

*Jim*  
*Frank*  
*1-15*

MAR 26 1982

MEMORANDUM FOR: Valeria H. Wilson  
Management Analysis Branch  
Planning and Program Analysis Staff, NRR

FROM: Ashok Thadani, Chief  
Reliability and Risk Assessment Branch  
Division of Safety Technology, NRR

SUBJECT: TRANSMITTAL OF DOCUMENTS REQUESTED UNDER FOIA 82-145

Enclosed, as requested in your memo dated 3/23/82 to me, are: (1) the documents requested under FOIA 82-145 (Curran), (2) a listing of those documents, and (3) the completed FOIA time record form documenting staff time spent in connection with this FOIA request. If we can be of further assistance in this matter, please contact me or Jim Conran, x27111.

Ashok Thadani, Chief  
Reliability and Risk Assessment Branch  
Division of Safety Technology, NRR

Enclosures:  
As stated

cc: M. Ernst, DST  
S. Hanauer, DST

Distribution:

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A. Thadani  
F. Coffman  
J. Conran  
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DATE	3/25/82	3/25/82	3/25/82				

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LISTING OF DOCUMENTS PROVIDED IN RESPONSE TO  
FOIA 82-145 (CURRAN)

1. Memo, dated 10/13/81, Murley (DST) to Denton (NRR), entitled "Safety Classification Terminology -- Proposed Standard Definitions", and attachments as follows:
  - a. Enclosure 1 - Excerpts (pages 3-10) from staff testimony on Contention UCS #14 in the TMI-1 Restart Hearing.
  - b. Enclosure 2 - Memo, dated 10/30/80, Ross (DSI) to All DSI Personnel, entitled "Safety Terminology Used in TMI-1 Restart Hearing Testimony" (no enclosure included).
  - c. Enclosure 3 - "Definition of Terms" (2 pages).
  - d. Enclosure 4 - Proposed (draft) letter, Denton to All NRR Personnel, entitled "Standard Definitions For Commonly-Used Safety Classification Terms", and proposed enclosure "Definition of Terms" (2 pages).
  - e. Enclosure 5 - "Safety Classifications - NRC vs. IAEA", (2 pages).

DISTRIBUTION: Central File  
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J. Conran  
 Conran RDG

OCT 13 1981

MEMORANDUM FOR: Harold R. Denton, Director  
 Office of Nuclear Reactor Regulation

THRU: Edson G. Case, Deputy Director, NRR

FROM: Thomas E. Murley, Director  
 Division of Safety Technology, NRR

SUBJECT: SAFETY CLASSIFICATION TERMINOLOGY--PROPOSED STANDARD  
 DEFINITIONS

Enclosure 1 attached is excerpted from testimony developed by the DSI staff in connection with the litigation of Contention #14 in the TMI-1 Restart Hearing. That testimony set forth definitions for two safety classification terms (i.e., "important to safety" and "safety-grade") used frequently in the conduct of the agency's safety regulation activities. These definitions were endorsed explicitly by the Director, DSI (see Enclosure 2); and you will recall that this testimony was discussed specifically with you and Ed Case at a meeting just prior to the argument of Contention 14 in the hearing last December.

Since that time efforts have continued to achieve consistency within all elements of the NRR staff in the usage of those two terms; and that effort has expanded to include development of a standard definition for yet a third frequently used term, i.e., "safety-related." These efforts have included: (1) review of a large number of Reg. Guides and SRPs, in conjunction with review of the regulations on which they are based, for consistency in the application of safety classification terminology; (2) extensive discussions among cognizant NRR, RES (Standards Development), and ELD personnel regarding safety classification terminology (including consideration of possible alternative "standard" definitions) in a number of different contexts (e.g., development of a graded Q.A. approach; SRP revisions in connection with the Bingham Amendment effort); and (3) full discussion of the safety classification and safety classification terminology question with the cognizant ACRS subcommittee and subsequent consideration of these matters by the full ACRS.

