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IEEE Standard

IEEE Recommended Practice for

Unique Identification in Power Plants and Related

Facilities—Component Function Identifiers

Sponsor

**The Power Generating Committee of the
IEEE Power Engineering Society**

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IEEE Standards Board

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Foreword

(This Foreword is not a part of IEEE Std 803A-1983, IEEE Recommended Practice for Unique Identification in Power Plants and Related Facilities—Component Function Identifiers.)

In April 1979, the Working Group on Unique Identification in Power Plants of the Station Design Subcommittee was formed and charged with the task of producing a series of recommended practices for unique identification in power plants. Later, realizing that this concept provided the same benefits to other types of facilities, the title was extended to include "and related facilities," an example of which would be radioactive waste storage, or disposal, or both.

This series of recommended practices, entitled the Energy Industry Identification System (EIIS), provides a single source of unique identification of systems, structures, and components for all types of power generation and related facilities with provision for the inclusion of currently established plant system identifier codes. Using this series of recommended practices, which includes principles, a table of component-function identifier codes, implementation instructions, and system descriptions for the various types of power plants and related facilities, a user can correlate a system, structure, or component with another organization for purposes of reporting, comparison, or general communication. Numerous economic, safety, and convenience benefits can be derived from this concept. IEEE Std 803A-1983, provides a table of component function identifiers for use in generating unique identification codes for nuclear and fossil-fueled power-plant projects.

The original purpose of this working group was to generate an industry-wide language of communication which users could employ at the interface of their organizations and which would not require them to change a viable identification concept which they were using internally. In the event the users do not have a viable identification concept of their own, they may choose to employ this concept for their internal applications since it has been successfully applied by several utilities and architect/engineering firms.

This recommended practice was prepared by the Working Group for Unique Identification in Power Plants and Related Facilities, Station Design Subcommittee of the Power Generation Committee. At the time this recommended practice was approved, the members of the working group were:

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IEEE Recommended Practice for Unique Identification in Power Plants and Related Facilities—Component Function Identifiers

1. Scope

This recommended practice provides a single source of component function identifiers which, along with related recommended practices concerning unique identification principles and definitions, implementation instructions, and system descriptions, makes up a concept, entitled the Energy Industry Identification System (EIIS), for uniquely identifying systems, structures, and components of nuclear and fossil-fueled power plant projects (electric power generating stations) and related facilities. Hydro and other types of power plant projects are not included in this issue.

1.1 Purpose. The purpose of this series of recommended practices is to present a common language of communication which will permit a user to correlate a system, structure, or component with another organization for the purposes of reporting, comparison, or general communication. It does not require a using organization to change their own internal identification concept, but rather they have only to transcode at the interface of their organization from their internal language to this common language concept.

The users may, if they so choose, adopt this concept for their internal use. It represents the accumulated practice of the industry assimilated into one set of practices. A significant feature of this concept is that the unique identification code identifies the function at the component level and not the hardware itself.

1.2 References. When the following standards referred to in this recommended practice are superseded by a revision, the revision shall apply.

[1] ANSI/IEEE C37.1-1979, IEEE Standard Definition, Specification, and Analysis of Man-

ual, Automatic, and Supervisory Station Control and Data Acquisition.¹

[2] ANSI/IEEE Std 100-1977, IEEE Standard Dictionary of Electrical and Electronics Terms.

[3] IEEE Std 803-1983, IEEE Recommended Practice for Unique Identification in Power Plants and Related Facilities—Principles and Definitions.

[4] ISA S5.1-1949, Instrumentation Symbols and Identification.²

1.3 Applicable Documents in Preparation.³

2. Definitions

2.1 The following are definitions for terms as they are used in this unique identification concept or are assigned some special or restricted meaning in this recommended practice. For other terms not defined herein, refer to ANSI/IEEE Std 100-1977 [2].

2.1.1 component. A part or assembly of parts that is viewed as an entity for purposes of design, operation, and reporting.

¹ANSI documents are available from Sales Department, The American National Standards Institute, 1430 Broadway, New York, NY 10018.

²ISA documents are available from Instrument Society of America, 67 Alexandria Drive, PO Box 12277, Research Triangle Park, NC 27709.

³When the following documents are completed, approved, and published, they will become a part of this listing.

(1) IEEE Standards Project P804 (in preparation), Recommended Practice for Unique Identification in Power Plants and Related Facilities—Implementation.

(2) IEEE Standards Project P805 (in preparation), Recommended Practice for System Identification in Nuclear Power Plants and Related Facilities.

(3) IEEE Standards Project P806 (in preparation), Recommended Practice for System Identification in Fossil-Fueled Power Plants and Related Facilities.