

雄安英利能源科技有限公司

电池储能系统质保书

**Battery Energy Storage
System Warranty**

目录 Contents

1 定义 Definitions	1
2 质保期 Warranty period	1
2.1 质保生效日期 Warranty commencement date	1
2.2 产品标准质保期限 Product standard warranty period	2
2.3 质保延长服务 Extended warranty service	2
2.4 责任免除 Disclaimer	2
3 质保范围 Warranty scope	2
3.1 质保范围内的设备 Equipment covered by warranty scope	2
3.2 非质保范围内的设备 Equipment not covered by warranty scope	3
4 质保服务 Warranty service	3
4.1 质保期限内的质保服务 Warranty services during the warranty period	3
4.1.1 远程支持 Remote support	3
4.1.2 免费维修/更换 Free repair or replace	3
4.1.3 现场支持 Local support	3
4.1.4 紧急支持 Emergency support	3
4.1.5 备件供应 Spare parts supply	4
4.2 非质保服务内容 Non-warranty service content	4
4.3 售后服务 After-sales service	5
5 质保限制 Warranty limit	5
5.1 存储限制 Storage limit	5
5.2 日常操作条件的限制 Limitations of daily operating conditions	6
5.3 SOH 限制 SOH limit	6
6 除外情况 Exclusions	7
7 设备转让 Equipment assignment	8
8 索赔 Claim	9

1 定义 Definitions

1) 场站: 指产品运行的区域;

Site: the area where the product is operated;

2) 买方/用户/业主/顾客/客户: XXXX;

Buyer/User/Owner/Customer/Client: XXXX;

3) 卖方/供应商/制造商: 雄安英利能源科技有限公司, 以下简称“雄安英利”;

Seller/Vendor/Manufacturer: Xiong'an Yingli Energy Technology co.,ltd, hereinafter referred to as "XAYL";

4) 质保期限: 指在按照用户手册和技术协议正常使用的情况下发生故障, 提供免费维修和更换服务的期限;

Warranty period: the period of time that warrant free repair and replacement services in case of defects occurred under normal operation that has followed user manual and technical agreement.

5) 产品质保: 指产品无缺陷和无不合格, 能在技术协议规定的条件下正常运行;

Product warranty: Product are free from defects and nonconformity and can operate normally under the conditions specified in the technical agreement;

6) 衰减: 指电池容量退化的过程或状态;

Degradation: the process or status of degrading of battery capacity;

7) **SOC:** State Of Charge, 指设备的充电状态, 即电池当前容量与电池最大可用电流容量之比, 以百分比表示;

SOC: State Of Charge, the charging state of the equipment, that is, the ratio of the current capacity of the battery to the maximum available current capacity of the battery, expressed as a percentage;

8) **SOH:** State of Health, 指设备的健康状态, 即电池当前的健康状态与其初始状态之比, 以百分比表示;

SOH: State of Health, the health state of the equipment, that is, the ratio of the current health state of the battery to its initial state, expressed as a percentage;

9) 标称功率: 指的是在充电或放电期间中输入或输出设备的额定功率。

Rated power: the rated power input or output of the equipment during charging or discharging procedure.

2 质保期 Warranty period

2.1 质保生效日期 Warranty commencement date

以下日期先到为准: (i)设备出厂后三(3)个月; 或(ii) 买方书面确认的设备完成SAT 的日期;或(iii) 合同规定的其他日期。

The following date shall come first: (i) three (3) months after the equipment is shipped; Or (ii) the date of completion of the SAT for the equipment as confirmed in writing by Buyer; Or (iii) such other date as may be specified in the contract.

2.2 产品标准质保期限 Product standard warranty period

表 2-1 标准质保期限

Table 2-1 Standard warranty period

产品名称 Product name	标准质保期限 Standard warranty period
电池储能系统 Battery Energy Storage System	5 年 5 Years
PCS 或 PCS 中压环网柜一体机（若适用） PCS or PCS MVTR RMU skid (if applicable)	5 年 5 Years
EMS（若适用） EMS (if applicable)	5 年 5 Years
SCADA（若适用） SCADA (if applicable)	5 年 5 Years

2.3 质保延长服务 Extended warranty service

在标准质保期结束前，买方可购买延长质保服务与 XAYL 签订新的服务合同或延长现有的服务合同。扩展的保修期和价格取决于储存/操作条件，必要时，买方应提供相关必要资料以供卖方评估。原则上，整个保修期从以上定义的开始日期继续延保。否则，购买时不提供保修服务。

Prior to the end of the standard warranty period, the buyer may purchase an extended warranty service to sign a new service contract with XAYL or extend an Existing service contract. The extended warranty period and price are subject to storage/operating conditions and, if necessary, the Buyer shall provide the necessary information for evaluation by the Seller. In principle, the entire warranty period continues from the commencement date defined above. Otherwise, warranty service is not provided at the time of purchase.

