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Load design guide on structures for photovoltaic array

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Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by The Japan Electrical Manufacturers' Association (JEMA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14. Consequently **JIS C 8955:2011** is replaced with this Standard.

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Load design guide on structures for photovoltaic array

Introduction

This Japanese Industrial Standard is largely based on the stipulations of the Building Standards Act and its Order for Enforcement and Notification. When using this Standard for load design of structures for photovoltaic array, it is recommended to confirm compliance with the said Act for relevant requirements.

1 Scope

This Standard provides a guidance for allowable stress design of the structures that constitute a photovoltaic array (hereafter referred to as the arrays) to be installed on the ground or on the building structures.

The followings are not covered by this Standard.

- a) Arrays exceeding 9 m in maximum height from the mounting surface.
- b) Building-integrated arrays that are designed to replace building materials such as roofing, walling or window materials.
- c) Arrays to be installed at a ground height exceeding 60 m.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this Standard. The most recent edition of the standard (including amendments) indicated below shall be applied.

JIS C 8960 *Glossary of terms for photovoltaic power generation*

3 Terms and definitions

For the purposes of this Standard, the terms and definitions given in JIS C 8960, and the following apply.

3.1 structures

a generic term for workpieces intended for supporting photovoltaic modules (hereafter referred to as modules), such as single poles, support structures, etc.

3.2 fixed load

load permanently acting on the array, which includes the mass of modules, structures, etc.

3.3 wind load

load due to wind force which acts on modules, structures, etc.

3.4 snow load