

STATEMENT
ON
USD0.016/KWH/CYCLE
OF
NPS 3000Ah LiFePO4 BATTERY

Australia National Power Storage Pty Holding Ltd

Feb.2023

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of

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I .System Cost

Taking 1MWh energy storage system as an example, the cost of the system formed by NPS 3000Ah LiFePO4 batteries is USD159.05 thousand while that of the system with same capacity that consists of conventional 280Ah LiFePO4 batteries is USD186.9 thousand, with a cost reduction of more than 14.9%. 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	137.9	130.6	The cost of 3000Ah battery cell (137.9thousand) is 5% higher than that of 280Ah battery (130.6 thousand)
2	Battery Packs	5.9	29.2	System formed by 3000Ah batteries requires 16 packing boxes while the system with same capacity formed by 280Ah batteries requires 64 packing boxes. In addition, the packing boxes of 280Ah battery requires more batteries, more complicated connection and higher cost.
3	Connecting Cable for Packs	2.2	5.8	3000Ah battery requires much less cables and connectors than 280Ah battery.
4	BMS	3.6	7.1	System consists of 3000Ah batteries requires 32 BMS while that of 280Ah requires 1120. so the no. Of BMS is much less.
5	Fire Extinguishing System	1.9	2.9	3000Ah battery has a built-in fire extinguishing device,making it safer and lower in cost
6	Heat Management System	1.7	2.3	System formed by 3000Ah batteries precisely and efficiently cool down the temperature, making it lower in cost.
7	Combiner Cabinet	-	1.7	System formed by 3000Ah batteries has high capacity which can provide large current directly. No need of combiner Cabinet.
8	Control Cabinet	1.4	1.4	
9	Lighting & Power Distribution System			The outdoor liquid-cooled container of system formed by 3000Ah

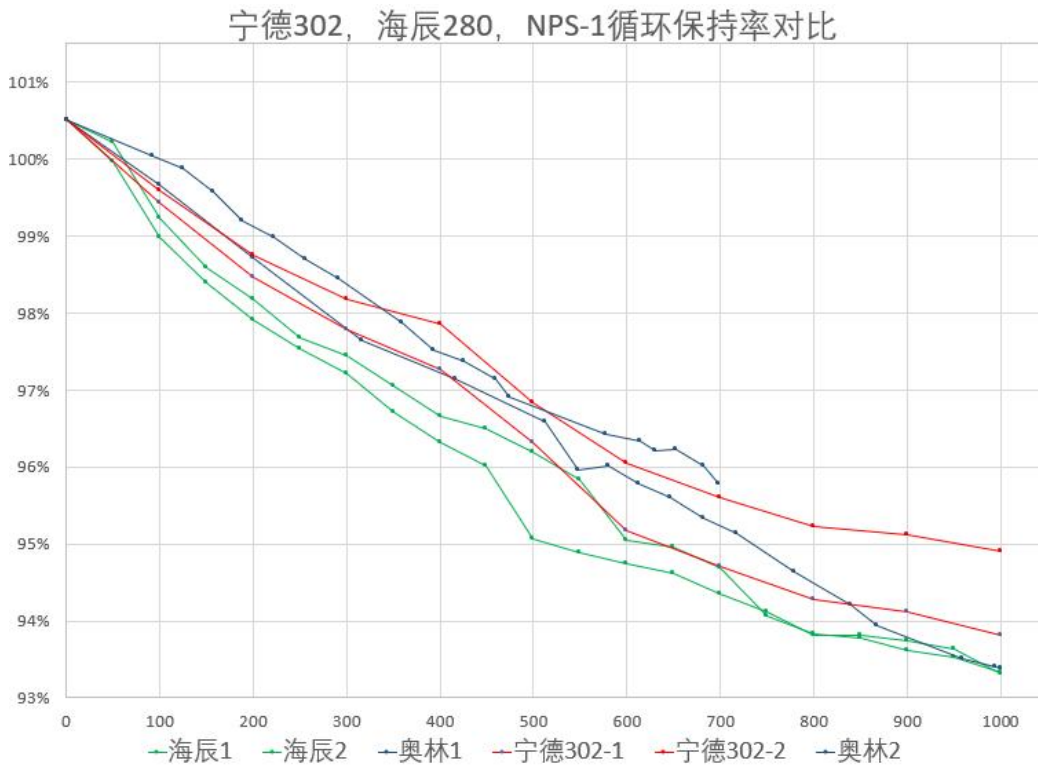
10	CCTV	4.4	5.8	batteries is made of metal plate instead of using preformed container, making it lower in cost.
11	Preformed Container & Other Accessories			
9	Total System Cost	159.05	186.9	The cost of energy storage system formed by 3000Ah batteries dropped by 14.9%.

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, 2022. 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.

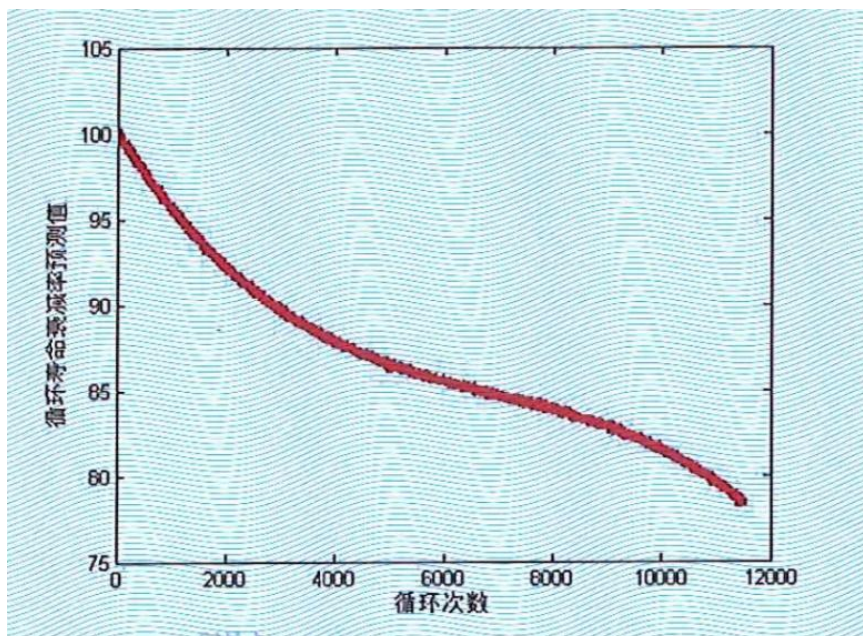
Compared with the type test report for 280Ah LiFePO4 battery of CATL and HITHIUM, NPS 3000Ah high-capacity LiFePO4 battery has the smallest loss after 1000 cycles and has the best performance. The supporting data of the aforesaid comes from the National Testing Center, thus proving that NPS 3000Ah high-capacity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



Cycle life retention rate comparison between CATL 302, HAICHEN 280 and NPS-1

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. The total cost of system of NPS is USD159.05 thousand. Considering attenuation of the battery and calculating based on median storage capacity of a battery during its lifetime, the Per KWh Per Cycle cost of NPS energy storage system is:

$$\begin{aligned}\text{Per KWh Per Cycle Cost} &= \text{Production cost of 1MWh} \div 11,000 \text{ cycles} \div 900 \text{KWh} \\ &= \text{USD159.05 thousand} \div 11,000 \div 900 \\ &= \text{USD0.016/KWh/Cycle}\end{aligned}$$

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