Gotion

Technical Agreement of

ESC-R125-261-CE

All in one BESS

Gotion

Contents

1. General Principles

This technical agreement applies to_units of ESC-R125-261-CE project and sets out the technical requirements for the functional design, structure, performance, packaging, transportation, installation, and testing acceptance of the contracted equipment.

1. This technical agreement, confirmed by both parties, serves as a technical attachment to the purchase contract and has the same legal effect as the main text of the contract. In case of any inconsistency in technical content, this agreement shall prevail, and in case of any inconsistency in commercial content, the purchase contract shall prevail.
2. If SELLER does not raise any technical differences, and during the execution of the contract, the BUYER discovers that there are differences between the products provided by SELLER and the provisions of their technical documents, the BUYER has the right to demand that SELLER repair or replace them or return them if the purpose of the contract cannot be achieved, and hold SELLER responsible for breach of contract.
3. SELLER is responsible for the production and manufacturing of the equipment and is responsible for the quality and technical specifications of the equipment.
4. This technical agreement sets out the minimum technical requirements and does not specify all technical details, nor does it fully quote relevant standards and provisions. SELLER shall ensure to provide high-quality products and corresponding services that comply with this technical agreement and the latest industrial standards, and meet the mandatory national safety, environmental protection and other requirements.
5. Any matters not covered in this technical agreement shall be determined through consultation between BUYER and SELLER.
6. This agreement is made in duplicate, one for BUYER and one for SELLER. It shall come into effect together with the purchase contract after being signed and stamped by both parties.

2. Standards-compliant

The equipment and accessories provided by SELLER shall comply with the following standards.

The ESC-R125-261-CE complies with relevant IEC standards and the UN38.3 transportation certification requirements, the standards are as follows:

Table of relevant certificated

Standard	CELL	MODULE	SYSTEM
IEC62619	✓		✓
IEC62477-1			✓
IEC61000-6-2/4			✓
IEC 63056			✓
UN38.3	✓	✓	✓
UN3480	✓	✓	✓

The PCS (Power Conversion System) of the ESC-R125-261-CE equipment complies with the grid-connection certification standards of relevant regions of Europe, as follows:

Area	Standard	
Europe	EN50549-10，EN50549-1	✓
Europe	EN50549-2	✓
Europe	IEC61727，IEC62116	
Czech Republic	PPDS based upon EN 50549-1	✓
Germany	VDE 4110/VDE 4120/VDE 4105	✓
Sweden	EN 50549+deviation	✓
France	50549-1/-10	✓
Austria	TOR type A+R25	✓
Belgium	C10/11 type ABCD basedupon EN 50549-2	✓
England	England G99 Type ABCD	✓
England	England G100	✓
Italy	CEI 0-21，CEI0-16	✓
Netherlands	EN 50549+typeB+C+D	✓

Spain	RD1699/413/647 NTS Type B UNE 217002: 2020 UNE 217001:2020-10	✓

3. Operating Environment

3.1 Site overview

The station site of this project is located at The European region that meets the product's operation conditions . There are no adverse geological effects distributed in and around the site. The stratigraphic structure of the site is relatively simple.

3.2Geographical location of the site

The geographical location is suitable for installing this product, and the altitude is ≤ 2000m.

3.3Transportation conditions

Easy to transport equipment to the site.

3.4 Access system overview

The project is connected to a nearby substation with a voltage level of 400V, and there is currently no system connection report. The final access plan shall be subject to the approval opinions of the access system.

4. Technical Parameters of C&I BESS System

4.1Technical parameters of energy storage system

Schematic diagram of 261kWh All-in- One BESS

Table of 261kWh All-in-One BESS

Battery parameters			
1	Cell type	3.2V/314Ah	Lithium iron phosphate
2	Rated capacity of the system	261kWh	100%DOD
3	Battery voltage range	728—936V	95% DOD, single cell voltage range: 2.8-3.6
4	Original efficiency of battery pack	≥95%	
Communication side parameters			
1	Rated power on the AC side	125kW	
2	Initial system efficiency (ambient temperature 25 ℃)	≥86%	Full discharge/Full charge * 100%
3	Rated voltage on the AC side	400V	

4	Voltage range of power grid	-15%~+15%	
5	Adjustable range of power factor	-0.99-0.99	
6	Rated frequency	50Hz/60Hz±2.5Hz	
7	AC current distortion rate	＜3%	At rated power
8	DC component	＜0.5%	At rated power
System parameter			
1	Operating environment temperature range	-30—50℃	Derating above 45 ℃
2	Operating humidity range	0—95%	Non-condensing
3	PCS cooling method	Temperature controlled forced air cooling	
4	Working altitude	≤2000m	
5	Protection level	IP55	
6	Fire protection system	Cabinet level firefighting	
7	System communication interface	RS485, Ethernet*2	
8	System Communication Protocol	Modbus /MQTT	
9	Cabinet size	1120*1350*(2420±5)	Width * Depth * Height, (mm)
10	Anti - corrosion level	Cabinet enclosure C4M	

