

STATEMENT
ON
USD0.014/KWH/CYCLE
OF
NPS 3000Ah LiFePO4 BATTERY

Australia National Power Storage Pty Holding Ltd

Dec.2022

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of

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I .System Cost

Taking 1MWh energy storage system(PCS Exclusive) as an example, the cost of the system formed by NPS 3000Ah LiFePO4 batteries is USD156.99 thousand while that of the system with same capacity that consists of conventional 280Ah LiFePO4 batteries is USD 194.2 thousand, with a cost reduction of more than 18%. Our system is the lowest in cost in the world .

See below cost comparison table for details:

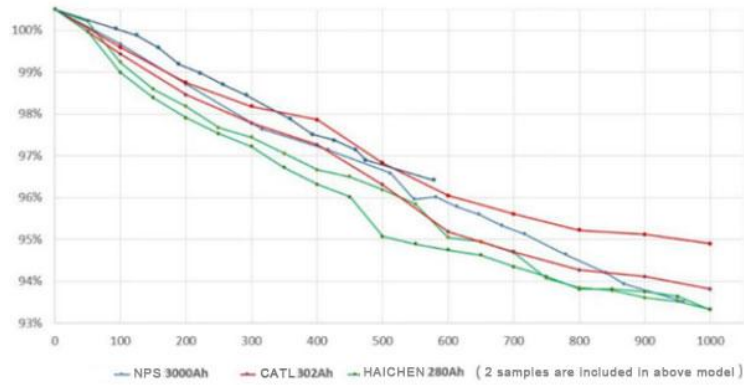
No.	Components	3000Ah (USD Thousand)	280Ah (USD Thousand)	Remarks
1	Battery Cell	136.7	90	The cost of 3000Ah battery cell is 5% higher than that of 280Ah battery
2	Battery Packs	0	-	System formed by 3000Ah batteries is packless while the system with same capacity formed by 280Ah batteries requires 64 packing boxes.
3	BMS	5.04	-	System consists of 3000Ah batteries has 128 cells while the system with same capacity formed by 280Ah batteries has 1152 cells, so the no. Of cells managed by BMS is much less.
4	10 feet container	8.63	-	Same cost
5	Temperature Control System	1.73	-	3000Ah battery reduces temperature through post terminal, which is higher in efficiency and lower in cost.
6	Fire Extinguishing System	1.58	-	3000Ah battery has a built-in fire extinguishing device,making it safer and lower in cost
7	Power Distribution Cabinet	2.88	-	Including high-voltage box, combiner cabinet, power distribution cabinet, same cost.
8	Accessories such as Cables, connectors	0.43	-	System formed by 3000Ah batteries require much less cables and connectors than system that consists of 280Ah batteries.
9	Total System Cost	156.99	135	The cost of energy storage system formed by 3000Ah batteries is CNY259,000 less than that of the system with same capacity that consists of 280Ah batteries, which is more than 18% less in terms of cost.

II . 11,000 cycles Calculation

1. Cycle life of NPS Battery Longer Than that of CATL and HITHIUM

28 units of NPS-A1 (3000Ah) LiFePO₄ battery produced by Australia National Power Storage Pty Holding Ltd were sent to the National Testing Center (Northern Automobile Quality Supervision, Inspection and Evaluation Laboratory) for type testing on February 20 this year. After nearly one year of testing, its longest 1000-cycle test has been completed. So far, all 19 test requirements of GB/T36276-2018 "lithium-ion battery for power storage" have been met, which means that NPS-A1 (3000Ah) has met all the requirements of obtaining the national type test report, marking that the world's largest LiFePO₄ battery will soon acquire the sales license in China.

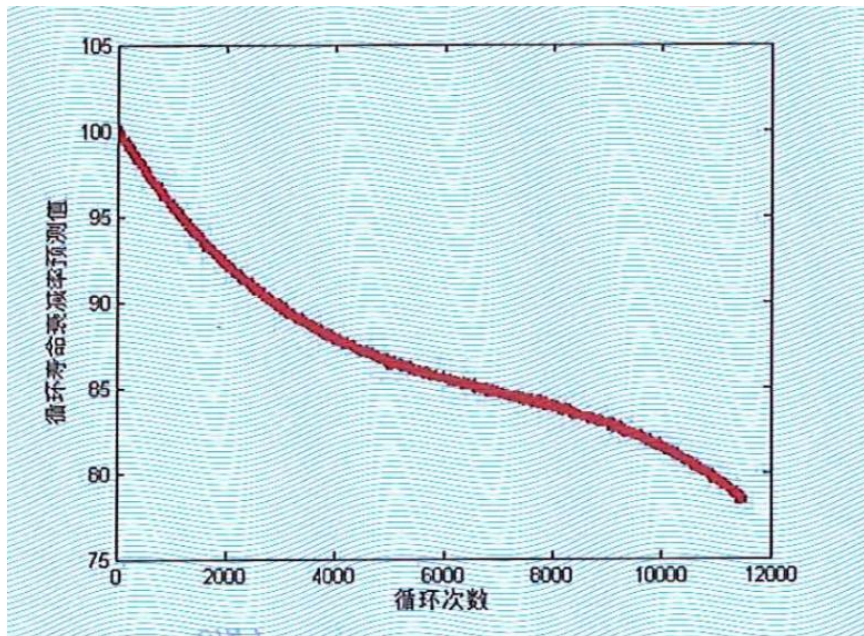
Compared with the type test report for 280Ah LiFePO₄ battery of CATL and HITHIUM, NPS 3000Ah high-capacity LiFePO₄ battery has the smallest loss after 1000 cycles and has the best performance. The supporting data of the aforesaid comes from the National Testing Center, thus proving that NPS 3000Ah high-capacity LiFePO₄ battery has longer cycle life than batteries of CATL and HITHIUM.



Data compare table of 1000 cycles type test based on standard GB/T36276

2. 11,000 Cycles (80% Capacity) Calculated by Third-party Laboratory

On December 12, 2022, NPS entrusted a third-party laboratory, Hefei Guangce Product Testing Institute, to test and analyze the cycle life of NPS-A1 (3000Ah) LiFePO4 battery. The analysis report (No. GC202212190020) issued by this lab shows that the theoretical cycle life of NPS-A1 (3000Ah) LiFePO4 sent for testing by NPS is 11,000 (@80% of nominal capacity).



Change Trend of Battery Capacity Decay Rate

III. Per KWh Per Cycle Cost

Per KWh Per Cycle Cost is the cost of energy storage system storing and discharging 1KWh of electricity, which is calculated mainly based on the production cost and cycle life of the energy storage system without considering other cost factors such as civil engineering, operation and maintenance for the time being.

The Per KWh Per Cycle cost of NPS energy storage system is:

$$\begin{aligned}\text{Per KWh Per Cycle Cost} &= \text{Production cost of 1MWh} \div 11,000 \text{ cycles} \div 1000 \text{KWh} \\ &= \text{USD156.8 thousand} \div 11,000 \div 1000 \\ &= \text{USD0.014/KWh/Cycle}\end{aligned}$$

IV. Attachments

Attachment 1: Type test report for NPS 3000Ah LiFePO4 battery

Attachment 2: Analysis report of cycle life for NPS 3000Ah LiFePO4 battery

Attachment 3: Abstract of type test report for Hithium 280Ah LiFePO4 battery