



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

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MEMORANDUM FOR: All NRR Employees

FROM: Thomas E. Murley, Director  
Office of Nuclear Reactor Regulation

SUBJECT: NRR OFFICE LETTER NO. 800 - NUREG-0800 - STANDARD  
REVIEW PLAN FOR THE REVIEW OF SAFETY ANALYSIS REPORTS FOR  
NUCLEAR POWER PLANTS

PURPOSE

The purpose of this office letter is to establish a standard format for the preparation, revision, and issuance of NRC Standard Review Plan (SRP) sections. It also includes instructions for the use of the Standard Review Plan Control System (SRPCS), and supersedes NRR Office Letter No. 2, Revision 3, dated December 19, 1986.

BACKGROUND

The SRP is used by staff reviewers in the Office of Nuclear Reactor Regulation (NRR) for guidance in performing safety reviews of applications to construct or operate nuclear power plants. In addition, the SRP is used as the basis for the review of requests by licensees for changes in their operating licenses. Thus, the SRP is a living document that is the basis for the review of proposed modifications resulting from new NRC requirements and licensee initiatives, as well as the basis for the review of FSAR's and PSAR's.

DEFINITIONS

Primary Review Branch is assigned primary responsibility for a particular section of the SRP. This branch may obtain the assistance of a Secondary Review Branch in the preparation of revisions or additions to the SRP as appropriate.

Secondary Review Branch is responsible for technical areas within an SRP section for which it has specific expertise that is not available in the Primary Review Branch. The Secondary Review Branch may also be a branch with related interest in an SRP section, but to a lesser extent. The overall responsibility for the SRP section, however, will be maintained by the Primary Review Branch.

CONTACT:  
G. Klingler, PMAS  
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SRP Control System tracks the development, coordination, and processing of proposed revisions and additions to SRP sections. It aids in allocating personnel and establishing priorities, and it provides management with an overview of proposed SRP revisions and additions.

#### RESPONSIBILITIES AND AUTHORITIES

##### Director, Office of Nuclear Reactor Regulation (NRR)

- a. Establishes and coordinates NRR SRP policies, guidance, and programs.

##### Associate Director for Inspection and Technical Assessment, NRR

- a. Assigns primary and secondary review branch responsibilities for SRP sections to branches within the associate directorship.

##### Director, Program Management, Policy Development and Analysis Staff, NRR

- a. Approves all SRP revisions and additions.

##### Primary Review Branch, NRR

- a. Is responsible for revisions and additions to assigned SRP sections and maintains this primary responsibility even when another NRR branch or NRC office performs the majority of the work involved in the revision.
- b. Prepares an SRP Control System data sheet for any anticipated revision or addition to the SRP and forwards it to the Inspection, Licensing and and Research Integration Branch (ILRB) coordinator for incorporation into the SRP Control System.
- c. Prepares revisions or additions to the SRP necessary to carry out assigned areas of responsibility in accordance with the procedure included with this letter (Enclosure 1).
- d. Updates the quarterly status of assigned revision work and sends the update, by means of the SRP Control System, to the ILRB coordinator (Enclosure 2).
- e. Ensures that policies, criteria, and procedures of a continuing nature are incorporated, as appropriate, in the SRP and that the documents prepared are technically correct.
- f. Ensures that NRR organizations and other NRC offices participate in the development of SRP documents as appropriate.
- g. Ensures that revisions and additions to the SRP are reviewed by a technical editor before they are issued in final form.
- h. Submits completed SRP revisions and additions to the SRP coordinator, ILRB, for issuance to holders of controlled copies of the SRP.

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- i. Identifies and forwards to ILRB suggested administrative changes to the SRP to improve its efficiency and effectiveness.
- j. Reviews assigned SRP sections and proposes changes to ensure the integration of its requirements with the inspection program.
- k. Is responsible for implementing the requirements of this office letter.

Secondary Review Branch

- a. Is responsible for an assigned technical area of responsibility for an SRP section.
- b. Coordinates its activities pertaining to revisions or additions to an assigned area of responsibility with those of the Primary Review Branch.
- c. Provides proposed changes to the Primary Review Branch in a timely manner to ensure SRP revisions or additions meet the proposed schedule as identified in the SRPCS.
- d. Identifies and forwards to ILRB suggested administrative changes to the SRP to improve its efficiency and effectiveness.
- e. Reviews assigned SRP sections and proposes changes to ensure the integration of its requirements with the inspection program.
- f. Is responsible for implementing the requirements of this office letter.

Chief, Inspection, Licensing, and Research Integration Branch, NRR

- a. Implements the NRR program for management and oversight of the SRP.
- b. Identifies and implements administrative changes to the SRP to improve its efficiency and effectiveness.
- c. Reviews the existing SRP sections to ensure the integration of its requirements with the inspection program.
- d. Reviews all proposed changes to the SRP to ensure that all documents are in conformance with NRC policies and guidance as stated in this office letter.
- e. Ensures that the SRPCS quarterly report is compiled from inputs received from the Primary Review Branches, and is issued in a timely manner.
- f. Is responsible for the content of and changes made to this office letter.