4.2 Energy storage battery rack parameters

Parameter Table of Liquid Cooled Battery rack

No.	Items	Technical parameter	Remarks
1	Rated capacity of battery rack (Ah)	314	25±2℃
2	Combination method	1P260S	
3	Nominal voltage (V)	832	260x (single cell voltage: 3.2V)
4	Recommended operating voltage range (V)	728—936	95% DOD, single cell voltage range: 2.8-3.6
5	Rated battery capacity of battery rack (kWh)	261	100%DOD
7	Charge/discharge rate (P)	0.5	
9	Storage Temperature Range	-30-60℃（cell temperature）	
10	Operating temperature range	0-50℃（cell temperature）	The liquid cooler is configured
11	Thermal management method	Liquid cooling	

4.3 Energy storage battery pack parameters

Schematic diagram of liquid cooled battery pack

Parameter table of liquid cooled battery pack

No.	Items	technical parameter	Remarks
1	Rated capacity (Ah)	314	25±2℃
2	Rated voltage (V)	166.4	Single cell voltage: 3.2V
3	Continuous charge/discharge rate (P)	0.5	
4	Recommended operating voltage range (V)	145.6-187.2	95% DOD, single cell voltage range: 2.8-3.6
5	Nominal Energy (kWh)	52.2	100%DOD,130V-189.8V
6	Dimensions (W * D * H) (mm)	(800±5)×(1152±5)×(237±5)	
7	Weight (kg)	≈340	
8	Thermal management method	Liquid cooling	

4.4 Energy storage battery cell parameters

Schematic diagram of liquid cooled battery cells

Parameter table of liquid cooled battery cells

No.	Items	Technical Parameter	Remarks
1	Rated capacity (Ah)	314	25±2℃
2	Rated voltage (V)	3.2	
3	Recommended operating voltage range (V)	2.8~3.6	95%DOD
4	Nominal Energy (Wh)	1004.8	25±2℃，100%DOD
5	Storage temperature range (℃)	-30~60℃	Optimal storage temperature 10 ℃~35 ℃
6	Dimensions (W * D * H mm)	(174.8±0.5)×(71.65±0.5)×(207.1±0.5)	
7	Battery weight (kg)	5.63±0.2	
8	Working temperature range (℃)	0℃～ 55℃	Charging temperature range
9	Humidity (%)	≤95%	non-condensing

4.5 BM Technical parameters of BMS

Main parameter table of BMS

Items	Technical indicators
Voltage sampling	When the single - cell voltage is less than 5V, the acquisition error is ≤ 0.005V, and the sampling period is ≤ 100ms. When the total cluster voltage is greater than or equal to 500V, the acquisition error is ≤ 1%, and the sampling period is ≤ 100ms.
Current sampling	When the cluster current is less than 200A, the acquisition error is ≤ 2A, and the sampling period is ≤ 50ms. When the cluster current is greater than or equal to 200A, the acquisition error is ≤ 1%, and the sampling period is ≤ 50ms.
Temperature sampling	When the battery temperature is in the range of -20℃ ≤ T ≤ 65℃, the acquisition error is ≤ 1℃, and the sampling period is ≤ 1s. When -40℃ ≤ battery temperature < -20℃, the acquisition error is ≤ 2℃, and the sampling period is ≤ 1s. When 65℃ < battery temperature ≤ 125℃, the acquisition error is ≤ 2℃, and the sampling period is ≤ 1s.
SOC calculation accuracy	≤5%
Function	Real time monitoring of battery status, charging and discharging current, voltage, and fault diagnosis functions. SOC estimation function High and low temperature management function Battery high and low voltage control Charge/discharge management
Charging overcurrent protection	Support
Discharge overcurrent protection	Support
Total voltage overvoltage protection	Support
Total voltage undervoltage protection	Support
Overcharge protection (individual voltage)	Support

Overdischarge protection (individual voltage)	Support
High temperature protection during charging	Support
Low temperature protection during charging	Support
High temperature protection during discharge	Support
Low temperature protection during discharge	Support
Balanced processing	passive
Communication method	CAN/RS485
Operating temperature range	-20-65 ℃

4.6 Main performance indicators of PCS

4.6.1 Main parameters

Main parameter table of PCS

DC Side Parameters		
DC voltage range	DC 600 V-1000 V	630V-950V (Full load)
Rated DC current	198 A	
Rated DC power	125 kW	
AC Grid-connected Parameters		
Rated power	125 kW	
Overload capacity	1.1	≤40℃
Rated voltage	AC 400 V	
Rated output current	180 A	
AC access method	Three-phase four-wire	
Grid voltage range	340-460 V	
Grid frequency range	50 Hz/60 Hz ± 2.5 Hz	
Total harmonic distortion rate of current	≤3% (full load)	
Power factor	-0.99-0.99	
Current DC component	≤0.5%	
Charge and discharge conversion time	<100 ms	
AC Grid-disconnected Parameters		
AC grid-disconnected voltage	AC 400 V	
AC voltage range	AC 400 V ± 3%	
AC grid-disconnected frequency	50 Hz/60 Hz	
Grid-disconnected output THDU	≤3% (linear load)	
Unbalanced load capacity	100%	

Grid-disconnected multi-machine parallel	Support	Refer to Note 1 for the conditions of off - grid parallel operation. Refer to Note 2 for the off - grid and grid - connected applications.
DC side in parallel	Nonsupport	
Other Parameters		
Maximum conversion efficiency	≥99%	
Allowable ambient temperature	-30℃-60℃	> 45℃ derating
Allowable relative humidity	≤95%	
Noise	≤75 dB	
Protection grade	IP20	
Altitude	3000 m	>2000 m derating
Enclosure Dimensions	W 520 × H 240 × D 680 mm	Cabinet size
Weight	70 kg	
Cooling method	Forced air cooling	
Multi-module networking mode	AC side in parallel	
BMS communication interface	CAN	
EMU communication interface	485	
Communication with upper PC	Network interface	

Note 1:

125kW European standard PCS off-grid parallel condition as follows:

1. Off-grid parallel machine (AC side parallel machine supports 4 units).

2. PCS Modules need to use 485-1 for communication.

3. Multiple off-grid parallel machines should reserve corresponding power allowance (20%) under different working conditions.

