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

GB/T 14099.4-2010

Gas turbines -- Procurement -- Part 4: Fuels and environment

燃气轮机 采购 第4部分：燃料与环境

(English Translation)

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Foreword

GB/T 14099 "gas turbine procurement" consists of the following components.

- Part 1. General principles and definitions;
- Part 2. Standard reference conditions and ratings;
- Part 3. Design requirements;
- Part 4. Fuel and Environment;
- Part 5. Application of the oil and gas industry;
- Part 6. Combined Cycle;
- Part 7. Technical information;
- Part 8. inspection, testing, installation and commissioning;
- Part 9. Reliability, availability, maintainability and safety.

This section GB/T Part of 414,099.

This part identical with ISO 3977-4:2002 "gas turbine procurement - Part 4. Fuel & Environment" (in English).

ISO 3977-4:2002 replaces ISO 3977:1997 "gas turbine procurement" in the relevant sections. ISO 3977. 1978 is the equivalent of Adopted as GB/T 14099-1993 "gas turbine procurement." And GB/T 14099-2005 instead of GB/T 14099-1993 "burning Gas turbine procurement ", GB/T 14099.1-2004" turbines - Procurement - Part 1. General principles and

definitions "and GB/T 14099.2-2004 "turbines - Procurement - Part 2. Standard reference conditions and ratings." Therefore, this part of the corresponding section in place GB/T 14099-2005 corresponding Chapters 8 and 9. And GB/T 14099-2005 has not been replaced by the remaining part is still valid, Until all the rest of the promulgation, when the GB/T 14099-2005 was only partial replacement of all nine.

For ease of use, this section made the following editorial changes.

- The "international standards in this section" to "this Part";
- Use the decimal symbol instead of as a decimal comma " , " . " , " ;
- Delete foreword international standards, national standards increase the preface.

Appendix A of this section is an informative annex.

This part is proposed by China Machinery Industry Federation.

This section of the gas turbine of the National Standardization Technical Committee (SAC/TC259) centralized.

This section is drafted. Jiangsu Electric Power Design Institute, Zhejiang Electric Power Design Institute, Shanghai Power Equipment Research Institute, Shanghai Electric Gate Gas Turbine Power Generation Co., Ltd., China Dongfang Electric Corporation, Zhejiang Zhenhai Power Company Limited jointly.

Introduction

This section GB/T 14099 is to establish the compliance of the gas turbine power plant using enacted. Current gas turbine manufacturing and Install the rapid growth of the world are concerned about the regional and global environmental problems. This section discusses the use of such a gas turbine power plant Fuel and operational issues related to generating emissions. This section details the requirements of the parties should be determined in advance, in order to achieve the shortest possible schedule delays, Optimal performance and minimal environmental impact of building purposes.

Gas turbines - Procurement Part 4. Fuel & Environment

1 Scope

This section GB/T 14099 gives a gas turbine procurement guide about fuel quality and environmental performance is. The guidelines also pointed out Information about the fuel gas turbine sets and buyers should provide quantification and prediction of the environmental impact of the type of information necessary. Burn Material specification as a reference, and not the rule.

2 Normative references

The following documents contain provisions which, through reference GB/T 14099 in this section constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 14099-2005 turbines - Procurement (ISO 3977:1991, IDT) GB/T 14099.3-2009 turbines - Procurement - Part 3. Design requirements (ISO 3977-3:2004, IDT) GB/T 15135-2002 turbine Vocabulary (ISO 11086:1996, MOD) GB/T 18345.1-2001 gas turbine flue gas emission - Part 1. Measurement and Evaluation (idt ISO 11042-1:1996) GB/T 18345.2-2001 gas turbine flue gas emission - Part 2. Automated emission monitoring (idt ISO 11042-2.

1996)

ISO 4261:1993 Petroleum products - Fuels (F class) boats and industrial gas turbine fuel specifications ISO 10494:1993 gas turbine and gas turbine engineering measuring airborne noise measurement method

3 Terms and Definitions

GB/T 14099-2005, GB/T 14099.3-2009 and GB/T 15135-2002 established and the following terms and definitions applicable for this part of GB/T 14099 of.

Density

$\rho =$

pref

$R \cdot T_{ref}$

Which is usually selected reference temperature 15 °C, the reference pressure 101.325kPa.

Integrated gasification combined cycle IGCC Combined cycle thermal process to gasify coal or other low-grade fuel energy.

Fuel nitrogen fuel-bound nitrogen FBN Results in the generation of fuel NO_x nitrogen components.

Note: This does not include gaseous nitrogen N₂.