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NB

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

NB/T 10240-2019

Code for design of densified biofuel boiler plants

生物质成型燃料锅炉房设计规范

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Foreword

This document was issued on 4 November 2019 by the National Energy Administration of the PRC and takes effect on 1 May 2020.

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 27.010, Chinese classification P 46.

This code was prepared by a drafting group in accordance with the requirements of the Notice of the National Energy Administration on Issuing the Second Batch of the 2014 Plan for the Formulation (Revision) of Industry Standards in the Energy Field (Guo Neng Ke Ji [2015] No. 12). The drafting group carried out extensive investigation and research, carefully summarized practical experience, and prepared the code on the basis of a wide solicitation of opinions.

The main technical contents of this code are: boiler plant layout; handling and storage of fuel; the fuel conveying system; the boiler; the boiler flue gas and air system; the ash and slag removing system; boiler feedwater; thermotechnical monitoring and control; chemical examination; civil engineering, electrical and utility systems; environmental protection and energy saving; fire protection; occupational safety and health; and operation and maintenance.

The National Energy Administration is responsible for the administration of this code. China Renewable Energy Engineering Institute (the General Institute of Hydropower and Water Resources Planning and Design) proposed the code, is responsible for its routine management, and is responsible for the interpretation of its specific technical contents.

Comments and suggestions arising during the implementation of the code are to be sent to China Renewable Energy Engineering Institute, at No. 2 Liupukang North Street, Xicheng District, Beijing, postal code 100120.

Chief editing organizations of this code: PowerChina Northwest Engineering Corporation Limited (China Power Construction Group Northwest Survey, Design and Research Institute Co., Ltd.) and China Renewable Energy Engineering Institute.

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Publication data and approval

NB/T 10240-2019 is an energy industry standard of the People's Republic of China, published under the sectoral code NB and carried on the cover with the classification letter P.

The international classification of the standard is ICS 27.010, covering energy and heat transfer engineering in general.

The Chinese standard classification code printed on the cover is P 46.

The Chinese title of the standard, printed in full on the cover and on the title page, is the Chinese designation for a code for the design of densified biofuel boiler plants.

The official English title printed on the cover and on the title page is Code for Design of Densified Biofuel Boiler Plants.

The standard was issued on 4 November 2019 and came into force on 1 May 2020, as stated on the cover and repeated in the catalogue of approved standards.

The standard was approved by the National Energy Administration and published by China

Water and Power Press, Beijing, in 2020.

The chief department in charge of the standard is China Renewable Energy Engineering Institute (the General Institute of Hydropower and Water Resources Planning and Design); the approving department is the National Energy Administration; the date of entry into force stated on the title page is 1 May 2020.

The standard was promulgated by Announcement No. 6 of 2019 of the National Energy Administration, which approved 384 energy industry standards in Annex 1, 48 English versions of energy industry standards in Annex 2, Amendment No. 1 to 7 energy industry standards in Annex 3, and the abolition of 5 energy industry standards or plan items in Annex 4.

In the catalogue of industry standards forming Annex 1 to that announcement, this standard is listed as serial number 17, with standard number NB/T 10240-2019, the approval date 4 November 2019 and the implementation date 1 May 2020.

In that catalogue the column for the superseded standard is blank and the column for the adopted standard number is blank, so the code replaces no earlier standard and adopts no international or foreign standard.

The body of the code runs to at least 39 pages and is completed by an explanation of the wording used in the code, a list of quoted standards, and an addition giving the explanation of provisions.

Structure of the document

The code is organized in seventeen clauses, followed by the explanation of wording, the list of quoted standards and the addition giving the explanation of provisions.

Clauses 1 to 3 set the framework: General Provisions on page 1, Terms on page 2 and Basic Requirements on page 3.

Clause 4, Boiler Plant Layout, starts on page 4 and is divided into Site Selection, General Layout, Arrangement of Buildings and Structures and Process Setup.

Clauses 5 to 10 follow the fuel and the working medium through the plant: Handling and Storage of Fuel from page 7, Fuel Conveying System with charging, conveying and feeding from page 9, Boiler with boiler equipment and boiler auxiliary system from page 12, Boiler Flue Gas and Air System with flue gas purification and emission from page 14, Ash and Slag Removing System from page 16 and Boiler Feedwater on page 17.

Clauses 11 and 12 cover Thermotechnical Monitoring and Control from page 18, subdivided into thermotechnical monitoring and control, and Chemical Examination on page 21.

Clause 13, Civil Engineering, Electrical and Utility System, runs from page 22 and covers