Note 2:

The application instructions for the 125kW European-standard PCS in off-grid and grid-connected modes are as follows:

Application type	Scenario description	Carrying capacity
Off-grid application	Conventional linear loads such as resistive, inductive, capacitive, resistive - inductive, and resistive - capacitive loads.	Support. The sudden connection ratio of resistive loads can reach 100% of Pn. When the power factor is less than 0.8, the sudden connection ratio of loads is supported at 10% of Pn. When the power factor is greater than 0.8, the sudden connection ratio of resistive - capacitive and resistive - inductive loads is supported at 15% of Pn.
	Single-phase pure capacitive load	Not Supported.
	General conventional household lighting, induction cookers, fans, cutting machines, electric drills, water-cooled air conditioners, and computers.	Support. The maximum inrush current of the load shall not exceed the over - current protection threshold of the PCS output current (within 120% of the rated current).
	Electric motor load	Support. When there is a relatively large excitation current during startup, the conventional load - carrying capacity is below 1/6Pn of the equipment. The maximum inrush current shall not exceed the over - current protection threshold of the PCS output current (within 120% of the rated current).
	Uncontrolled rectifier type load (RCD) (such as inverter type loads, whose rectification may be uncontrolled rectification using	Support. When the crest factor (the ratio of the peak current to the effective current) is lower than 2, the load - carrying capacity is less than 50%. The higher the crest factor, the lower

	diodes/thyristors, etc.), only applicable to three - phase rectifier loads.	the load - carrying capacity. The maximum inrush current shall not exceed the over - current protection threshold of the PCS output current (within 120% of the rated current).
	Uncontrolled rectifier type load (RCD): Single-phase rectifier load	Support, the maximum peak current of the load cannot Exceeding the overcurrent protection threshold of PCS output current Value (within 120% of rated current).
Grid connected application	Loads such as electric furnaces and medium-frequency furnaces.	Not Supported The load will lead to poor power grid quality and unstable grid-connected operation.

4.6.2 Basic functions

1) The PCS converter realizes AC/DC conversion between the power grid and the battery, and completes bidirectional energy flow.

2) It adopts a three-phase four-wire topology and can control the single-phase, three- phase active, and reactive power.

3) It supports multi-machine parallel connections with good scalability.

4) It supports active and reactive power adjustment.

4.6.3 Advanced functions

The PCS cooperated with the EMU controller, enables the following advanced application functions:

1. Active power adjustment: The PCS module can adjust the active power output according to the control commands by the EMU controller, and the active power regulation does not exceed the range of the apparent power of the PCS module.

2. PCS module charging and discharging control function: the EMU controller can determine the charging and discharging state of the PCS module and the charging and discharging current according to certain control strategies and the battery information returned by the BMS; the PCS can receive and execute the charging and discharging instructions sent by the EMU controller, and it also can receive the BMS instructions.

3. Reactive power adjustment: The PCS module can adjust the reactive power output according to the control commands by the EMU controller, and the

reactive power regulation does not exceed the range of the apparent power of the PCS module.

4. The response characteristics when the frequency is abnormal: the inverter can withstand system frequency abnormalities to a certain extent.
5. PCS protection function: PCS provides real-time fault protection based on the voltage and frequency at the grid-connecting side and the operating status itself, including:

- Overvoltage and undervoltage protection of the power grid
- High and low frequency protection of the power grid
- DC overvoltage/undervoltage protection
- DC overcurrent protection
- DC polarity reverse protection
- AC overcurrent protection
- Overtemperature protection
- Phase loss protection
- Anti-islanding protection
- AC incoming phase sequence error protection
- Communication fault protection
- Protection for IGBT
- Cooling system protection
- Have emergency stop protection function
- Feedback the battery fault information protection based on BMS

4.7 Main indicators of EMU

4.7.1 Main parameters

Main parameter table of EMU

Technical parameter	
Motherboard size	196×150×30 mm
Monitor size(in)	10.1 in
Resolution ratio	1024*600
Touchscreen type	Capacitive touch
Power Voltage	6-33V、5W
Maximum power	10W
Work temperature	-40℃~+85℃
Installation Method	; Embedded installation of display screen and M3 screw fixation of motherboard;
Communication protocol	Modbus / MQTT
Motherboard interface	3-channel RS485 isolation interface; 3-channel RS232 interface; 1 channel 10/100M Ethernet interface; 6 DI inputs and 6 DO output points;

4.7.2 Main functions

1. The EMU system has various independent functional modules, such as real-time data acquisition, data management, data export, event and log management, etc.
2. The real-time data acquisition module of the monitoring system mainly realizes the channel of data, including the upload of information, and supports various industry and international standard protocols, such as: Modbus protocol, etc.
3. The real-time display module of the monitoring system displays various real-time data of system equipment on the user interface.
4. The data query module of the monitoring system includes real-time data viewing, historical charge-discharge data viewing, and historical event viewing, which can view the operation of equipment and the faults, alarms and other event information that occurs at any time.
5. The monitoring system has an operation authority password management function. Any operation that changes the mode of operation and operating

parameters requires authority confirmation.