As a result of these efforts we are proposing for your endorsement formally standard definitions for the terms "important to safety," "safety-grade," and "safety-related" as set forth in Enclosure 3. As a first step in implementing your endorsement, we are proposing for your signature a (draft) letter to all NRR staff members (see Enclosure 4), informing them of your endorsement and prescribing adherence to the definitions in Enclosure 3 in all future NRR activities. As a follow-on to this action consideration is being given to issuance of a Reg. Guide and/or SRP section addressing definition and application of these terms. It may be useful in that context to develop as further

Contact: Jim Conran, NRR  
 49-28983

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DATE							

guidance in the application of these terms a listing of plant structures, systems, and components that are "important to safety," but are not "safety-grade" (or "safety-related"). This was a question that recurred frequently during the extensive inter-staff discussions of these matters referred to above.

In the longer term, in connection with efforts to develop means of ranking plant systems with respect to degree of importance to safety, and in connection with related efforts to develop a graded Q.A. approach, we intend to reexamine completely the suitability of the existing safety classification terminology scheme. ACRS was particularly critical of the existing scheme with regard to its lack of clarity and precision, and of the confusion that seems to result frequently in its day-to-day application. It should also be noted that the existing NRC scheme is not consistent with international (i.e., IAEA) standard safety classification terminology (see Enclosure 5). It is possible, therefore, that in the longer term further modification of the definitions set forth in Enclosure 3 could occur; or a completely new classification scheme and associated terminologies might be developed. In the interim, however, until the longer term efforts can be completed, we believe that there is a genuine need for standardizing safety classification terminology at least to the extent reflected in Enclosures 3 and 4; and we strongly recommend endorsement and promulgation of the standard definitions as we have proposed.

By concurrence in this letter all NRR Division Directors indicate agreement regarding the acceptability and utility of the proposed standard definitions set forth in Enclosure 3, with the express understanding that in the formulation and statement of those definitions there is no attempt by DST to modify technical requirements to be applied in areas under the technical purview of the other NRR Divisions, or to broaden the scope of their licensing review activities. It is recognized that minor editorial changes may have to be made to some Reg. Guides and SRPs in order to make their wording consistent with the definitions set forth in Enclosure 3; but our interest here is only in establishing consistency in the language used by all cognizant groups within NRR in expressing whatever technical requirements they consider appropriate.

Original signed by:  
Thomas E. Murley

Thomas E. Murley, Director  
Division of Safety Technology

Enclosures (5)  
As stated

cc w/encl:  
D. Ross, RES  
R. Minogue, RES  
V. Stello, Jr., IE  
H. Shapar, ELD

*concerned*  
DHFS/D  
SHapauer  
9/11/81  
NRR  
ECase  
10/16/81

*concerned as noted*  
DLV  
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RVotlmer  
9/13/81

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URNAME	HConran	AT Athadani	Mernst	Murley	RMattson	DEisenhut	RVotlmer
DATE	8/11/81	8/12/81	8/14/81	8/25/81	8/21/81	8/27/81	8/13/81

Excerpts from Staff Testimony  
On Contention UCS #14 in the  
TMI-1 Restart Hearing

Enclosure 1



Q.4 What is the purpose of your testimony?

A. The purpose of my testimony is to respond to UCS Contention #14, which states:

"The accident demonstrated that there are systems and components presently classified as non-safety-related which can have an adverse effect on the integrity of the core because they can directly or indirectly affect temperature, pressure, flow and/or reactivity. This issue is discussed at length in Section 3.4, "System Design Requirements," of NUREG-0578, the TMI-2 Lessons Learned Task Force Report (Short Term). The following quote from page 18 of the report describes the problem:

'There is another perspective on this question provided by the TMI-2 accident. At TMI-2, operational problems with the condensate purification system led to a loss of feedwater and initiated the sequence of events that eventually resulted in damage to the core. Several nonsafety systems were used at various times in the mitigation of the accident in ways not considered in the safety analysis; for example, long-term maintenance of core flow and cooling with the steam generators and the reactor coolant pumps. The present classification system does not adequately recognize either of these kinds of effects that nonsafety system can have on the safety of the plant. Thus, requirements for nonsafety systems may be needed to reduce the frequency of occurrence of events that initiate or adversely affect transients and accidents, and other requirements may be needed to improve the current capability for use of nonsafety systems during transient or accident situations. In its work in this area, the Task Force will include a more realistic assessment of the interaction between operators and systems.'

