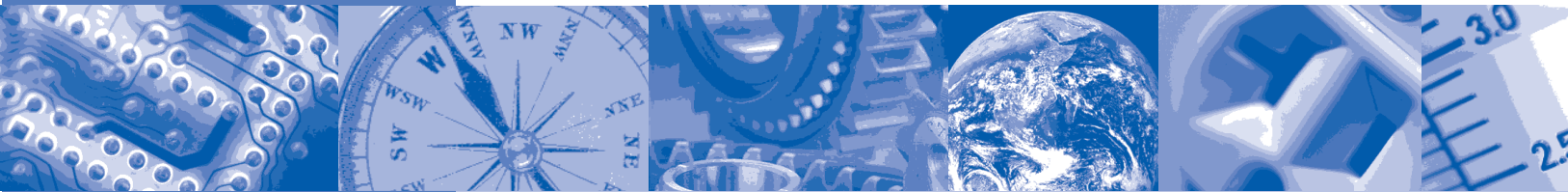


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Fossil Fuel Power Plant Human-Machine Interface: Alarms



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ISA
67 Alexander Drive
P. O. Box 12277
Research Triangle Park, North Carolina 27709

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1 Scope

This recommended practice is provided for the benefit of design engineers and, ultimately, plant operators. Use of this recommended practice will result in a more coherent and useful application of plant alarms for operations personnel. The goal of this recommended practice is to reduce alarm discrepancies, clutter, excessive noise levels, and information overload.

This recommended practice will address the following alarm-related issues:

- a) Functional grouping
- b) Prioritization
- c) Order and consistency
- d) Colors
- e) Formats and displays
- f) Audio tone and pitch
- g) Acknowledge, reset, and test functions
- h) Nuisance alarms

These items are addressed both individually and with respect to their relationships with one another.

This recommended practice pertains to alarms displayed using lights or light-boxes, but not software based alarms (e.g., CRT-based alarms) and is intended to supplement the information provided by ANSI/ISA-18.1-1979 (R1992), *Annunciator Sequences and Specifications*.

2 Purpose

The purpose of this recommended practice is to provide advice and guidance in the development and design of plant alarm systems. The primary application for this recommended practice is fossil power plants; however, these guidelines are generic in nature, and suitable for use in other process industries.

3 Definitions

3.1 alarm:

an audible or visible means of indicating to the plant operator an equipment or process malfunction or abnormal condition.

3.2 annunciator:

an electro-mechanical or electronic packaged alarm system, usually consisting of one or more "light-boxes," associated logic, and power supply.

3.3 first-out:

in a multiple-alarm scenario, a method of determining which alarm occurred first.

3.4 light box:

plug-in alarm module used with hard-wired panel-mounted alarm systems.