6. According to project requirements, it is equipped with functions such as peak-load shifting operation strategy, backup power strategy, demand control, load following, etc.
7. It has an event recording function. Modifications to operating parameters, battery management unit alarm information, protection actions, charging and discharging start times, etc. should all be recorded, and the time record should be accurate to minute. The event record should have a power-off retention function. Each alarm record should include alarm time and alarm equipment.
8. It can display or upload the information necessary to ensure the safe and reliable operation of the system, such as related set values, analog measurements, event records, and alarm records, etc.

4.8 Main indicators of fire fighting

4.8.1Explosion venting panel

When pressure rises, the explosion vent opens at the defined breaking point and releases pressure out of the vessel into the surrounding area.

4.8.2 Parameters of explosion venting panel

Main parameters of explosion venting panel

Technical data	
Standard burst pressure Pstat	0.1 bar
Max. permitted operating pressure	50 % of Pstat
Temperature	– 40 ~ 180 °C (– 40 ~ 356 °F)
Material	Stainless steel
Gasket material	FDA approved silicon gasket
Tolerance	± 20 % at standard burst pressure
Process	Pulsating/non-pulsating
Standard vacuum resistance	50 % of set pressure at non-pulsating processes
Recommended torque for M10 screws	20 Nm

4.8.3 Aerosol gas fire suppression system

The aerosol gas fire suppression system uses a submerged method for extinguishing fires. It is equipped with an aerosol fire suppression system in the battery compartment. When the relevant detectors detect the occurrence of a fire, the aerosol gas fire suppression system will automatically activate to spray and extinguish the fire.

4.8.4 Aerosol design parameter

1) Aerosol fire suppression design：100±10g/m³

2) Activation method: Temperature activation

3) Designed discharge time: ≤35s

4.8.5 Requirements for smoke detectors

1) Accuracy requirement：≤0.02dB/m

2) Protection area：60㎡

4.8.6 Requirements for heat detectors

1) Accuracy requirement：±2℃

2) Protection area：60㎡

4.8.7 Li-ion detector

1) Detected gases: Hydrogen/Carbon Monoxide/Volatile Organic Compounds

2) Operating temperature range：-10-60℃

3) Response time：≤5s

4.9 Liquid cooling system

Table of technical parameters

Items	Technical indicators
Rated voltage	220~240V 50/60Hz
Operating environment temperature range	-30°C -55°C
Storage environment temperature range	-40°C-70°C
Refrigeration capacity	5kW
Heating capacity	2kW
Circulating water flow	46.5L/min@60kPa
Weight	75kg
Noise	75dB (A) @1m
Anti - corrosion grade	C3M
IP level	IPX5 (whole chiller)
Unit size (W×D×H)	700 mm*900 mm*245 mm
Cooling input power	2.5kW@L35/W18
Heating input power	2.35kW@Tu=10℃
Communication mode	RS485

4.10 System external communication interfaces and protocols

Interface: 1*RS485, Protocol: Modbus -RTU;

Interface: 2*Ethernet, Protocol: Modbus - TCP / MQTT;

Performance Guarantee

The products provided by SELLER shall meet the promised technical requirements. If they do not meet the requirements, SELLER shall be responsible for repairing, replacing or handling the problematic materials or equipment in order to meet the operational requirements. During the defect liability period, if the complete set of equipment and components provided by SELLER fails, SELLER shall be responsible for repairing and replacing them.

Main performance guarantee (filled in according to the performance guarantee requirements of the project)

1. All equipment and spare parts provided by SELLER, including all accessories and equipment obtained from third parties, shall comply with industry standards, International Electrotechnical Commission (IEC) standards, and BUYER's enterprise standards.
2. After the battery is molded and clustered, the energy storage system is 0.5P, with an Rsoc of 50%, 25℃, and 95%DOD. It is charged and discharged once a day, and the SOH should not be less than 70% in the 10th year. After charging and discharging twice a day for 6,000 cycles, the SOH will not be less than 70%.
3. Lithium iron phosphate single cell batteries must comply with IEC 62619:2017 “Secondary cells and batteries containing alkaline or other non-acid electrodes - Safety requirements for secondary lithium cells and batteries', for use in industrial applications”， And provide corresponding testing reports, the battery module also needs to meet the performance requirements in this specification. The acceptance of this project shall be strictly carried out in accordance with the national and local acceptance standards and specifications for energy storage power stations.
4. The system is designed in such a way that the use of water as an extinguishing agent is neither advisable nor necessary.

Attachment 1: Scope of Supply

Supply List

SELLER shall provide BUYER with sets of integrated energy storage systems with a capacity of 125 kW/ 261 kWh. Internally integrated with lithium iron phosphate battery pack, energy storage bidirectional converter, BMS, EMU, control box, and equipped with temperature control system, fire protection system, auxiliary system, and cables.

