Project: 100 MW (AC) Solar PV Project (160MWp DC capacity)

40MW/120MWh Battery energy storage system having 10 years of plant O&M

<u>ATTACHMENT – 2 (Rev 01): DECLARATION OF SYSTEM INTEGRATION AND SPARES/ SERVICES</u> SUPPORT

We hereby confirm that, we are an Original Equipment Manufacturer (OEM) of BESS and shall be solely responsible for Engineering, selection of components, erection, testing & commissioning, Performance demonstration, warranty and operation & maintenance requirements as per the stipulations of the tender requirements for 40 MW/ 120 MWh Battery Energy Storage System having 10 years of plant O&M.

We further confirm support/ availability of service, spares for a minimum of 10 years from the date of operational acceptance.

OR

We hereby confirm that, we are a system integrator with proven experience details as per Attachment – 1 (meeting the specified Qualification Requirement) and shall be solely responsible for Engineering, selection of components, erection, testing & commissioning, Performance demonstration, warranty and operation & maintenance requirements as per the stipulations of the tender requirements.

Further we have hereby enclosed the authorization letter from OEM for Engineering, selection of components, erection, testing & commissioning, Performance demonstration, warranty and operation & maintenance of 40 MW/ 120 MWh Battery Energy Storage System having 10 years of plant O&M.

We further confirm support/ availability of service, spares for a minimum of 10years from the date of operational acceptance. A Certificate from OEM is hereby enclosed for support of spares in this regard.

*Strike off if not Applicable

Enclosures:

- Details of the OEM for BESS.
- BESS OEM Authorization letter(Appendix to Attachment 2)
- OEM Certificate for support of spares for 10 years from the date of operational acceptance.

Seal & Signature of Bidder with Date
Business Address
Regd. Office Address

Project: 100 MW (AC) Solar PV Project (160MWp DC capacity)

40MW/120MWh Battery energy storage system having 10 years of plant O&M

Appendix to Attachment 2 (Rev 01): Manufacturer's Authorization (For BESS)

		Date: RFB No.:						
To:								
WHEREAS								
We	(OEM	Name	and	Address),	who	are	official	manufacturers
We of	(BESS Com	ponent l	Descri	otion),				
having factories at								
<i>Name)</i> to submit a Bid t			•					ufactured by us gotiate and sign
the Contract.								-
We hereby authorize M	/s ((Bidder	Name)	for Design	ı, Engir	neerin	g, Manuf	facture, Testing,
Supply, Erection & Com	missioning an	id O&M	for "	10MW/120	MWh E	Batter	y energy	storage system
having 10 years of plant	0&M for 100	MW (AC	C) Sola	r PV Project	: (160N	1Wp E	C capaci	ty) of M/s SECI".
We hereby confirm our minimum period of 10 ye	_				suppo	ort of	spares 8	& services for a
Note: The above OEM au			ovided	d for major l	BESS co	mpor	nents viz.,	. Battery & BMS,

ENIS and Power Conditioning System (PCS).

Seal & Signature of with Date **Business Address** Regd. Office Address

Project: 100 MW (AC) Solar PV Project (160MWp DC capacity)

40MW/120MWh Battery energy storage system having 10 years of plant O&M

ATTACHMENT - 4 (Rev 01): CERTIFICATE OF COMPLIANCE TO PROVISIONS OF BID DOCUMENT

1.	With reference to our Bid Proposal No	dated	for
	40MW/120MWh Battery energy storage system having 10 years of plant	0&M of 100 MW	/ (AC)
	Solar PV Project (160MWp DC capacity), we hereby confirm that all the	provisions of Bio	dding
	Documents read in conjunction with Amendment (s) / Clarification(s) / Ad	ldenda / Errata (if	f any)
	are acceptable to us and the same has been taken into consideration whil	e quoting our bid	price
	and we declare that we have not taken any deviation in this regard.		