The Staff proposes to study the problem further. This is not a sufficient answer. All systems and components which can either cause or aggravate an accident or can be called upon to mitigate an accident must be identified and classified as components important to safety and required to meet all safety-grade design criteria."

The Board limited the scope of this contention to the core cooling system. (First Special Prehearing Conference Order, December 18, 1979).

Q.5 How is the term "... components important to safety ..." defined in the Commission's regulations?

A. The term "... structures, systems, and components important to safety ..." is defined in the introductory paragraph to the General Design Criteria (Appendix A to 10 CFR Part 50) as those "... structures, systems, and components that provide reasonable assurance that the facility can be operated without undue risk to the health and safety of the public." From this context, it is clear that the expression "... important to safety ..." is meant to apply generally to all structures, systems, and components addressed in the General Design Criteria (GDC). The term is used consistently in that sense throughout the GDC, and in other parts of the regulations as well (e.g., see discussion below).

Q.6 Is the term "... safety-grade ..." defined in the regulations?

A. That term is not defined explicitly in the regulations. The term is widely-used, however, in the context of the safety review process. The meaning of the term, as most commonly used by the staff in that context, is inferred from the language of the regulations, as follows:

- (a) General Design Criterion 1 introduces the notion of different quality levels for plant features with differing safety roles and varying degrees of importance to safety. Specifically, GDC-1 requires application of "... quality standards commensurate with the importance of the safety function to be performed ..." for structures, systems, and components important to safety.
- (b) Appendix A to 10 CFR Part 100 implements the concept established in GDC-1 (i.e., gradations in quality levels corresponding to relative safety importance) by identifying explicitly a select



sub-class of structures, systems, and components (out of the broad class "important to safety") that are required for the performance of specific, critical safety functions (e.g., safe shutdown, accident prevention and consequence mitigation, etc.). Specifically, Sec. III.c of Appendix A to 10 CFR Part 100 defines the Safe Shutdown Earthquake (the most severe seismic event analyzed for a nuclear power plant), and requires that "... certain structures systems, and components (important to safety) ..." be designed to remain functional for that event. Those "certain" plant features, and the critical safety functions they must perform, are further identified in Sec. III.c as: "... those necessary to assure:

- (1) The integrity of the reactor coolant pressure boundary,
- (2) The capability to shut down the reactor and maintain it in a safe shutdown condition, or
- (3) The capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures comparable to the guideline exposures of this part."

Very high quality standards must, of course, be applied to plant features required for such purposes, in order to assure their availability when called upon and very high reliability in service. Such considerations are the origin of the term "safety-grade"; and the staff applies that term only to the structures, systems and components required to perform the specific critical safety functions identified above. (Frequently, the term "safety-grade, systems or components" is shortened to "safety systems or components." These two terms are used interchangeably in the following testimony).

Q.7 Would you summarize from the preceding, the relationship between the terms "important to safety" and "safety-grade"?

A. (1) The term "important to safety" applies generally to the broad class of structures, systems, and components addressed in the General Design Criteria.

(2) "Safety-grade" structures, systems and components are a sub-class of all those "important to safety."

(3) All structures, systems, and components encompassed by the term "important to safety" (including the "safety-grade" sub-class) are necessary to meet the broad safety goal articulated in Appendix A to 10 CFR Part 50 of the regulations (i.e., provide reasonable assurance that a facility can be operated without undue risk to the health and safety of the public).

(4) Only "safety-grade" structures, systems and components are required for the critical accident prevention, safe shutdown, and accident consequence mitigation safety functions identified in Sec. III.c of Appendix A to 10 CFR Part 100.

Q.8 Has the staff identified those structures, systems and components which must be safety-grade?

A. Yes. They are listed in detail in Regulatory Guide 1.29. The specific purpose of Reg. Guide 1.29 was to identify all structures, systems and components of nuclear power plants that should be designed to withstand the effects of the Safe Shutdown Earthquake (designated Seismic Category I). Because of the manner in which the term safety-grade was derived in the preceding discussion, however, the list of Seismic Category I plant features identified in Reg. Guide 1.29 should also be the listing of all "safety-grade" structures, systems, and components in a plant.

Q.9 Is the term "... core cooling system ..." defined in the regulations?

