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**Guide for post evaluation of electrochemical energy storage
station**

电化学储能电站后评价导则

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part

1. Structure and drafting rules for standardization documents" Drafting. Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents. This document was proposed by the China Electricity Council. This document is under the jurisdiction of the National Energy Storage Standardization Technical Committee (SAC/TC550). This document was drafted by: State Grid Zhejiang Electric Power Co., Ltd. Electric Power Research Institute, China Electric Power Research Institute Co., Ltd., South Power Grid Technology Co., Ltd., China Energy Engineering Group Guangdong Electric Power Design Institute, Huawei Digital Energy Technology Co., Ltd., China Southern Power Grid Research Institute Co., Ltd., State Grid Shanghai Electric Power Company Electric Power Research Institute, Shanghai Electric Power Design Institute Co., Ltd., State Grid Zhejiang Electric Power Co., Ltd., China Southern Power Grid Energy Storage Co., Ltd., and State Power Investment Group Yunnan International Power Investment Co., Ltd. The main drafters of this document are: Li Peng, Zhang Xuesong, Hu Juan, Ma Yuhua, Liu Min, Lin Da, Zhong Guobin, Kong Piaohong, Zhao Bo, Xu Shouping, Ren Changxiang, Wang Xiangjin, Yang Fan, Fang Hongmiao, Wang Chao, Li Wei, Zhang Yu, Liu Huijun, Han Qian, Bai Hao, Wang Shuchao, Wang Qiangjie, Chen Man, Peng Peng, Zhang Limei. Guidelines for post-evaluation of electrochemical energy storage power plants

1 Scope

GB/T 43686-2024 is the Chinese guide to the post evaluation of an electrochemical energy storage station, that is the structured review carried out after the station has been built and run for a period, to establish whether it actually did what it was approved to do. China has installed grid storage at extraordinary speed and largely on projections; this document is the instrument for checking those projections against the record. It sets the content of the technical evaluation, the safety evaluation, the environmental impact evaluation and the benefit evaluation, the requirements on the data the evaluation uses and on the evaluation methods, and the form of the post evaluation conclusion. It applies to stations connected above 10 kV using lithium ion, flow, lead-acid and lead-carbon, sodium ion and hydrogen or fuel cell batteries as the storage carrier. For an owner, an investor, a grid company or a regulator, it is the reference that decides whether a station is judged a success. It takes effect on 1 October 2024.

This document stipulates the technical evaluation, safety evaluation, environmental impact assessment, benefit evaluation, and post-evaluation conclusions of the electrochemical energy storage power station post-evaluation. Evaluation content requirements, as well as evaluation materials, evaluation methods, etc. This document is applicable to grid-connected batteries with voltage levels above 10kV and powered by lithium-ion batteries, flow batteries, lead-acid/lead-carbon batteries, sodium-ion. Post-evaluation of electrochemical energy storage power stations using batteries, water electrolysis to produce hydrogen/fuel cells as energy storage carriers.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

GB/T 27748.1 Stationary fuel cell power generation system Part

3 Terms and definitions

The terms and definitions defined in DL/T 2528 and the following apply to this document.