10.3 Specific Exclusions: The limitations of liability in this Section shall not apply to:

10.3.1 Liabilities arising from the BESS Supplier's breach of its confidentiality obligations under this Section.

10.3.2 Liabilities for bodily injury, death, or damage to tangible property caused by the BESS Supplier's gross negligence or wilful misconduct.

11 FORCE MAJEURE

11.1 Force Majeure shall be dealt as per the terms and conditions mentioned in the RfP document.

12 CONFIDENTIALITY

12.1 Obligation: Both parties acknowledge that they may have access to confidential and proprietary information of the other party, including but not limited to technical specifications, designs, trade secrets, business plans, pricing, and operational data. Each party agrees to treat such information as strictly confidential. **The Employer shall ensure that the BOS Contractor also adheres to these confidentiality obligations regarding any confidential information of the Supplier shared with the BOS Contractor.**

12.2 Non-Disclosure: Neither party shall disclose, reproduce, or use the other party's confidential information for any purpose other than fulfilling its obligations under this Agreement, without the prior written consent of the disclosing party.

12.3 Exceptions: The confidentiality obligations shall not apply to information that: (a) is or becomes publicly available without breach of this Agreement; (b) was known to the receiving party prior to disclosure; (c) is independently developed by the receiving party

without reference to the disclosing party's confidential information; or (d) is required to be disclosed by law or court order, provided the receiving party provides prompt notice to the disclosing party to allow for protective measures.

12.4Survival: The obligations under this Section shall survive the termination or expiration of this Agreement for a period of five years.

13 TERM & TERMINATION

13.1Term: This Agreement shall commence on the Effective Date and remain in full force and effect for a period of **10 years** following the date of successful Commissioning, unless terminated earlier in accordance with the provisions herein.

13.2Termination for Cause: Either party may terminate this Agreement immediately upon written notice to the other party if:

- The other party commits a **material breach** of this Agreement and fails to cure such breach within **30 days** after receiving written notice thereof. A material breach includes, but is not limited to, persistent failure to meet service levels, non-payment of undisputed fees, or abandonment of the Project.
- The other party becomes insolvent, files for bankruptcy, enters into liquidation, or makes an assignment for the benefit of creditors.

13.3Effect of Termination: Upon termination, the parties' respective rights and obligations shall cease, except for:

- Payment obligations accrued prior to the termination date.
- Provisions that by their nature are intended to survive termination, including but not limited to Sections 5 (Service Levels and Liquidated Damages), 9 (Indemnification), 10 (Limitation of Liability), 12 (Confidentiality), 13.3 (Effect of Termination), and 14 (Governing Law & Dispute Resolution).
- The Supplier shall cooperate fully in the handover of documentation and any ongoing services as reasonably requested by the Employer **and BOS Contractor**.

14 GOVERNING LAW & DISPUTE RESOLUTION: Dispute Resolution shall be dealt as per the terms and conditions mentioned in the RfP document.

15 MISCELLANEOUS

- 15.1 Entire Agreement:** This Agreement, including its Appendices, constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior and contemporaneous agreements, understandings, negotiations, and discussions, whether oral or written.
- 15.2 Amendments:** Any amendment or modification to this Agreement must be in writing, specifically referencing this Agreement, and signed by duly authorized representatives of both parties.
- 15.3 Severability:** If any provision of this Agreement is held to be invalid, illegal, or unenforceable by a court of competent jurisdiction, the remaining provisions shall remain in full force and effect, and the invalid or unenforceable provision shall be replaced by a valid and enforceable provision that comes closest to the intent of the original provision.
- 15.4 Assignment:** Neither party may assign or transfer its rights or obligations under this Agreement, in whole or in part, without the prior written consent of the other party, which consent shall not be unreasonably withheld.
- 15.5 Notices:** All notices and other communications required or permitted under this Agreement shall be in writing and delivered personally, by registered mail (return receipt requested), or by reputable overnight courier, or by email with confirmation of receipt, to the addresses specified below:

For Employer: [Employer Company Name] [Employer's Address] Attention: [Name/Department] Email: [Email Address]

For Supplier: [BESS Supplier Company Name] [Supplier's Address] Attention: [Name/Department] Email: [Email Address]

For BOS Contractor (for information/coordination copies): [BOS Contractor Company Name] [BOS Contractor's Address] Attention: [Name/Department] Email: [Email Address]

Notices shall be deemed effective upon receipt.