A. To my knowledge, that term is not defined explicitly in the regulations.

From the context in which it is applied in the specification of this contention, however, the staff considers that term to encompass those primary, secondary, and auxiliary systems used to remove heat from the core and transfer it to the heat sink, both in normal operation and under accident conditions.

Q.10 Referring now to the first sentence of the contention,

(a) Can non-safety systems and components directly or indirectly affect the temperature, pressure flow and/or reactivity, and

(b) Can non-safety systems and components, therefore, have an adverse effect on the integrity of the core?

A. (a) The staff stipulates that non-safety systems and components can directly or indirectly affect core reactivity and primary coolant temperature, pressure and flow. It follows, therefore, that (at least in general) failure or off-normal operation of non-safety systems and components can cause or aggravate an accident, but

(b) That does not establish that failure or off-normal operation of non-safety systems and components alone can have an adverse effect on the integrity of the core, as strongly implied by the wording of the contention. (In the TMI-2 accident sequence, failure of non-safety components, coupled with improper operation of installed safety systems, led to core damage.)

Q.11 Do you have any clarifying or amplifying comments regarding the second paragraph of the contention, i.e., the quote excerpted from NUREG-0578?

A. The staff acknowledges that non-safety systems and components were used in the mitigation of the TMI-2 accident; but it is important to note and emphasize, in the discussion of this contention, that resort was made to use of non-safety systems and components in the accident mitigation role, only after improper operation of installed safety systems had resulted in severe core damage and other outside-design-basis conditions (e.g., voiding in the primary coolant and hydrogen generation, which may have blocked natural circulation, thus creating the need for forced cooling).

Q.12 Referring now to the last sentence of the contention, what is the staff's position regarding the statement that "All systems and components which can either cause or aggravate an accident or can be called on to mitigate an accident must be identified and classified as components important to safety and required to meet all safety-grade design criteria"?

A. We believe that, in the sense that the term "important to safety" is defined and used consistently in the regulations (see response to Q.5 above), such systems and components would already be regarded (i.e., classified) as important to safety. But, as further established in the responses to Q.6 and Q.7 above, all components important to safety need not be safety-grade. Only components required for the specific critical safety functions delineated explicitly in the response to Q.6 above need to meet safety-grade design criteria.

Q.13 More specifically, if a given non-safety system or component is known to have contributed to an accident, or is known to have been relied upon to recover from an accident (as was the case at TMI-2), how does the staff decide whether-or-not the safety classification of the system or component should be changed and whether-or-not that system or component should be made safety-grade?

A. The test applied by the staff, in deciding whether a given non-safety system or component should be upgraded to safety-grade, is not just whether it could cause or aggravate or be called upon to mitigate an accident. The final determination (regarding whether-or-not to upgrade) is based upon consideration of the following questions (decision criteria), which derive directly from the definitions and discussions developed in the responses to Q.5 through Q.10:

(a) will the failure or off-normal operation of the non-safety system or component in question, in and of itself, degrade the capability of installed safety systems such that those safety systems cannot mitigate accident consequences and assure adequate safety,\*

(b) will the effects of failure or off-normal operation of the non-safety system or component in question alone exceed the capability of installed safety systems to mitigate accident consequences and assure adequate safety, if installed safety systems are operated properly so that full credit can be taken for their functioning to design capability throughout the accident sequence,\*

\*Assuming single failure in the installed safety systems in accordance with the Single Failure Criterion.

(c) is a non-safety system or component that may be called upon actually required to mitigate accident consequences and assure adequate safety, if installed safety systems are operated properly so that full credit can be taken for their functioning to design capability throughout the accident <sup>sequence</sup> sequence.\*

If the staff determines, either by careful analysis or actual experience, that the answer to any of these questions, in all of its aspects, is yes, then:

- (i) the system or component in question would be upgraded to safety-grade, or
- (ii) the design of the facility and/or the capability of the installed safety systems would be improved such that the answer is no to all three questions.

In some instances (as has been the case for some of the non-safety components which were involved in the TMI-2 accident sequence and recovery process), even though none of the decision criteria above that would require upgrading are met, the staff may decide as a prudent measure to require upgrading of the system or component in question, but not to full safety-grade. This might be done, for example, in order to improve the availability and reliability of the component in question, and thereby provide increased safety margins or greater flexibility for dealing with potential future accident situations (either within the current design basis or like TMI-2, and irrespective of how such conditions might come about).