2.4 责任免除 Disclaimer

在服务合同规定的保修期满后，XAYL不再对储能系统内设备就软件提供任何质保服务，并免除法律责任和赔偿责任。

After the expiration of the warranty stipulated in the service contract, XAYL no longer provides any warranty services for the software of the equipment in the energy storage system, and is exempt from legal liability and compensation liability.

3 质保范围 Warranty scope

3.1 质保范围内的设备 Equipment covered by warranty scope

XAYL质保范围包括：电化学储能电池系统（包含集装箱内空调及液冷机组、消防及灭火系统、BMS等部件）、电源转换系统（PCS）、中压变压器(MVTR)，环网柜(RMU)，EMS(若适用)，SCADA（若适用）。具体的质保范围以买方实际购买的设备为准。

XAYL's warranty scope covers: Battery energy storage system (including air conditioner and liquid cooling unit in container, fire protection system and fire extinguishing system, BMS and other components), power conversion system (PCS), medium voltage transformer (MVTR), ring main unit (RMU), EMS (if applicable), SCADA (if applicable). The specific warranty scope is subject to the equipment actually purchased by the buyer.

3.2 非质保范围内的设备 **Equipment not covered by warranty scope**

以下器件/部件不在XAYL质保范围内，包括电池簇架、安装附件、安装工具、保险丝、避雷器、过滤网（棉）、集装箱/电池柜机械部件、集装箱/电池柜附件如内部电缆、急停按钮和密封条等。

The following devices/components are not covered by XAYL's warranty scope, including battery cluster racks, installation accessories, installation tools, fuses, SPD, air filters (cotton), container/battery cabinet mechanical components, container/battery cabinet accessories such as internal cables, emergency stop button and sealing strip, etc.

4 质保服务 **Warranty service**

4.1 质保期限内的质保服务 **Warranty services during the warranty period**

4.1.1 远程支持 **Remote support**

用户可通过邮件报告故障，XAYL 通过远程支持进行初步故障排查和指导。在质保期内依据业主要求，可免费对系统软件升级。

Users can report faults via email, and XAYL provides initial troubleshooting and guidance via remote support. According to the requirements of the owner, the system software can be upgraded for free during the warranty period.

4.1.2 免费维修/更换 **Free repair or replace**

在质保期内，产品内各部件因制造不良或设计不当而发生损坏或未能达到合同规定的各项指标时，XAYL无偿地为买方修理或更换上述零部件，直至解决设备故障。

During the warranty period, if any part of the product is damaged due to ill manufacturing or improper design or fails to meet the targets specified in the contract, XAYL will repair or replace the parts as above for the buyer for free until the equipment fault is resolved.

4.1.3 现场支持 **Local support**

售后服务人员24小时内响应，到达现场后保证在48小时内解决问题或将系统故障级别降低到一般故障之内。

After-sales service personnel respond within 24 hours, and ensure that the problem is solved within 48 hours after arriving the site or the system fault level is reduced to a general fault.

4.1.4 紧急支持 **Emergency support**

卖方制定应急预案，确保在各种情况下快速响应和处理，并根据故障等级评估结果提供不同的应急预案。三级故障（轻微）时，卖方提供全天候远程在线技术指导，一级故障（严重）时，提供紧急现场支持服务。

The seller will formulate emergency proposals to ensure rapid response and treatment under various circumstances, and provide different emergency proposals according to the evaluation

results of the fault levels. The seller will provide all- weather remote online technical guidance for level 3 fault (slight), and provide emergency on-site support service for level 1 fault (serious).

表4-1 故障等级及应急预案

Table 4-1 Fault levels and emergency proposals

故障等级 Fault levels	定义 Definitions	应急预案 Emergency proposals
一级 (严重) Level 1 (Serious)	系统停机或严重安全隐患 System shutdown or serious security risks	紧急停机保护，远程支持及本地团队/跨国差旅协同，优先更换部件，24 小时内工程师无法抵达现场则联系业主协商并制定最快速差旅处理计划。售后服务人员到达现场后保证在 24 小时/48 小时内解决问题或将系统故障级别降低到一般故障之内。 Emergency shutdown protection, remote support and local team/international travel coordination, priority replace the parts, contact the owner if the engineer cannot arrive at the site within 24 hours to negotiate and make the fastest travel handling plan. After the service personnel arrive at the site to ensure to solve the problem or reduce the system fault level to level 2 (general) within 24 hours /48hours
二级 (一般) Level 2 (General)	局部功能失效（如 PCS 效率降 20%） Partial function failure (e.g. PCS efficiency decreased by 20%)	远程支持团队和本地团队协同，72 小时内修复或提供临时供电方案。 Remote support team and local team work together to repair or provide temporary power solutions within 72 hours
三级 (轻微) Level3 (Slight)	参数异常或轻微告警（如 SOC 偏差） Parameter exception or slight alarm (such as SOC deviation).	远程支持调整参数，推送操作指南，48。小时内闭环。 Remote support to adjust parameters, submit operation guidance, closed loop. within 48 hours.

