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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

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**1 000 MW class hydraulic -- Generator -- Part 3: Quality
inspection stands for installation**

(English Translation)

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Foreword

This instructional document has been drafted in accordance with the rules given in GB/T 1.1-2009.

This guidance document is proposed by China Electrical Equipment Industry Association.

This guidance document is organized by the National Large Scale Generator Standardization Technical Committee (SAC/TC511).

The drafting of this technical guidance document. China Three Gorges Corporation, China Power Construction Co., Ltd., China's water conservancy and hydropower Fourth Engineering Bureau Co., Ltd. Mechanical and Electrical Installation Branch, Harbin Electric Machinery Co., Ltd., Dongfang Electric Group Dongfang Electrical Machinery Co., Ltd.

State Power Construction Group East China Survey and Design Institute Co., Ltd., the Yangtze River design company.

Introduction

Since the installation of the 700MW hydroelectric generating set of the Three Gorges Project in China, the installation of a domestic giant hydroelectric generating set has entered a Peak, Longtan, Xiaowan, Laxiwa, Xiluodu, Xiangjiaba power plant giant units have been put into operation, the installation of the giant unit of more attention to the quality of the total Results giant unit installation quality testing standards is imperative, the original GB GB/T 8564-2003 quality testing standards need to be improved, with After improving the quality inspection standards can also guide Baihetan, Wudongde and other follow-up giant unit installation.

This guidance document is based on the summary of the domestic large hydro-generator sets (single-flow capacity of 700MW and above Francis turbine Motor unit) installed on the basis of quality standards prepared for the future stand-alone capacity 1000MW Francis turbine installation Quality testing provide a standard basis.

1000MW water turbine generator Part 3. Installation quality inspection guidelines

1 Scope

This Guidance Document sets forth the requirements for the installation, commissioning and testing of hydroelectric generating sets and their ancillary equipment. This guideline technique the document is applicable to the installation and acceptance guidance of 1000MW Francis turbine units with single capacity.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 2900.25 Electrotechnical terminology rotary motor Hydropower plant hydraulic machinery and equipment GB/T 7894 hydroelectric generator basic technical conditions GB/T 8564 turbine generator installation technical specifications GB/T 11345 Weld non-destructive testing ultrasonic testing technology test grade and assessment GB/T 14541 operating turbine oil maintenance management guidance GB/T 20160 rotating motor insulation resistance test GB/T 20835 generator stator core magnetization test guidelines GB/T 50150 electrical installations installation of electrical equipment transfer test standards DL/T 330 Water conservancy and hydropower projects metal structures and equipment welded joints diffraction time difference method ultrasonic testing DL/T 1067 evaporative cooling hydro-generator (power generation/motor) basic technical conditions

3 Terms and definitions

GB/T 20160, GB/T 2900.45 and GB/T 2900.25 defined terms and definitions apply to this document.

4 General rules

General requirements for the installation of 1000MW hydro-generator set specifications should be consistent with the relevant provisions of GB/T 8564.

5 General provisions

General requirements for the installation of 1000MW hydro-generator set specifications should be consistent with the relevant provisions of GB/T 8564.

6 Turbine installation test content

6.1

Buried installation quality inspection Press "Buried installation quality inspection standards" (see Table 1 ~ Table 8) implementation.