2. We further confirm that any deviation / variation / additional conditions etc or any mention, contrary to Bidding Documents read in conjunction with Amendment (s) / Clarification(s) / Addenda / Errata found anywhere in our Bid Proposal, implicit or explicit shall stand unconditionally withdrawn, without any cost implication whatsoever to Employer.

Seal & Signature of Bidder with Date Business Address Regd. Office Address

Project: 100 MW (AC) Solar PV Project (160MWp DC capacity)

40MW/120MWh Battery energy storage system having 10 years of plant O&M

ATTACHMENT - 5 (Rev 01): TECHNICAL DOCUMENTS TO BE SUBMITTED ALONG WITH THE BID

- a. Bill of Quantities (To include minimum list of items as per Table-1)
- b. BESS System architecture drawing, EMS networking drawings.
- c. BESS Electrical SLD
- d. BESS Capacity calculations with formulas considering all applicable parameters. Calculations/ Data on BESS SoC, PCS/ PCU efficiency, round trip efficiency and throughput etc.,
- e. Technical write up/ data sheets/ Catalogues of cell/modules, sensors, transducers, Battery pack, PCS, EMS, HVAC, Fire Fighting, auxiliary systems, AC/DC Electrical panel of BESS.
- f. Applicable Test certificates and reports for all major BESS components as per Cl. 1.5.6 of Section C and Cl. 2.3 of Annexure III.
- g. Rating and type/ specification of BESS step up transformer, Protection and Metering equipment.
- h. Rating and type/ specification of MV/ LV switchgear, Protection and Metering equipment
- i. Rating and type/ specification of transformer breaker, Protection and Metering equipment
- i. BOQ of Instrumentation, Control and Power Cable
- k. Weights and dimensions of the BESS Equipment
- I. Battery disposal plan
- m. Mile stone completion schedule
- n. Site Organization, Construction schedule, contractor's equipment, personnel (*During Contract Execution*)
- o. Environment & Social Management Strategies and Implementation Plans (*During Contract Execution*)
- p. Code of Conduct for Contractor's Personnel (ES) (During Contract Execution)

Note: Other Documents that are required to be submitted for detailed engineering shall be finalized post award of the contract in consultation with customer SECI.

Clause.I: Extension in due-date up to 12.12.2020, 09:00 Hrs. IST and permitting submission of offer through email mode as well, to following mail-IDs: srinivasulu@bhel.in, sonal@bhel.in and mounishg@bhel.in.

Clause.II: The offer shall consist of following (minimum) details to be submitted in 3 separate folders:

Pre-Qualification Bid:

- 1. Attachment 1 (Rev 01) and associated annexures (PDF Page No 124 & 125 of 144/Corrigendum 1)
- 2. Attachment 2 (Rev 01) and Appendix to Attachment 2 (Rev 01) (Corrigendum 2)

Project: 100 MW (AC) Solar PV Project (160MWp DC capacity)

40MW/120MWh Battery energy storage system having 10 years of plant O&M

Techno Commercial Bid:

- 1. Attachment 3 Capabilities & Capacities
- 2. Attachment 4 (Rev 01)/ Corrigendum 2 Compliance certificate
- 3. Attachment 5 (Rev 01)// Corrigendum 2 Technical data to be submitted along with bid

Price Bid:

1. Price Schedule (Rev 01)/ Corrigendum 1

<u>Note</u>: The specification furnished includes overall specification for Project Solar + BESS. However, the scope of the pre bid tie up tender is applicable for BESS system only.

Further BESS Specific requirements can be found at following references

- 1. BESS Technical Specifications (PDF Pg 1 to 346 of 1526)
- 2. BOM for BESS (PDF Pg 1507 of 1526)
- 3. Special Commercial Conditions of Contract (PDF Pg. 1509 to 1526 of 1526)

Apart from the above, Bidder shall study and consider SECI specification requirements as applicable for BESS directly or indirectly.