SRP Manual Coordinator, ILRB, PMAS, NRR

- a. Ensures that the appropriate NRR organizations and other NRC offices are given the opportunity to participate in the development of SRP sections.

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- b. Ensures that the requirements of this office letter are applied in the preparation and approval of the SRP.
- c. Issues the SRPCS quarterly report.
- d. Acts as the central coordinator and information resource person for all SRP activities.
- e. Is responsible for maintaining the SRP distribution list.

### BASIC REQUIREMENTS

#### Use in Safety Reviews

The SRP plays a primary role in assuring the staff, the nuclear industry, and the public that all plants licensed include those features that are essential to protect the public health and safety. Thus, Project Managers and technical reviewers should use the SRP in all of their reviews to ensure that these goals are achieved. The SRP represents the most definitive basis available for specifying NRC's design criteria and design guidelines for ensuring an "acceptable level of safety" in the review of light water reactor facilities. The SRP evolved from many years of experience gained by the staff in establishing and using regulatory requirements in the safety evaluations of nuclear facilities. The uniform implementation of the design requirements, criteria, and guidelines in the SRP by all NRR staff members should ensure that the acceptable level of safety will be maintained.

#### Scope of Review

Because the staff review is an audit of the applicant's analysis, the staff may emphasize or delete particular aspects of an SRP section, as appropriate for the application being reviewed. These areas of increased emphasis or deletions are acceptable, if the reviewer has management approval and documents the scope and depth of the review in the Safety Evaluation Report (SER). Starting with the SER for Clinton Unit 1 (February 1982) each SER has included a brief description of the review actually performed by the NRC staff; licensees should not be asked for additional information to facilitate meeting this staff requirement. Examples of acceptable variations in the scope of a review include deletions because of a design similar to the design of another unit recently reviewed, increased emphasis as a result of new developments derived from operating experience, or consideration of unique design features not addressed in the SRP.

#### Review Responsibilities

The Primary and Secondary Review Branches for each SRP section are listed in Enclosure 3. In general, these assignments have been made by the Associate Director for Inspection and Technical Assessment. Review branches have the responsibility for revising sections of the SRP or preparing new SRP sections.

#### Deviations from the SRP by Applications

Because the SRP generally describes an acceptable means of meeting the regulations,

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but not necessarily the only means, applications may deviate from the acceptance criteria in the SRP. On March 10, 1982, the Commission approved the rule 10 CFR Part 50.34(g), "Documentation of Differences from the Standard Review Plan." This rule requires that applications docketed after May 17, 1982, identify and describe all differences in design features, analytical techniques, and procedural methods between those proposed for a facility and those given in the acceptance criteria of the Standard Review Plan. This rule is supplemented by NUREG-0906, "Guidance for Implementation of 10 CFR 50.34(g)." If an application deviates from the SRP acceptance criteria, NRR staff reviewers must make an explicit evaluation finding in the appropriate section of the SER and must provide justification and appropriate bases for accepting an application's documented deviations.

#### Revisions to the SRP by the Staff

The SRP is part of the continuing regulatory standards development activity that not only documents past and current methods of review, but also provides a basis for an orderly modification of the review process. The SRP will be revised periodically as new requirements are imposed or as existing requirements are modified. In addition, the SRP will be revised and updated periodically as the need arises to clarify the content or correct errors. In addition, proposals to revise the review process by modifying the SRP will be considered for matters that would provide substantial safety improvement, or for those matters that would reduce unduly burdensome staff positions while still maintaining adequate safety.

Staff reviewers should not decrease or go beyond the scope and criteria of any specific SRP section without management approval. Backfits are defined in 10 CFR 50.109, and both plant-specific and generic backfits must comply with this rule. The staff should be particularly sensitive to actions that they initiate that may be within the context of a "backfit." This includes not only new or modified interpretations of existing rules or regulations, but also new or revised requirements or guidance that is different from that set forth in official letters, safety evaluation reports, regulatory guides, or an applicable subsection of the SRP, including branch technical positions and appendices.

If a staff member believes that protection of public safety necessitates a position more stringent than that defined in the SRP, the staff member should follow one of two courses of action. First, if the additional requirement or guidance applies to a specific operating license application or operating reactor, the potential backfit should be promptly identified to management and handled generally according to NRC Manual Chapter 0514, "NRC Program for Management of Plant-Specific Backfitting of Nuclear Power Plants," dated February 27, 1986, and NRR Office Letter No. 52, Management of Plant-Specific Backfitting, as revised. Second, if the additional requirement affects a number of a class of nuclear power plants, the procedures in Office Letter No. 39, "NRR Procedures for Control and Review of Generic Requirements," as revised, and in Office Letter No. 40, "Management of Proposed Generic Issues," as revised, should be followed. If corresponding changes to technical specifications are needed, the directions of Office Letter No. 38, "Procedures for Revisions to Technical Specifications," as revised, should be followed.