4.1.5 备件供应 Spare parts supply

在质保期限内，XAYL 提供的质保服务包含备件供应，根据项目体量提供足够的调试备件及售后备件，确保更换部件的质量和兼容性。

During the warranty period, XAYL's warranty service includes the supply of spare parts, providing sufficient commissioning spare parts and after-sales spare parts according to the project capacity to ensure the quality and compatibility of replacement parts.

4.2 非质保服务内容 Non-warranty service content

场（电）站常规性运维检修工作不属于质保服务内容。

The routine operation and maintenance works of the site (electrical station) are not parts of

the warranty service.

4.3 售后服务After-sales service

在质保期限外，XAYL 可提供售后服务，详见XAYL 售后文件。

Outside the warranty period, XAYL can provide after-sales service, as detailed in the XAYL After-Sales document.

5 质保限制 Warranty limit

5.1 存储限制 Storage limit

表 5-1 存储限制

存储周期 0~3 月	环 境 温 度 条 件 :	SOC 范围: 20%-50%
存储周期 3~6 月	-20°C~45°C	SOC 范围: 20%-50%
	环 境 温 度 条 件 :	
	5°C~35°C	
产品型号	从发货时间到实际 SAT 时间 (天)	SOH 能量保持率
Enprime-C	0	100%
	30	99.80%
	60	99.60%
	90	99.40%
	120	99.20%
	150	99.10%
	180	98.90%

Table 5-1 Storage limits

Storage period for 0~3 months	
Ambient temperature condition: -20℃~45℃	SOC range: 20%~50%
Storage period for 3~6 months	
Ambient temperature condition: 5℃~35℃	SOC range: 20%~50%

From shipping date to actual		
Product model	SAT date (Days)	SOH energy retention rate
Enprime-C	0	100%
	30	99.80%
	60	99.60%
	90	99.40%
	120	99.20%
	150	99.10%
	180	98.90%

备注：买方应接受储能产品的容量会因运输不当和储存时间过长而发生不可逆转的衰减，买方应尽快给产品上电。上电后 SAT 前，需要对储能产品进行一次完整的满充满放循环，回充系统 SOC 达到 30% 以上后进行存储，如果存储时间过长，应每三个月进行一次完整的满充满放循环，回充系统 SOC 达到 30%以上。

Note: The Buyer shall accept that the capacity of the energy storage product will decay irreversibly due to improper transportation and long time storage, and the Buyer shall provide power to the product as soon as possible. After power-on and before SAT, it is necessary to perform a complete full charge and discharge cycle for the energy storage product, and store it after recharge the system until the SOC reaches more than 30%. If the storage time is too long, a complete full and discharge cycle should be performed every three months, and recharge the system until the SOC reaches more than 30%.

5.2 日常操作条件的限制 Limitations of daily operating conditions

在任何情况下，设备的操作不得超过以下限制：不得以大于标称功率的功率值运行；当以标称功率充电和放电时，设备不得超过：(i)每个日历日平均一(1)个等效循环；每个日历日最多不超过两(2)个等效的完整循环；(ii) 每一个日历年最多不超过七百三十（730）个或相等的完整循环。(iii) DOD 最多不超过95%。

Under no circumstances shall the equipment be operated beyond the following limitations: it shall not operate at a power greater than the rated power; When charging and discharging at rated power, the equipment shall not exceed: (i) average one (1) equivalent cycle per single calendar day; Maximum no more than two (2) equivalent full cycles per single calendar day; (ii) Maximum no more than seven thirty (730) or equivalent full cycles per a single calendar year. (iii) DOD not exceeding 95% at most.

5.3 SOH 限制 SOH limit

当能量保持率（SOH）低于70%时，储能系统运行性能和安全无法保证，XAYL 将重新评估质保。

When the energy retention rate (SOH) is below 70%, the operational performance and safety of the energy storage system cannot be guaranteed, and XAYL will re-evaluate the warranty.

