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**Code for Electric Power Design
In Petrochemical Plants**

石油化工企业生产装置电力设计技术规范

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In Petrochemical Plants**

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Chief editorial unit : Lanzhou Design Institute, China Petrochemical Group Corp.

Chief editorial department : Sino Petrochemical Group Corporation

Approved by : State Bureau of Petroleum & Chemical Industry

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Preface

This code is the revision of the original *Specifications for Electric Design for Production Plants in Petrochemical Enterprises* made by this institute in accordance with the notice given in the (1999) Jian-biao-zi No.102 document of Sino Petrochemical Group.

The code is divided into 11 chapters and 5 appendixes. The contents added for this time of revision include:

1. Attention is paid to implementation of the plant mode reform concept;
2. The current development trend of building large-size and automatized production plants is taken into consideration;
3. Attention is paid to connection with the international practice;
4. Emphasis is placed on the safety of men and units;
5. Economization on energy.

In the course of modification, wide range investigations and studies were made on the problems of the original Specifications, the practical experience in the electric power design (construction) in petrochemical plants since the original Specifications went into effect, especially in recent years, were summarized, some of the latest achievements in scientific research and manufacture of electrical equipment and materials were drawn and different opinions concerning design, construction, operation and manufacture were collected from all relevant parts of the country. The main issues were discussed for multiple times before the draft was reviewed and finalized.

If any modification or supplementation is found necessary during the implementation of this code, please submit relevant comments and documents to the Institute for our reference when revision is made in the future.

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1 General

1.0.1 This specification applies to the power design of newly built, reformed or expanded plants in petrochemical enterprises (including oil refining, chemical and chemical fiber plants, called “the plant(s)” hereunder).

1.0.2 The following principles shall be observed for the electric power design of the plants.

(1) The technical and economic policies of the state shall be earnestly implemented, so as to provide cost effective and rational designs that use sophisticated technology and ensure personal and equipment safety and reliable power supply;

(2) In line with the features, scales and development plans of the projects, the short term construction and long term development shall be well combined, with the short term construction to be given the first place and proper development port to be reserved, but without any land reserved for future expansion;

(3) Reasonable arrangement and design plans shall be worked out through overall planning and all-around consideration based on the load nature, capacity and environmental conditions, etc.;

(4) Different energy saving measures shall be actively taken in the electric power design, in an effort to reduce the consumption of power;

(5) Any relevant new theory, new technology, new equipment or new material that proves effective through practice shall be adopted, in an effort create good economic, social and environmental benefits.

1.0.3 In implementation of this Code, the provisions under relevant current state and sector standards and codes shall also be conformed to.



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