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Any change in safety requirements or scope of review which initiates a revision to the SRP, must be approved by NRR in accordance with the instructions in this office letter. Revisions to the SRP are categorized by type (Enclosure 1), and may or may not require ACRS and CRGR review prior to being issued. Those revisions requiring ACRS and CRGR review will be reviewed by the ACRS and CRGR in accordance with the CRGR Charter, Revision 3, dated September 3, 1986, and the change will be published as a "Proposed Revision to the Standard Review Plan" for public comment. The comment period permits the public to participate in the decision-making process before the SRP section is approved and issued in final form, and encourages public input to the content of new requirements and to the value-impact statement associated with each new or revised section of the SRP. The procedure in Enclosure 1 will be used for processing a revision to the SRP.

The SRP should be the comprehensive and integrated documentation incorporating all regulatory guidance. The SRP is the product of the integrated efforts of all review branches in assuring that each SRP section is congruent with current NRC regulations and conforms with current regulatory guides and previously approved staff requirements and positions. New requirements may be issued as orders or generic letters for an interim period. These new requirements should be promptly incorporated into the SRP.

The acceptance criteria or review procedure of an SRP section may reference regulatory guides, branch technical positions, NUREG reports or, in some cases, the technical literature as a way to meet the Commission's regulations. However, these referenced documents or any other documents should not be used by themselves to implement new or revised requirements or guidance. NUREG reports in particular should be used only as technical support documents and should be devoid of requirements or guidance, including any recommendations for new requirements or guidance.

It is the responsibility of the Primary Review Branch to ensure that the latest organizational changes are reflected in the SRP at the time of issuance. Branch Technical Positions (BTP) are being deleted and should be changed to appendices to an SRP when revisions are made, or should be incorporated as part of the SRP itself. The trend is to merge the BTP into the related SRP so that just one document is identified for the review process.

#### Standard Review Plan Control System

The Inspection, Licensing and Research Integration Branch (ILRB) will maintain the SRPCS that tracks the development and processing of SRP revisions (Enclosure 2). The SRPCS provides information necessary to manage and control SRP revisions from their inception until the notice of issuance of the SRP section is published in the Federal Register and the section is issued for use. The technical review branches are responsible for notifying the ILRB promptly of any proposed or potential revisions to the SRP. They are also responsible for providing needed tracking information for the SRPCS, including a detailed schedule of milestone dates for processing SRP revisions.

#### Distribution

The distribution list for controlled copies of the SRP was updated in June 1987.

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SRP revisions within NRC are distributed by position title rather than by an individual's name. Regional offices receive copies in accordance with requests made by the Director, Division of Resource Management and Administration for each regional office. The SRP has been distributed externally to contractors and consultants engaged in work for the NRC in accordance with requests made by a division director. The nuclear industry and the general public may purchase copies of the SRP from the National Technical Information Service, Springfield, VA 22161 (Telephone number 703-487-4650).

Requests for changes to the NRC distribution list for the complete SRP or revisions should be approved by a division director and sent to the Chief, Inspection, Licensing and Research Integration Branch, PMAS.

#### IMPLEMENTATION

Implementation of this policy will add stability to the licensing process and increase the confidence of the industry and the public that requirements imposed by NRC are congruent with the regulations and are commensurate with the level of safety to be expected. Consistent implementation of this policy should enable NRR to carry out its statutory function with full consideration of the public interest.

#### EFFECTIVE DATE

This office letter is effective immediately.



Thomas E. Murley, Director  
Office of Nuclear Reactor Regulation

#### Enclosures:

1. Procedure for Processing a  
Revision to the Standard  
Review Plan.
2. Standard Review Plan Control  
System
3. Assignment of Review Responsibilities  
(Primary and Secondary Branches)

## ENCLOSURE 1

### PROCEDURE FOR PROCESSING A REVISION TO THE STANDARD REVIEW PLAN

#### GENERAL

The following procedure delineates the steps to be followed to obtain management approval of revisions to the Standard Review Plan (SRP).

Revisions to the SRP are the responsibility of the Primary Review Branch (PRB). The PRB will be responsible for implementing the procedure described in this enclosure. In some instances, the work to revise an SRP section may not be performed by the PRB, but may be done by another branch within NRR or a branch within RES. However, the PRB will still maintain primary responsibility for the revision to ensure that the basic requirements of this procedure are met and to report on the status of the revision in the Standard Review Plan Control System (SRPCS) until the revision receives final approval and is issued.