Table of Supply List of Energy Storage System

No.	Name	Specification and model	UOM	Quantity
1	ESC-R1250-261-CE Integrated Industrial and Commercial Energy Storage System	Width * Depth * Height: 1120*1350*(2420±5)（mm）	Nos	1
1.1	Battery rack	Battery rack: 1P52S * 5S (832V, 261.2kWh) Battery pack: 1P52S (140.8V, 42.24kWh)	Nos	1
1.2	PCS	rated power：125kW	Set	1
1.3	Liquid cooler system	Including the liquid cooling unit and pipeline system, the pipeline system consists of multi-level pipelines and control valve groups	Set	1
1.4	Battery management system	Level 1 BMS (quantity: 5), Level 2 BMS (quantity: 1),	Set	1
1.5	Fire protection system	Including Lithium - ion battery detector, temperature sensors, smoke sensors, aerosol	Set	1

		fire suppression systems and explosion relief panels.		
1.6	Controller	Including EMU motherboard	Set	1
1.7	Serial port screen		Nos	1

Attachment 2: Quality Assurance, Inspection/Acceptance Specifications, and Maintenance

Quality Assurance, Inspection/Acceptance Specifications, and Maintenance

(1) General

1) This clause is used to inspect and perform performance acceptance tests on the equipment (including purchased equipment) provided by SELLER during the contract execution period, ensuring that the equipment provided by SELLER complies with the requirements of the technical agreement.
2) After the contract becomes effective, SELLER shall provide the monitoring and inspection standards related to the contract equipment in a timely manner according to BUYER's requirements. These standards shall be in accordance with the provisions of the technical agreement.
3) SELLER guarantees to BUYER that the supplied equipment is brand new. The design and material selection are accurate and free of errors, and the manufacturing process is free of defects and mistakes.
4) SELLER has effective methods to control the quality and service of all outsourced and purchased parts to meet the requirements of this specification.
5) During the quality assurance period, if any part of SELLER's product is damaged due to poor manufacturing or improper design or fails to meet the various indicators stipulated in the contract, the SELLER shall repair or replace the parts for the BUYER free of charge.
6) This technical agreement is only applicable to this supply.

(2) Factory Inspection

1) SELLER must strictly carry out inspections and tests of each production link in the factory.
2) The results of SELLER's inspection must meet the requirements of the technical agreement. If there are any discrepancies or if the standards are not met, SELLER must take action until the requirements are satisfied.

(3) Special Provisions

Buyer should plan the delivery schedule appropriately, ensuring that the equipment is fully integrated and grid-connected within 90 working days from the commencement of shipment. During the acceptance process, consideration should be given to the natural degradation that may occur due to on-site storage. In the event that the equipment cannot be grid-connected promptly (if the equipment is stored for more than three months), the Buyer should provide a

temporary power supply and the necessary conditions for charging and discharging to carry out a battery cell maintenance procedure.

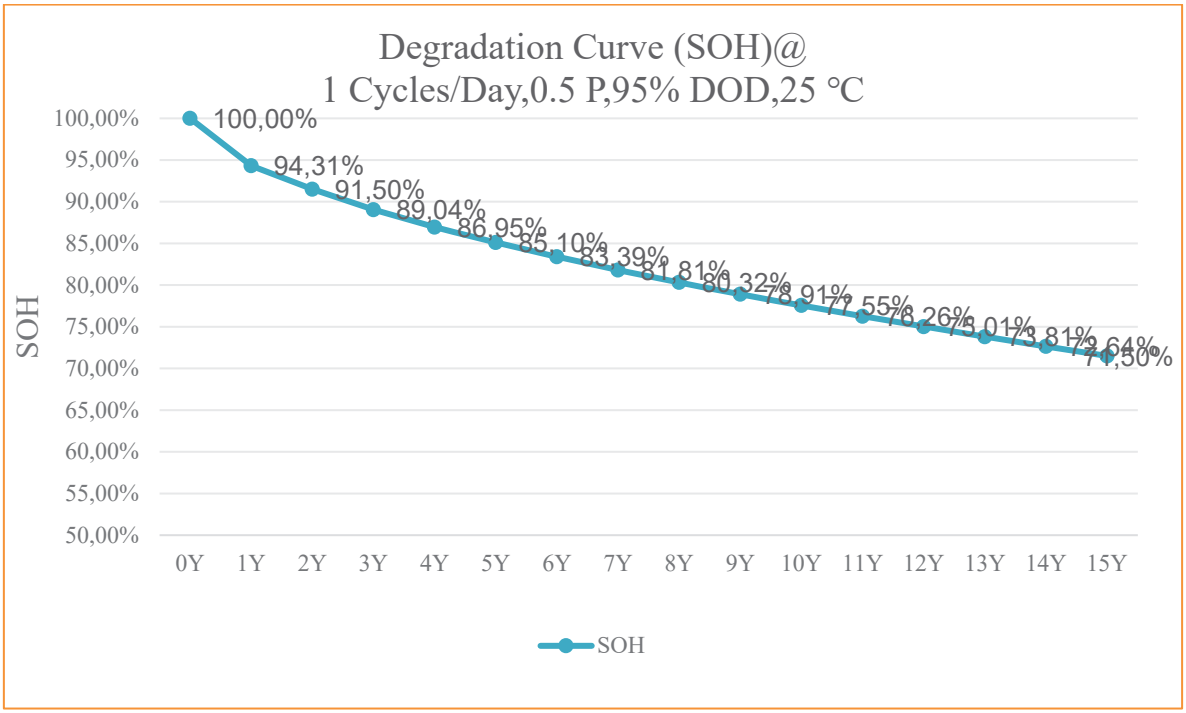
Attachment 3: SOH Curve

The following data is simulated data, only for reference values, not as a performance warranty requirements.

