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MEMORANDUM FOR: L. J. Evans, Jr., Chief
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SUBJECT: SUBCOMMITTEE REPORT ON CONSISTENCY ISSUES ARISING FROM
COMPARISON OF THE PROPOSED SAFEGUARDS UPGRADE RULE
(73.50) AND PROPOSED 73.55

The comparison 73.50 and 73.55 for consistency was undertaken using the following documents for a statement of the proposed rules as of this writing:

73.50

- 1) Evans, L. J.; "Safeguards Upgrade Rule Structure and First Performance Capability Narrative Drafts for Comment"; 26 January 1977.
- 2) Kasun, D. J.; "Safeguards Upgrade Rule - Minimum Essential Requirements"; Submission to Safeguards Upgrade Working Group; 4 February 1977.
- 3) Evans, L. J.; "Upgrade Schedule and Working Group Responsibilities"; Memorandum for Safeguards Working Group; 24 January 1977.

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73.55

- 4) Minogue, R. B.; "SECY-76-242C - Physical Protection of Nuclear Power Reactors against Industrial Sabotage"; Memorandum for Samuel J. Chilk; undated.
- 5) Rusche, B. C. and Chapman, K. R.; "Design Basis Threat Information/Response Force Requirements (73.55)"; Memorandum for Chairman Rowden, Commissioner Gilinsky, and Commissioner Kennedy;

In developing consistency issues that arise from a comparison of 73.50 and 73.55, the approach has been taken that this comparison must include not only the rules, but also, all the related supporting documents which will be issued to the licensee to guide his response. The consensus of this panel is that total consistency in the objectives of all documents which are published in connection with the rules will significantly simplify their application. Consistency in format and, to the extent possible, content is also desirable.

COMPARISON OF RELATED SUPPORTING DOCUMENTS

This memorandum first undertakes to compare, where a comparison is possible, the objectives of all documents to be published in conjunction with revised 73.50 and proposed 73.55. This comparison was undertaken by defining five mandatory objectives and an optional objective ordinarily pursued by the NRC when promulgating a rule. These objectives have been stated in the form of questions to be answered by NRC documents and are shown in the first column of Table 1. The two remaining columns of this table give the titles of the documents which are intended, as of this writing, to provide answers to the stated questions for proposed rules 73.55 and 73.50, respectively. The dashed lines in the final column indicate that documents to answer the stated questions have not as yet been defined.

In answering the need to state the general performance requirement called for by the rule (Question 1 of Table 1), both 73.50 and 73.55 use the first paragraph of the rule to state the objective. Very similar wording is used.

For 73.55 the essential requirements for compliance (Question 2 of Table 1) are provided in paragraphs (b) through (h) of the rule. These requirements are further defined in an interim acceptance criteria document which is presently in preparation. This document will eventually be prepared in the form of one or more Regulatory Guides. The rule

Table 1 Comparison of NRR/NMSS Rulemaking Approach

Question	NRR Approach	NMSS Approach
1. What is the fundamental objective of this rule?	. 73.55 paragraph (a)	. 73.50 paragraph (a),(b)
2. What essential general requirements and supplementary design guidance is provided to assist the licensee meet the objectives of the rule?	. 73.55 paragraph (b) through (h) . Interim Acceptance Criteria Document**	. 73.50 paragraph (f) through (?) . Regulatory Guides
3. What threats are/are not included?	. Interim Acceptance Criteria Document**	. - - -
4. What form should the licensee/ applicant response take?	. Interim Format and Content Document**	. - - -
5. How will the response be graded?	. Interim Acceptance Criteria Document**	. License Review Plans
6. *What is an example of satisfactory response?	. Interim Acceptance Criteria Document	. - - -

*Optional

**Regulatory Guides will be developed from interim acceptance criteria

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73.50 uses a two-tier approach in paragraphs (b) through (?) to state essential requirements. The first tier states general performance capability and criteria. These are to be followed by specific criteria. The specific criteria have not as yet been formally defined, hence the (?) indicating the terminal paragraph. Reference 2 above indicates that these specific criteria will be further explained in regulatory guides.

