

DS09

61 FR 46834

9/5/96



#2

Contact: J.J. Kramer

Westinghouse
Electric Corporation

Energy Systems

NSD-NRC-96-4866

Nuclear Services Division

PO Box 855
Pittsburgh Pennsylvania 15230-0855

October 28, 1996

Mr. David L. Meyers
Chief, Rules Review and Directive Branch
U.S. Nuclear Regulatory Commission
11545 Rockville Pike
Rockville, MD 20852

ATTENTION: Rules Review and Directive Branch

Dear Mr. Meyers:

Subject: Draft Regulatory Guides DG-1054, DG-1055, DG-1056, DG-1057, DG-1058, DG-1059
on Software for Safety Systems (61 FR 46834, September 5, 1996)

The attached comments are submitted by the Westinghouse Electric Corporation ("Westinghouse") in response to the United States Nuclear Regulatory Commission ("NRC") request for public comments on the six draft Regulatory Guides on Software for Safety Systems. The draft Regulatory Guides endorse industry consensus standards of the Institute of Electrical and Electronics Engineers (IEEE) on the subject of Safety System Software.

Westinghouse appreciates the opportunity to provide these comments. Should you wish to discuss our comments in greater detail, please contact me at (412) 374-5169.

Very truly yours,

N. J. Liparulo, Manager
Regulatory and Engineering Networks

COPIES TO:
NRC
CH-11-10 10-11-96

120020

9611130254 961028
PDR REGGD
GENERAL PDR

ELM208 JTC102896

RE000

IR-11 Guides & Manuals

Suggested Exceptions to the NRC DG-1055 endorsement of IEEE-828-1990, Standard for Software Configuration Management Plans

Summary of Comments

There are 66 "hard requirements" in this standard which are identified by the word "shall". The context of these are "the Plan shall describe...", or "the Plan shall specify". This is viewed to be too proscriptive. Many processes embody the principles discussed in the standard, but contain the information required in other process documents or procedures. However, in only one instance is flexibility given in the standard to "describe or reference" outside of the Plan. A statement is needed which acknowledges that requirements of this standard may be satisfied within other process areas and referenced where appropriate in the Plan.

The application of IEEE-828 to specific documents should be further clarified. The title of the standard refers to "software" configuration management plans, the scope section refers to "the entire life-cycle", and section 2.3.5 discusses interface control for items "outside the scope of the Plan". This raises some confusion as to whether the overall Functional Requirements, System Requirements and Specification should be controlled under the requirements of this standard or ASME/NQA-2a Part 2.7. In this context, only software programs and their directly associated documentation should fall within the scope of IEEE-828.

Comments on specific areas:

Scope

There is a statement in the Scope section which reads, "It also applies to noncritical software and to software already developed." Is it the intent of the NRC to endorse a back-fit for the configuration management of software already in place, or compliance for the management of future changes to existing software? A clarification statement would serve to eliminate potential confusion in this area.

Section 2.3.2.3 Approving or Disapproving Changes

"The Plan shall identify each configuration control board (CCB)..." It should be recognized that a structured and disciplined process can be implemented which requires the documentation of appropriate reviews, approvals and signatures before a change can be implemented without the specific requirement to form a CCB.

Section 2.3.5 Interface Control

"The Plan shall identify the external items to which the project software interfaces." In order to eliminate potential confusion in this area, a clarification statement which focuses the scope of 828 directly on software and its associated documentation, acknowledging that other documentation such as System Requirements, System Specifications and Test Procedures may be controlled by other

Configuration Management Programs (CMPs) which are not within the scope of this standard.

Section 2.4 Software Configuration Management (SCM) Schedules

This section should be excluded from endorsement. In today's environment, where software is being developed for re-use on many projects, the fundamental principle of configuration management is to ensure that software design and implementation is both traceable and repeatable. The referenced section is not viewed to be within the scope of configuration management. Specifically, "Schedule information shall be expressed as absolute dates, as dates relative to either SCM or project milestones."