

HJ

INDUSTRY STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

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**Technical requirements for environmental protection in electric
power transmission and distribution construction project**
(English Translation)

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Foreword

To implement the Environmental Protection Law of the People's Republic of China, the Environmental Impact Assessment Law of the People's Republic of China and the Environmental Protection of Construction Projects Regulations on Environmental Protection Management, which regulates the environmental protection work of power transmission and transformation construction projects, and formulates this standard.

This standard specifies the electromagnetic, acoustic, ecological, water, and atmospheric phases of site selection, design, construction, and operation of power transmission and transformation projects.

Environmental protection requirements of other elements.

This standard is issued for the first time.

This standard was formulated by the Department of Radiation Source Safety Supervision and the Department of Regulations and Standards of the Ministry of Ecology and Environment.

1 Scope of application

This standard specifies the technical requirements for environmental protection of power transmission and transformation construction projects.

This standard applies to 110kV and above AC transmission and transformation construction projects and ± 100 kV and above DC transmission Environmental protection of construction projects.

2 Normative references

This standard refers to the following documents or their clauses. For undated references, the effective version applies to this standard.

GB 3096 Acoustic Environmental Quality Standard GB 8702 Electromagnetic environment control limit GB 8978 Integrated Wastewater Discharge Standard GB 12348 Environmental Noise Emission Standard at the Boundary of Industrial Enterprises GB 12523 Environmental noise emission standards for construction sites HJ 2.4 Technical Guidelines for Environmental Impact Assessment Acoustic Environment HJ 19 Technical Guidelines for Environmental Impact Assessment Ecological Environment HJ 24 Technical Guidelines for Environmental Impact Assessment HJ 169 Technical Guidelines for Environmental Risk Assessment of Construction Projects HJ 705 Technical Specification for Environmental Protection Acceptance Acceptance of Construction Projects HJ/T 393 Technical Specification for Prevention and Control of Urban Dust Pollution HJ/T 394 Technical Specification for Environmental Protection Acceptance of Construction Project Completion Ecological Impact Category

3 Terms and definitions

The following terms and definitions apply to this standard.

Electric power transmission and distribution construction project the project that transforms the characteristics of electric energy (mainly voltage, AC or DC) and transmits it from the power supply location to the power demand location project.

The power transmission and transformation construction projects mentioned in this standard can be divided into AC transmission and transformation construction projects and DC transmission construction projects.

Electricity construction projects include transmission lines and substations (or switch stations, series compensation stations, etc.). DC transmission construction projects include transmission lines and converters.

Station and earth electrode system.

Environmental protection measures Management or technical measures taken to prevent or reduce adverse effects on the environment.

Environmental protection facilities Equipment, and engineering facilities required to prevent and control environmental pollution and ecological damage, and to carry out environmental monitoring.

Electromagnetic environment-sensitive target Objects that need to be focused on in the electromagnetic environment impact assessment and monitoring. Including houses, schools, hospitals, office buildings, factories, etc.

The building where you live, work or study.

Power station project Point-type projects in power transmission and transformation construction projects, such as substations, switch stations, series compensation stations, converter stations, etc.

4 Basic regulations

4.1

The environmental protection of power transmission and transformation construction projects should adhere to the principles of giving priority to protection, giving priority to prevention, comprehensive management, public participation, and responsibility for damage.

Therefore, prevent and control possible electromagnetic, acoustic, ecological, water, atmospheric and other adverse environmental impacts and environmental risks, and ensure that all Continuously improve the environmental quality based on the environmental standards.

4.2

Carry out planning environmental impact assessment work in accordance with laws and regulations, and strengthen the linkage between planning environmental impact assessment and construction project environmental impact assessment.

4.3

The environmental impact assessment of construction projects shall be carried out in accordance with laws and regulations before construction of power transmission and transformation projects. Construction project constitutes a major change If it is activated, the environmental impact assessment shall be carried out again in accordance with laws and regulations.

4.4

The environmental protection facilities that need to be constructed in a power transmission and transformation project must be designed, constructed, Put into production and use. The construction unit shall include environmental protection facilities in the construction contract, ensure the progress and funds for the construction of environmental protection facilities, and During the project construction process, the environmental impact assessment document and the environmental protection countermeasures proposed in the approval decision of the approval department are also organized.

4.5

When the power transmission and transformation construction project is completed, the construction unit shall carry out the environmental protection acceptance work of the

completed construction in accordance with the prescribed standards and procedures.

5 Site selection

5.1

The site selection and route selection of the project shall meet the requirements of the planning environmental impact assessment documents.

5.2

The site selection of power transmission and transformation projects should comply with the red line management and control requirements of ecological protection, and avoid protection of nature reserves and drinking water sources Environmentally sensitive areas such as areas. It is true that due to natural conditions and other factors, it is impossible to avoid the experimental area of the nature reserve and the secondary protection area of drinking water source for transmission lines in environmentally sensitive areas, the uniqueness of the line plan shall be demonstrated on the premise of meeting relevant laws, regulations and management requirements.

And adopt a harmless way to pass.

5.3

When selecting a site for a substation project, comprehensive consideration should be given to the planning of the entry and exit corridors according to the final scale, so as to avoid entry and exit lines entering the nature reserve and drinking water.

Environmentally sensitive areas such as water source protection areas.

5.4

When selecting locations for outdoor substation projects and planning overhead incoming and outgoing lines, attention should be paid to housing, medical and health, cultural education, scientific research, in areas where administrative offices are the main functions, comprehensive measures are taken to reduce the impact of electromagnetic and acoustic environments.

5.5

The multi-circuit transmission lines in the same corridor should adopt the form of multi-circuit erection on the same tower, parallel erection, etc., to reduce the number of new corridors and optimize Improve the distance between the line and corridor to reduce the environmental impact.

5.6

In principle, avoid the construction of substation projects in the category 0 acoustic environment functional area.