The interim acceptance criteria document being prepared for 73.55 presently contains a section which defines the qualities ascribed to the threat (Question 3 of Table 1). It is intended that this section will also include a statement of those threat qualities which have been excluded. It is recognized that this definition of threat may not be suitable for general publication, though a final decision has not been made. A similar threat definition for 73.50 was called for by C. South at the last formal working group meeting. Progress on such a document is unknown at this time.

For 73.55 the interim format and content document is intended to guide applicant response to the rule (Question 4 of Table 1) and simplify the process of determining compliance. An outline of this document has been prepared and a draft is due shortly. The authors are unaware of a similar document planned for 73.50.

For 73.55 the interim acceptance criteria document will define the approach to be used in grading an applicant's physical security plan (Question 5 of Table 1). The document may also contain a section which provides an exemplary design (Question 6 of Table 1) which satisfies the requirements of 73.55 for a generic nuclear power reactor facility. For 73.50, License Review Plans and Site Assessment Procedures (Reference 3) appear to define the grading of licensee response. No statement of exemplary design appears to exist in presently planned documents.

COMPARISON OF RULE FORMATS

Consideration of formats was limited to the statements of 73.50 and 73.55 as contained in References 1 and 4, respectively. Both rule statements provide a general performance requirement followed by additional requirements. In the case of 73.50, a two-tiered approach is taken with the second tier of requirements being more specific than the first.

The formats of the rules as presently written are generally consistent. No format changes are being considered for 73.55. However, the authors are aware that major changes in the format of 73.50 are presently under consideration.

COMPARISON OF RULE CONTENTS

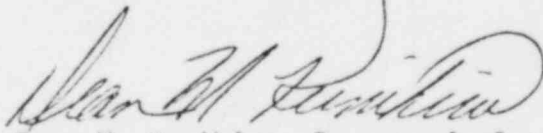
For the sake of a comparison of contents, rule 73.55 was assumed to exist as stated in Reference 4 and amended by Reference 5. Rule 73.50 was taken as stated in Reference 1 and expanded by Reference 2. Because of the fluid status of 73.50, no attempt was made to do an exhaustive comparison. Rather points of significant difference have been highlighted below.

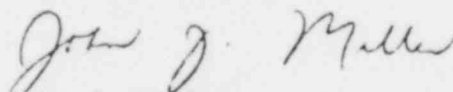
<u>Subject</u>	<u>73.55</u>	<u>73.50</u> (Includes Kasun's system specification)
A. Threat	<ul style="list-style-type: none">. Several outsiders and 1 insider.	<ul style="list-style-type: none">. Classified number of outsiders and insiders
B. Physical Security Organization	<ul style="list-style-type: none">. Specification of minimum and nominal number of individuals in armed response force (5,10). Allows armed response individual along with guards in armed response force.. LLEA mentioned but no specific role assigned. Requirement for full-time member of security organization who can direct physical security activities.. Requirement for written physical security procedures.	<ul style="list-style-type: none">. No specification of number in responding force.. Response force consists only of guards.. LLEA plays prominent role.. No requirement for authority in physical security.. No such requirement.
C. Barriers	<ul style="list-style-type: none">. Barriers required but no statement of role in alarm protection or defensive positions. Requirement for isolation zones. Illumination requirement in protected area and isolation zone.	<ul style="list-style-type: none">. Requirement for hardened barriers to protect alarms, defensive positions.. No isolation zone requirement.. No specific illumination requirement stated.

<u>Subject</u>	<u>73.55</u>	<u>73.50</u>
D. Access Control	. Search all handcarried packages, other randomly.	. Search all packages.
	. Requirement for picture badges.	. No such specific requirement.
E. Intrusion Alarms	. Central alarm station not visible from protected area perimeter.	. No such requirement.
F. Communications	. No duress alarm system.	. Duress alarm system for guards.
	. Requirement for radio and telephone communication to LLEA.	. Only radio communication required.
G. Testing and Maintenance	. Testing periods specified.	. No testing period specification.

CONCLUSION

Notwithstanding the fluid situation regarding the upgrading of 73.50, thereby limiting the practicality of isolating specific inconsistencies and corresponding recommendations, three potential consistency problem areas have been identified. These were the need to consider 1) the commonality of not only the rules themselves, but also the supporting documents, such as Regulatory Guides, 2) the overall format structure, and 3) the degree of safeguard system or component detail that will be specified in the rules.


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