SOH data table A(1 cycle/day,95% DoD)

	A	B	C	D
Year	Months after Commissioning	Cycles	Depth of Discharge	Original Guaranteed SOH
0	0	0	95%	100.00%
1	12	365	95%	94.31%
2	24	730	95%	91.50%
3	36	1095	95%	89.04%
4	48	1460	95%	86.95%
5	60	1825	95%	85.10%
6	72	2190	95%	83.39%
7	84	2555	95%	81.81%
8	96	2920	95%	80.32%
9	108	3285	95%	78.91%
10	120	3650	95%	77.55%
11	132	4015	95%	76.26%
12	144	4380	95%	75.01%
13	156	4745	95%	73.81%
14	168	5110	95%	72.64%
15	180	5475	95%	71.50%

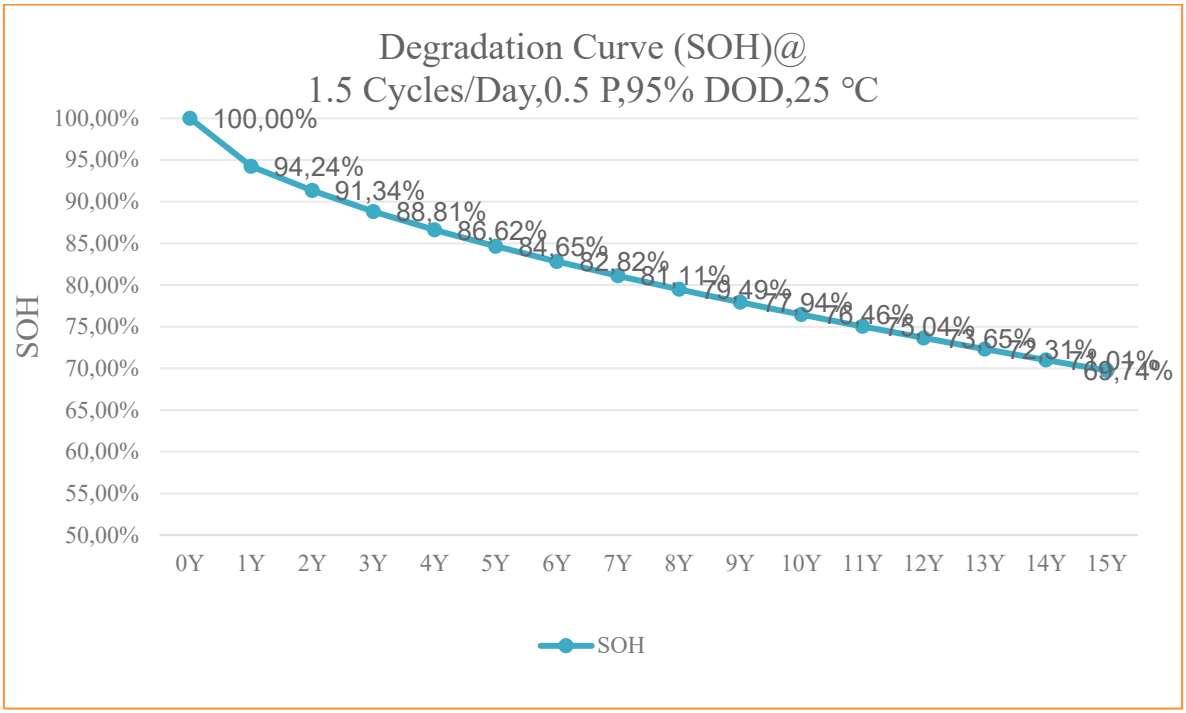
Chart A:Degradation Curve (SOH)@1 Cycle/Day,0.5P



SOH data table B(1.5 cycles/day,95% DoD)

	A	B	C	D
Year	Months after Commissioning	Cycles	Depth of Discharge	Original Guaranteed SOH
0	0	0	95%	100.00%
1	12	547.5	95%	94.24%
2	24	1095	95%	91.34%
3	36	1642.5	95%	88.81%
4	48	2190	95%	86.62%
5	60	2737.5	95%	84.65%
6	72	3285	95%	82.82%
7	84	3832.5	95%	81.11%
8	96	4380	95%	79.49%
9	108	4927.5	95%	77.94%
10	120	5475	95%	76.46%
11	132	6022.5	95%	75.04%
12	144	6570	95%	73.65%
13	156	7117.5	95%	72.31%
14	168	7665	95%	71.01%
15	180	8212.5	95%	69.74%