\*Assuming single failure in the installed safety systems in accordance with the Single Failure Criterion.





UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

OCT 3 0 1980

MEMORANDUM FOR: All DSI Personnel

FROM: Denwood F. Ross, Jr., Director, Division of Systems  
Integration, NRR

SUBJECT: SAFETY TERMINOLOGY USED IN TMI-1 RESTART HEARING TESTIMONY

One contention by intervenors in the TMI-1 Restart Hearing would require that all non-safety components that could cause or aggravate an accident, or that could be called upon to mitigate the consequences of an accident, should be made safety-grade. Specific examples focused on by the intervenors in this regard, include the PORV and block valves, pressurizer heaters, and reactor coolant pumps, in view of the roles played by those components in the TMI-2 accident sequence and recovery process. In addressing this issue, it was necessary to focus on the definition, application, and common-usage of the terminologies employed by the staff in this regard. The attached testimony establishes the definition for two of the most frequently used terms of this kind, i.e., "important to safety" and "safety-grade."

It should be noted that another frequently used term, i.e., "safety-related," is not treated in the attached testimony. Office of Standards Development has prepared a Commission Paper that is intended to resolve the definition of that term. The thrust of the OSD effort is to establish that the terms "safety-related" and "important to safety," as they are defined and used in the regulations, are synonymous (at least in the context of application of the quality assurance criteria of Appendix B to 10 CFR Part 50). At this point, however, the definition of the term "safety-related" is not yet fully resolved; and, because the OSD effort involves a proposed change to the language of Appendix B, the Commission will have the final word in that regard.

To the extent that definitions for commonly-used safety terminologies have been established (as in the attached testimony), our goal should be consistency in their usage and application in all of our activities. More to the point, in the context of immediate concern, I expect all DSI personnel involved in the TMI-1 Restart Hearing to give particular emphasis to consistent usage and application of the terms "important to safety" and "safety-grade" in accordance with the definitions established in the attached testimony.

PDR  
~~810+080007~~

*LS Reubenstein for*  
Denwood F. Ross, Jr., Director  
Division of Systems Integration  
Office of Nuclear Reactor Regulation

Enclosure:  
As stated

cc: See next page

ENCLOSURE 2

OCT 3 0 1980

cc: H. R. Denton, DIR, NRR  
R. B. Minogue, DIR, OSD  
V. Stello, DIR, IE  
H. Shapar, DIR, ELD  
All NRR Division Directors  
H. Silver, DOL  
S. Richardson, OSD  
J. M. Cutchin, IV, ELD  
T. F. Dorian, ELD

## DEFINITION OF TERMS

### Important to Safety

- Definition - From 10 CFR 50, Appendix A (General Design Criteria) - see first paragraph of "Introduction."

"Those structures, systems, and components that provide reasonable assurance that the facility can be operated without undue risk to the health and safety of the public."

- Encompasses the broad class of plant features, covered (not necessarily explicitly) in the General Design Criteria, that contribute in important way to safe operation and protection of the public in all phases and aspects of facility operation (i.e., normal operation and transient control as well as accident mitigation).
- Includes Safety-Grade (or Safety-Related) as a subset.

### Safety-Related

- Definition - From 10 CFR 100, Appendix A - see sections III.(c), VI.a.(1), and VI.b.(3).

"Those structure, systems, or components designed to remain functional for the SSE (also termed 'safety features') necessary to assure required safety functions, i.e.:

- (1) the integrity of the reactor coolant pressure boundary;
- (2) the capability to shut down the reactor and maintain it in a safe shutdown condition; or
- (3) the capability to prevent or mitigate the consequences of accidents which could result in potential off-site exposures comparable to the guideline exposures of this part.

- Subset of "Important to Safety"
- Regulatory Guide 1.29 provides a LWR-generic, function-oriented listing of "safety-related" structures, systems, and components needed to provide or perform required safety functions. Additional information (e.g., NSSS type, BOP design A-E, etc.) is needed to generate the complete listing of safety-related SSC's for any specific facility.

