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NB

**ENERGY INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

NB/T 11563-2024

**General rules for information classification and coding of
hydropower projects**

水电工程信息分类与编码通则

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Foreword

This document was issued on 24 May 2024 by the National Energy Administration of the PRC and takes effect on 24 November 2024.

It is a NB/T standard: recommended rather than compulsory, but it is the text a Chinese reviewer applies when assessing a submission.

It is classified under ICS 27.140, Chinese classification P 59.

This document was drafted in accordance with the rules given in GB/T 1.1-2020 Directives for standardization - Part 1: Rules for the structure and drafting of standardizing documents.

This document is the general rules of NB/T 11564 Information classification and coding of hydropower projects, and is the basic standard for the classification and coding of hydropower project information.

Please note that some of the content of this document may be the subject of patent rights. The issuing body of this document assumes no responsibility for identifying patents.

This document is administered by the National Energy Administration, was proposed by and is under the routine administration of the General Institute of Hydropower and Water Resources Planning and Design, and the Sub-committee on Hydraulic Structure Design of the Hydropower Investigation and Design Standardization Technical Committee of the Energy Industry (NEA/TC15/SC2) is responsible for the interpretation of the specific technical content.

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This document is issued for the first time.

1 Scope

NB/T 11563-2024 is the Chinese general rules for classifying and coding the information of a hydropower project, and it is the base standard of the NB/T 11564 series. It exists because a dam is a fifty to hundred year asset built and operated by a dozen organizations that never share a computer system, and because information that cannot be addressed unambiguously cannot be exchanged at all. Planning, survey, design, construction, operation and decommissioning each generate their own records, in their own software, under their own naming conventions; without an agreed identifier the same reservoir appears under three names, the same river under two spellings, and every handover becomes a manual reconciliation. This document fixes the identifiers. It divides project information into general information - country and region, administrative division, river, project type, project and project stage - and special information covering the fourteen disciplines from hydrology and sediment through hydraulic structures, electromechanical works, metal structures, construction organization design, land acquisition and resettlement, environmental protection, cost, construction, operation and maintenance, to safety and emergency. It then sets the coding rules, and they are concrete: a six digit river code, two digits for the drainage basin and river system and four for the river in sequence, so that the Yangtze is 360001; and a nine digit hydropower project code, one digit of project type, six digits that are the river code for a conventional station or the county administrative division code for a pumped storage station, and two digits of sequence. The worked examples are the real ones - the Xiluodu station is 136005520, being type 1 on river 360055, the Jinsha, in twentieth position from upstream; the Tianhuangping pumped storage station is 233052301, type 2 in Anji county 330523, first of its kind there. The coding is governed by five principles, of which the important one is extensibility: space is

reserved inside every code and existing codes never change when new objects are added, which is what makes the scheme survivable over the life of a dam. The bulk of the document is its normative annexes, and Annex A alone runs from page 5 to page 142: the code of every river in China. Annexes B to E give the project type codes, the codes of the large and medium sized hydropower and pumped storage projects, the project stage codes and the discipline identification codes. It was issued on 24 May 2024 by the National Energy Administration and took effect on 24 November 2024.

This document specifies the method of classifying and the rules for coding the information of hydropower projects, and gives the codes for general information.

This document applies to the classification and coding of information over the whole life cycle of a hydropower project: planning, design, construction, operation and decommissioning.

2 Normative references

The contents of the following documents constitute indispensable provisions of this document through normative reference in the text. For dated references, only the edition corresponding to that date applies to this document. For undated references, the latest edition, including all amendments, applies to this document.

GB/T 2260 Codes for the administrative divisions of the People's Republic of China

GB/T 2659.1 Codes for the representation of names of countries and regions and their subdivisions - Part 1: Country and region codes

GB/T 7027 Basic principles and methods for information classification and coding

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 classification

The process of distinguishing classification objects according to selected attributes or characteristics, and of grouping together those classification objects that share a common attribute or characteristic. [GB/T 10113-2003, definition 2.1.2, modified]

3.2 coding

The process of assigning a code to a thing or a concept. [GB/T 10113-2003, definition 2.2.1, modified]

3.3 code

A character or group of characters that represents a specific thing or concept. [GB/T 10113-2003, definition 2.2.5]

3.4 general information

Information that applies to every business field and every stage of a hydropower project, and that is not defined or produced by a single business field or a single stage.

3.5 special information

Information defined or produced by a single business field or a single stage of a hydropower project.

3.6 class

A collection of things or concepts having a certain common attribute or characteristic. [GB/T 10113-2003, definition 2.1.1]

4 Overall requirements

4.1 The classification and coding of hydropower project information shall comply with the provisions of GB/T 7027.

4.2 The classification and coding of hydropower project information shall be able to cover the whole life cycle and all the disciplines of a hydropower project, and shall be mutually coordinated.

4.3 The classification and coding of hydropower project information shall facilitate the exchange and sharing of information.

4.4 The coding of hydropower project information shall be based on the classification of the information, and shall follow the following principles:

- a) the principle of uniqueness: each code may identify one coding object only;
- b) the principle of systematisation: the information coding system shall be formed on the basis of the classification of hydropower project information;
- c) the principle of extensibility: space shall be reserved within the code to meet the need for extension; the code of a coding object shall remain fixed, and the existing codes shall not be changed when a new coding object is added;
- d) the coding method shall be simple, practical and easy to compile;
- e) the information coding structure and the writing format of classes at the same level shall be uniform.

4.5 The information codes of a hydropower project may be applied independently or in combination.

5 Classification method

5.1 Hydropower project information shall be divided into general information and special