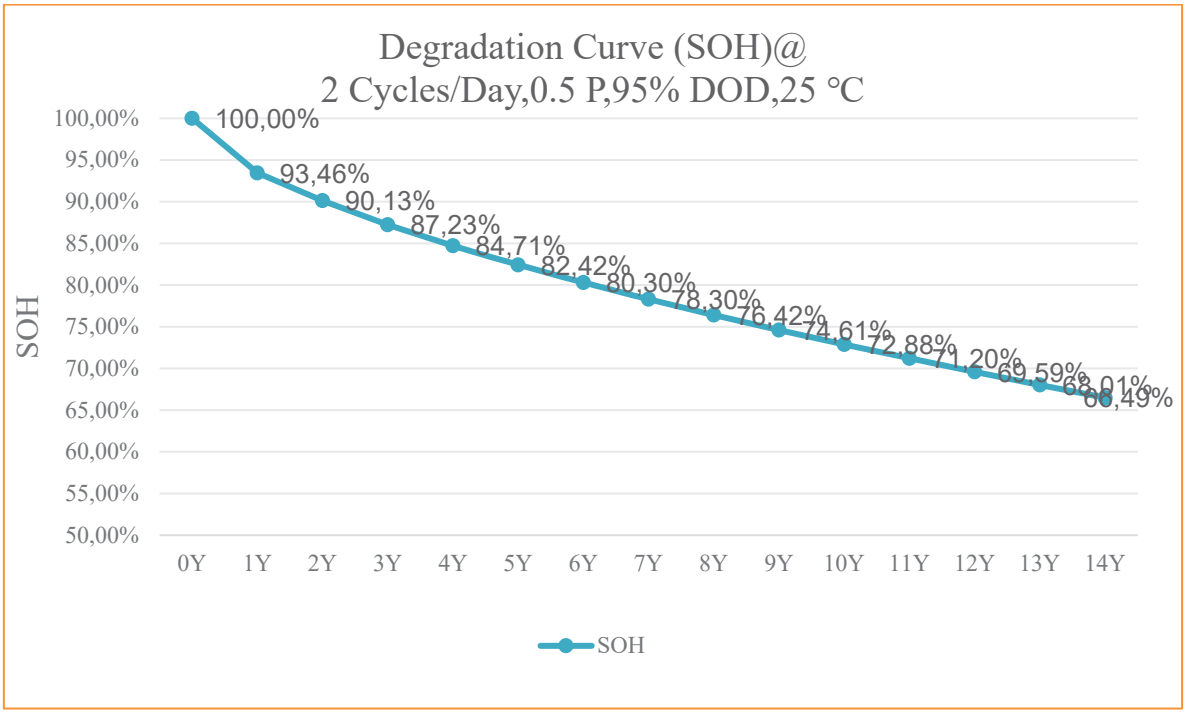
Chart B:Degradation Curve (SOH)@1.5 Cycles/Day,0.5P



SOH data table C(2 cycles/day,95% DoD)

	A	B	C	D
Year	Months after Commissioning	Cycles	Depth of Discharge	Original Guaranteed SOH
0	0	0	95%	100.00%
1	12	730	95%	93.46%
2	24	1460	95%	90.13%
3	36	2190	95%	87.23%
4	48	2920	95%	84.71%
5	60	3650	95%	82.42%
6	72	4380	95%	80.30%
7	84	5110	95%	78.30%
8	96	5840	95%	76.42%
9	108	6570	95%	74.61%
10	120	7300	95%	72.88%
11	132	8030	95%	71.20%
12	144	8760	95%	69.59%
13	156	9490	95%	68.01%
14	168	10220	95%	66.49%

Chart C:Degradation Curve (SOH)@2 Cycles/Day,0.5P



Remarks:

1) In the Chart-A ,the performance data conditions are 50% resting SOC, [0.5P], [95%] DOD, at a temperature of 25℃, with no more than 2 cycle per day and no more than 365 cycles per year;
2) In the Chart-B ,the performance data conditions are 50% resting SOC, [0.5P], [95%] DOD, at a temperature of 25℃, with no more than 2.5 cycle per day and no more than 547.5 cycles per year;
3) In the Chart-C ,the performance data conditions are 50% resting SOC, [0.5P], [95%] DOD, at a temperature of 25℃, with no more than 3 cycle per day and no more than 730 cycles per year;
4) Performance data calculations do not consider auxiliary consumption;
5) For the renovation of the energy storage power station involved in this project, as well as changes in the position of the battery container and the parallel connection method, it is necessary to seek the opinions of the seller in advance.

Attachment 4: Warranty Policy

1. Warranty Period

1.1 The Warranty Commencement Date shall be the earlier date between:

(a) The end date of commissioning on site, or

(b)Three (3) months after the products or devices arrive EU port.

1.2 The warranty period shall be three (5) years with respect to the battery system

1.3 The warranty period shall be five (5) years with respect to the PCS

1.4 The seller may provide the Buyer with paid lifetime service for the products or devices,

such as repairs or upgrade to its latest models after the expiry of the warranty period

provided that both sides reach an agreement on the matter.

2, Warranty Content

2.1, During the warranty period, the Seller shall be responsible for the quality and performance

of the products or devices. The seller has sole responsibility and discretion for determining

the cause and nature of the issues associated with the quality and performance. Upon the

receipt of the Buyer's written complaining notice with respect to quality or performance

issues, the Seller shall promptly give feedback on whether the complaint is accepted. If the

complaint is accepted, the Seller shall be based on the specific circumstances of the defects

or deficiencies, choose the appropriate method independently, at its own cost and expense,

repair the defects or deficiencies of the products or devices which occurred in the course of

normal use, to ensure that quality or performance issues can be solved timely.

2.2， The Buyer shall be responsible for additional costs arising from detailed analysis or third

party inspection if it disputes the decision of the Seller with respect to the cause and nature

of quality or performance issues.