Note: The term "safety-related" also appears in 10 CFR 50, Appendix B (Q.A. Program Requirements); however, in that context it is framed in somewhat different language than its definition in 10 CFR 100, Appendix A. That difference in language between the two appendices has contributed to confusion and misunderstanding regarding the exact meaning of "safety-related" and its relationship to "important to safety" and "safety-grade." A revision to the language of Appendix B has been proposed to clarify this situation and remove any ambiguity in the meaning of these terms.

Safety-Grade

- Term not used explicitly in regulations but widely used/applied by staff and industry in safety review process.
- Equivalent to "Safety-Related," i.e., both terms apply to the same subset of the broad class "Important to Safety."

DRAFT  
JConran/jm  
10/2/81

MEMORANDUM FOR: All NRR Personnel

FROM: Harold R. Denton, Director  
Office of Nuclear Reactor Regulation

SUBJECT: STANDARD DEFINITIONS FOR COMMONLY-USED SAFETY CLASSIFICATION  
TERMS

Litigation of one of the principal issues in the TMI-1 Restart Hearing brought to light the fact that there is not complete consistency among all elements of the NRR staff in the application of safety classification terms used frequently in the conduct of NRR's safety review and licensing activities. More specifically, it appears that terms "important to safety," "safety grade," and "safety-related" have been used at times interchangeably, or in ways not completely consistent with the definitions, and usage of such terms in the regulations, and which do not fully reflect the intent of the regulations or current licensing practice.

Efforts have been underway for some months now to develop guidance for the consistent usage of these terms. These efforts have included: (a) review of a large number of Reg Guides and SRP's, in conjunction with parts of the regulations upon which they are based, for consistency in the application of safety classification terminology, (2) extensive discussions among cognizant NRR, RES (Stds. Devel.) and ELD representatives regarding proper interpretation and application of such terms, including consideration of alternative "standard" definitions and (3) consultation with the cognizant ACRS Subcommittee regarding these matters, and consideration by the full ACRS as well.

As a result of these efforts, I am endorsing and prescribing for use by all NRR personnel the standard definitions set forth in the enclosure to this letter. It should be noted that in connection with long-term efforts to develop

means for ranking reactor plant systems with respect to degree of importance to safety, and in connection with related efforts to develop a graded Q.A. approach in reactor licensing, the general question of safety classifications and safety classification terminologies will be reexamined; and this could result in changes to the definitions set forth in the enclosure or perhaps in development of a completely new scheme in this regard. For the time being, however, the definitions in the enclosure should be considered "standard" and should be applied consistently by all NRR personnel in all aspects of our safety review and licensing activities and should be appropriately reflected in our regulatory guidance documents.

It is expected that minor editorial revisions will have to be made to some existing Reg Guides and SRP's in order to make their wording consistent with these definitions. You should review the regulatory guidance documents within your purview in this regard and recommend the necessary changes; it is not expected that this will involve extensive revision efforts. I want to make clear that my interest here is only in establishing consistency in the language used by all cognizant groups within NRR in expressing our technical requirements. It is not my intention by this action to dictate new technical requirements, to modify existing technical requirements, or to broaden the existing scope of NRR licensing review.

Harold R. Denton, Director  
Office of Nuclear Reactor Regulation



## DEFINITION OF TERMS

### Important to Safety

- Definition - From 10 CFR 50, Appendix A (General Design Criteria) - see first paragraph of "Introduction."

"Those structures, systems, and components that provide reasonable assurance that the facility can be operated without undue risk to the health and safety of the public."

- Encompasses the broad class of plant features, covered (not necessarily explicitly) in the General Design Criteria, that contribute in important way to safe operation and protection of the public in all phases and aspects of facility operation (i.e., normal operation and transient control as well as accident mitigation).
- Includes Safety-Grade (or Safety-Related) as a subset.

### Safety-Related

- Definition - From 10 CFR 100, Appendix A - see sections III.(c), VI.a.(1), and VI.b.(3).

"Those structure, systems, or components designed to remain functional for the SSE (also termed 'safety features') necessary to assure required safety functions, i.e.:

- (1) the integrity of the reactor coolant pressure boundary;
- (2) the capability to shut down the reactor and maintain it in a safe shutdown condition; or
- (3) the capability to prevent or mitigate the consequences of accidents which could result in potential off-site exposures comparable to the guideline exposures of this part.