6 除外情况 Exclusions

本质保不涵盖由下列任何事件引起的缺陷或性能不足，包括但不限于：

This warranty does not cover any defect or performance deficiency caused by any of the following events including but not limited to:

1) 买方未严格依据卖方提供的说明/指南/手册/规范/铭牌对产品或设备进行运输、存储、安装、配置、操作、使用、和正常维护，必要时，买方应配合提供证明材料；

Buyer fails to transport, storage, install, configure, operate, use and maintain the products or equipment in strict accordance with the instructions/guidelines/manuals/specifications/nameplates provided by the Seller, the Buyer shall provide supporting materials when necessary;

2) 对产品或设备错用、滥用、或疏于管理，或使产品或设备接触有害或腐蚀性物质；

Misuse, abuse, neglect with respect to the products or devices, or the products or devices are exposed to hazardous or corrosive substances;

3) 未经卖方书面许可，将产品或设备从卖方最初安装的位置移动或重新安装；

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;

4) 由于买方疏忽、操作不当或故意破坏，造成 XAYL 电池储能系统硬件或数据的大规模损坏；

Large-scale damage of XAYL battery energy storage system hardware or data due to buyer's negligence, improper operation or intentional destruction;

5) 未经卖方书面许可，买方擅自或邀请第三方对产品或设备进行维修或更改；

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;

6) 买方不当的运输、卸载或储存；

Improper transportation, unloading or storage by the Buyer;

7) 买方未遵守适用的法律或标准；

The Buyer fails to comply with applicable laws or standards;

8) 买方未遵守适用的产品说明、指南、警告或技术规范等等；

The Buyer fails to comply with applicable product instruction, guidelines, warnings or technical specification, etc,

9) 由他方供应的部件或系统引发的产品或设备损坏；

Damage to the products or devices triggered by the components or systems supplied by others;

10) 由于连接器的工程质量问题，导致交流或直流连接器破裂、损坏或损坏；

Due to the engineering quality of the connector, the AC or DC connector is broken, damaged or damaged;

11) 买方基础设施问题直接造成的系统损坏；

System damage directly caused by buyer's infrastructure problems;

12) 普遍公认的不可抗力事件，如自然灾害，火灾，战乱等；

Generally recognized force majeure events, such as natural disasters, fires, war, etc.;

13) 超出电压、风、雪负荷规格和任何其他操作规格的条件；

Conditions exceeding voltage, wind, snow load specifications and any other operating specifications;

14) 电源浪涌、电信故障、电网中断或电压峰值；

Power surges, telecommunication failures, grid outages or voltage spikes;

15) 人为因素或生物活动造成的损害；

Damage caused by human factors or biological activities;

15) 不影响产品或设备正常运行的缺陷(如外观缺陷)；

Defects that do not affect the normal operation of the product or equipment (such as appearance defects);

16) 正常磨损；

Fair wear and tear;

17) 产品或设备的序列号被更改、操作或无法清晰识别；

The serial number of the product or equipment has been changed, manipulated or cannot be clearly identified;

19 在产品使用过程中，收到XAYL 的安全提示或整改通知后，未及时采取整改措施，未能消除安全隐患；

Failure to take corrective measures in time after receiving safety tips or rectification notices from XAYL during the use of the product, and failure to eliminate safety risks;

20 买方公司未在费用到期日之前向 XAYL 支付供应协议/采购订单中规定的任何保修延期或续期费用。

Buyer Company has not paid XAYL any warranty extension or renewal fee specified in the Supply Agreement/Purchase Order prior to the expiration date of the fee.

7 设备转让 Equipment assignment

本有限质保从属买方的专有权益，且不存在第三方受益人。但经卖方事先书面同意，该

有限质保可以全部而非部分转让给任何允许的继承者或产品或设备的所有者。

This limited warranty is subject to Buyer's exclusive interest and there are no third party beneficiaries. However, with Seller's prior written consent, this limited warranty may be transferred in whole but not in part to any permitted successor or owner of the product or equipment.

8 索赔 Claim

如果买方坚持发起保修索赔程序， 买方必须：

If Buyer insists on initiating warranty claim proceedings, Buyer must:

(a) 在检测到故障后30 天内以书面形式通知XAYL；

Notify XAYL in writing within 30 days of the detection of the fault;

(b) 提供系统序列号 、安装细节和问题描述。必须包含 XAYL 所要求的照片、视频和设备运行数据；

Provide the system serial number, installation details, and problem description. Must include photos, videos and equipment operation data as required by XAYL;

(c) 允许XAYL 或授权服务商在买方项目场站检查设备。根据XAYL 的要求，将故障部件运送到授权的XAYL 售后服务中心进行检测。

XAYL or authorized service providers are allowed to inspect the equipment at the Buyer's project site. According to XAYL's requirements, the faulty parts are shipped to an authorized XAYL after-sales service center for testing.

(d) 关于故障的责任认定， 以双方共同认可为准。

Liability determination for failure shall be subject to mutual approval by both parties.