2.3, The Seller may, for the purpose of convenience, appoint a third party to carry out repairing

service on its behalf, in which case the Seller shall notify the Buyer in writing, without the

Buyer's consent, however, the Seller shall be responsible for repairing activities and its

results of such third party.

2.4， In the process of the repairing, if any parts or components of the products or devices have

ceased the production or are no longer available, the Seller may, at its sole discretion,

choose to use the parts or components of different sizes, appearance and models provided

that they are compatible with the existing products or devices, and ensure that quality

requirements are met after repairing;

2.5， The Seller may, at its own discretion, take one or more measures as listed hereunder:

(a) Dispatch on-site service personnel (its employees, agents or authorized third party) to project site where the defective products or devices are located;

(b) Investigate the issue of the defective products or devices;

(c) Repairing the defective products or devices;

(d) Testing and repairing the defect units or parts in the place of the Seller or authorized third

party;

(e) Replace the products or devices, or supply additional products or devices to compensate the

loss of capacity；

(f) Reimburse the portion of loss capacity in accordance with the regulations of Supply Agreement.

2.6，The liabilities associated with this limited warranty are subject to the limits of liability set

forth in the Sales contract.

3, The Obligations of the Buyer

3.1，The products or devices must be used by the Buyer for its intended

purpose in compliance

with the specifications and within the environment prescribed in the Operations & Maintenance Manual furnished by the Seller. In addition, the Buyer shall spare no efforts to protect the products or devices against further damage if any defect has been identified.

3.2，The Buyer shall provide the Seller with necessary convenience for repairing activities, including but not limited to: arranging necessary downtime, providing the access, assigning

supporting personnel, providing tools and power, etc., and the Buyer shall not be entitled to

claim the fees arising from such convenience or the losses caused by the downtime of the products or devices against the Seller.

3.3，The Buyer shall be responsible for the safety of service personnel dispatched by the Seller

or the third party authorized by the Seller. Repairing site must be free from hazards or obstructions. Furthermore, all applicable safety precautions must be strictly implemented at

the site of repairing.

3.4，The Buyer shall provide the Seller with relevant information or reports as it is necessary and required by the Seller to validate the defect and implement the repairing, including but

not limited to:

(a) Ambient condition information such as temperature & humidity log data;

(b) Battery log data;

(c) Inspection or defect reports;

(d) Necessary photos or other forms of evidences.

3.5，If the failure reported by the Buyer is confirmed not to be defective or not within the scope

of the Seller or otherwise not covered by this warranty, the Buyer shall be responsible for

all associated expenses incurred to the Seller, which shall be fully paid in one-time payment

within thirty (30) days after the invoice has been issued by the Seller.

3.6，During the period of paid service, the service charge shall be fully paid in one-time

payment within thirty (30) days after the invoice has been issued by the Seller.

3.7，The replaced parts, components or products shall become the property of the Seller after the

repairing, in case that the Seller wish to retain them, the Buyer shall store them properly for

a reasonable period of time at the request of the Seller, if requested by the Seller, the Buyer

is obliged to send back the replaced parts for analysis.

4, Assignment

4.1，This limited warranty is for the sole and exclusive benefit of the Buyer and there are no

third party beneficiaries hereof. However, subject to prior written consent of the Seller, this entire limited warranty may be assigned in whole but not in part to any permitted successor

or the owner of the products or devices.

5, Special Provision

5.1, The Buyer and the Seller specifically acknowledge that, the United Nations Conventions on

Contracts for the International Sale of Goods (1980) shall not apply to this warranty or any

aspect of any dispute relating to this warranty.

6, Exclusions

6.1，This warranty does not cover any defect or performance deficiency caused by any of the

following events, including but not limited to:

(a) Daily operation and normal maintenance with respect to the products or devices are not

strictly conducted by the Buyer in compliance with Operations & Maintenance Manual

furnished by the Seller.

(b) Misuse, abuse, neglect with respect to the products or devices, or the products or devices

are exposed to hazardous or corrosive substances;

(c) Without written permission from the Seller, remove or re-installation at any location other

than the physical location in which it was originally installed by the Seller;

(d) The products or devices are repaired or altered by the Buyer or a third party

invited by the

Buyer without written permission from the Seller;

(e) Improper transportation, unloading or storage by the Buyer;

(f) The Buyer fails to comply with applicable laws or standards;

(g) The Buyer fails to comply with applicable product instruction, guidelines, warnings or

technical specification, etc.

(h) Damage to the products or devices triggered by the components or systems supplied by

others;

(i) A universally recognized event of force majeure;

(j) Conditions exceeding the voltage, wind, snow load specifications, and any other operational specifications;

(k) Power failure surges, telecommunication breakdown, grid outage or voltage spike;

(l) Damage from persons or biological activity;

(m) Flaws that do not adversely affect the proper functioning of the products or devices (e.g.

cosmetic defects);

(n) Fair wear and tear;

6.2，This warranty shall be void under the condition that serial numbers of the products or

devices have been altered, manipulated, or cannot be clearly identified;

6.3，All rights of the Buyer under this warranty policy are subject to full payment of the amount

due from the Buyer to the Seller;

6.4，The warranty set forth herein is the Seller’s sole warranty. All other warranties, expressed

or implied, including warranties of merchantability and fitness for a particular purpose, are

specifically excluded.