- Subset of "Important to Safety"
- Regulatory Guide 1.29 provides a LWR-generic, function-oriented listing of "safety-related" structures, systems, and components needed to provide or perform required safety functions. Additional information (e.g., NSSS type, BOP design A-E, etc.) is needed to generate the complete listing of safety-related SSC's for any specific facility.

Note: The term "safety-related" also appears in 10 CFR 50, Appendix B (Q.A. Program Requirements); however, in that context it is framed in somewhat different language than its definition in 10 CFR 100, Appendix A. That difference in language between the two appendices has contributed to confusion and misunderstanding regarding the exact meaning of "safety-related" and its relationship to "important to safety" and "safety-grade." A revision to the language of Appendix B has been proposed to clarify this situation and remove any ambiguity in the meaning of these terms.

Enclosure

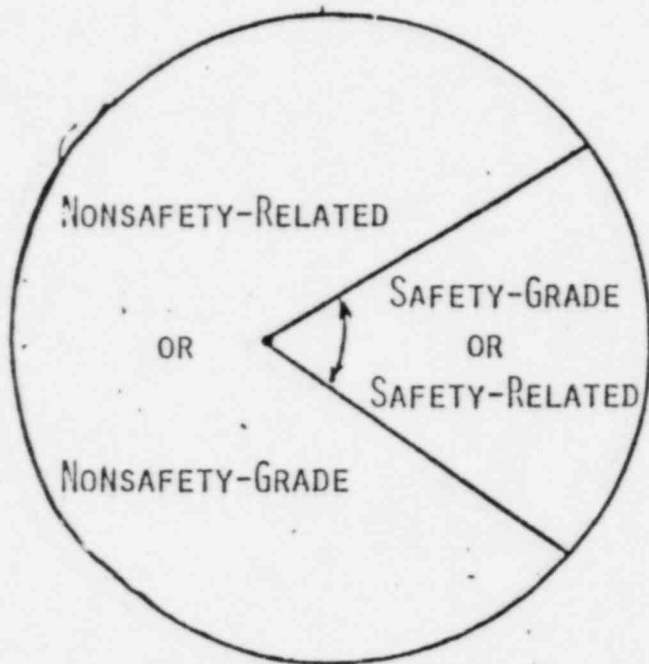
Safety-Grade

- Term not used explicitly in regulations but widely used/applied by staff and industry in safety review process.
- Equivalent to "Safety-Related," i.e., both terms apply to the same subset of the broad class "Important to Safety."

SAFETY CLASSIFICATIONS

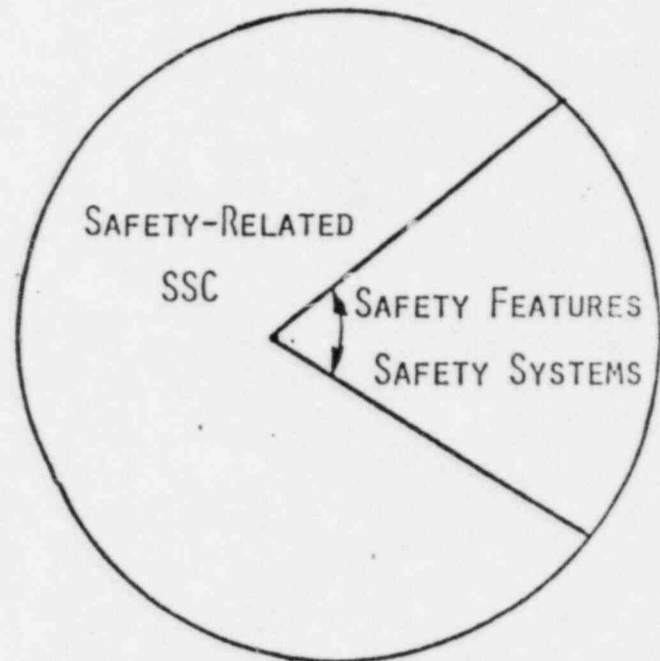
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NRR

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IAEA

ENCLOSURE 5

ENCLOSURE 5