- 15.6 Counterparts:** This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

15.7 Third-Party Beneficiary: For clarity, the BOS Contractor is acknowledged in this Agreement for coordination purposes. However, this Agreement does not create any third-party beneficiary rights for the BOS Contractor against the Supplier, nor does it create any direct contractual relationship between the Supplier and the BOS Contractor, unless explicitly stated otherwise or implied by the direct coordination obligations.

IN WITNESS WHEREOF, the parties hereto have executed this Service Level Agreement as of the Effective Date first written above.

[Employer Company Name]

By: _____

Name:

Designation and stamp:

[BESS Supplier Company Name]

By: _____

Name:

Designation and stamp:

Date:

APPENDIX A: TECHNICAL SPECIFICATIONS & PERFORMANCE GUARANTEES

This Appendix details the specific technical parameters and guaranteed performance levels for the BESS.

- **A.1 BESS System Design:**
 - Total Usable Energy Capacity:
 - Nominal Power Output (Charge/Discharge):
 - Maximum Power Output (Peak/Duration):
 - Minimum / Maximum Operating Temperature Range:
 - Expected Battery Chemistry:
 - Number of Cycles (Design Life):
 - Response Time (from dispatch command to full power):
 - Auxiliary Power Consumption (Standby/Operating):

- **A.2 Guaranteed Performance Parameters:**
 - **Usable Energy Capacity Degradation Curve:**
 - A detailed table or graph representing the guaranteed degradation curve as per Tender Specifications
 - **Round-Trip Efficiency (RTE):** Minimum ____ (AC-DC-AC) over a full charge-discharge cycle at nominal power, including Auxiliary Power.
 - **Availability:**

- **A.3 Component Specifications:**
 - **Battery Manufacturer & Model:** [Specify]
 - **PCS Manufacturer & Model:** [Specify]
 - **EMS Software Platform:** [Specify]
 - **Container Specifications:** [IP Rating, Fire Rating, HVAC capacity etc.]

APPENDIX B: PREVENTIVE MAINTENANCE SCHEDULE

(Shall be finalized prior to the commissioning of the project, however, must include below mentioned activities)

This Appendix outlines the detailed schedule for routine preventive maintenance activities.

- **B.1 Remote Checks:**
 - System health status, alarm monitoring, SoC/SoH, operating temperatures, communication links.
- **B.2 Quarterly On-Site Checks:**
 - Visual inspection of all external components, enclosures, cabling.
 - Cleaning of air filters for PCS and HVAC systems.
 - Verification of safety interlocks and emergency stop buttons.
 - Basic electrical connection integrity checks.
- **B.3 Bi-Annual On-Site Checks:**
 - All quarterly checks plus:
 - Detailed inspection of battery modules, racks for swelling, leaks, or damage.
 - Thermographic imaging of electrical connections and critical components.
 - Calibration of key sensors (voltage, current, temperature).
 - Check and top-up of coolant levels (if applicable).
 - Fire suppression system visual inspection and pressure checks.
- **B.4 Annual On-Site Comprehensive Maintenance:**
 - All previous checks plus:
 - Full functional test of PCS, including protection relay testing.
 - Full functional test of EMS, including data logging and control sequences.
 - Battery capacity test (every year or as required by degradation curve).
 - Detailed inspection of container integrity, seals, and paint.
 - Review of operating logs and performance data to identify trends.
 - Software/firmware updates.
 - Comprehensive safety review and risk assessment.
- **B.5 Planned Outage Allowance:** The Employer shall provide reasonable access for scheduled preventive maintenance, which shall be mutually agreed upon at least 30 days in advance with the **BOS Contractor**. System Availability Guarantee shall be calculated as per relevant Clause of the SLA.

APPENDIX C: CRITICAL SPARE PARTS LIST & AVAILABILITY

(Shall be finalized prior to the commissioning of the project, however, must include below mentioned activities)

This Appendix details the critical spare parts that the Supplier shall stock and make available to meet the specified MTTR targets. This shall be inclusive of, but not limited to Annexure GA: Mandatory Spares specified in the tender document.

- **C.1 On-Site Spares:** [List specific high-failure-rate, easy-to-replace components to be stored on-site by Supplier]
- **C.2 Regional/Central Warehouse Spares:** [List larger or less frequently replaced critical components, with committed delivery times]
- **C.3 Lead Times for Non-Stocked Spares:** For any critical spare parts not listed above, the Supplier commits to an expedited procurement and delivery process, with a target lead time of no more than ____ *(to be mutually agreed at the time of signing of the SLA)* from diagnosis.