SRP revisions may be issued with or without public comment. This procedure describes the process followed for each type of revision from the time the proposed revision is identified until it is issued for use. The two types of SRP revisions are as follows:

#### Type I - Revisions to the SRP Without Public Comments

1. Revisions that incorporate new or revised requirements or guidance that have received public comment and have been approved by the Director, NRR, and for which additional public comments are not necessary (e.g., implementation or referencing in the SRP of Commission Policy Statements or instructions, Regulatory Guides, Standards, and Resolution of Generic Issues including approved TMI Action Plan items).
2. Revisions that incorporate new positions that have been approved by the Director, NRR, and by CRGR and EDO as being so clearly needed that a public comment period would cause an unacceptable delay in implementing them.
3. Clarifications, corrections, changes in names or assignment of branches, deletions of unused references or other similar minor changes.

#### Type II - Revisions to the SRP With Public Comments

1. Revisions that incorporate proposed new or revised requirements, positions, or guidance that have not been reviewed and approved by the Director, NRR, CRGR and the EDO, and include proposed new sections for the SRP.

#### PROCEDURE FOR ALL REVISIONS

1. When any revision to the SRP is identified (a clarification, correction, proposed or approved requirement, or guidance) the Inspection, Licensing and Research Integration Branch (ILRB) should be provided the information



## ENCLOSURE 1

needed to manage and track the development and processing of the revision. The ILRB will maintain a SRPCS that contains all identified proposed revisions to each SRP section.

2. New SRP sections to the SRP will adhere to the SRP standard format described in Attachment 1.
3. The PRB will prepare the revised SRP section in the form of a marked-up copy of the previous revision. The PRB will also coordinate the revision with other divisions; obtain the concurrence of appropriate NRR Division Directors; and transmit the completed revision to the ILRB.
4. If the revision to an SRP requires a change to the Standard Technical Specifications (STS), the PRB will initiate a revision to the STS (see NRR Office Letter No. 38, as revised).

### PROCEDURE FOR TYPE I REVISIONS

The following steps will be followed for Type I revisions to the SRP:

1. The PRB will draft a memo to the ACRS and CRGR for the signature of the Director, NRR, that summarizes the revision, explains the need for the revision and provides the basis for designating the revision as Type I. Included should be references to the documents that contain the previous approval, if applicable. This memo should request expedited CRGR review.
2.
  - a. ILRB reviews the revision package for completeness and format.
  - b. ILRB verifies that the proposed change meets the criteria for a Type I revision, assures that the revision does not go beyond the scope of the approved requirements, or that clarifications do not go beyond the intent of existing requirements.
3. ILRB prepares the final SRP revision package and transmits the revision package to CRGR and the ACRS for information over the signature of the Director, NRR.
4. ILRB sends the Federal Register notice to the Division of Rules and Records for issuance over the signature of the Branch Chief, ILRB.
5. ILRB also sends the completed SRP revision to the Division of Information Support Services for reproduction and distribution. The SRP section is issued for use using the 11X SRP standard distribution list.

### PROCEDURE FOR TYPE II REVISIONS

The revision process for a Type II change to the SRP consists of two parts. The first part covers the processing of a proposed revision package through issuance of the proposed revision for public comments. The second part covers the review and disposition of the public comments and further processing of the revision package for final approval, issuance, and incorporation in the licensing process.

ENCLOSURE 1

1. The PRB will prepare a draft SRP package which includes a draft memo to the CRGR, for the signature of the Office Director that summarizes the revisions, explains the need for the revision and includes a regulatory analysis or backfit analysis prepared in accordance with NRR Office Letter No. 16, as revised.
2. The PRB division will transmit the revision package, revised in accordance with comments received, including discussion of any unresolved comments, to the Director, NRR, four weeks prior to the scheduled submission to the CRGR.
3. Generally, the Director, NRR, will schedule a dry run for the CRGR presentation and for discussion of any outstanding issues. PMAS will formally schedule a meeting with the CRGR once the Director, NRR, has approved the revision package.
4. Following receipt of any comments or instructions from the Director, NRR, the PRB division will revise the package and finalize the forwarding memorandum to the CRGR for the signature of the Director, NRR. The transmittal will include the concurrences or divergent views of appropriate NRR divisions, other technical offices, and the Office of the General Counsel.
5. The PRB Division will make the necessary presentations to CRGR, including resolving any comments.
6. The PRB will prepare a response to CRGR comments for transmittal by the Director, NRR, within one week of receiving the comments in accordance with the directions of NRR Office Letter No. 39, as revised.
7. The PRB will transmit a memorandum to the ACRS over the signature of the Office Director that summarizes the revision, explains the need for the revision and includes the regulatory or backfit analyses. This memorandum must be concurred in by NRR's ACRS coordinator, PMAS.
8. The PRB will modify the SRP revision package and send it to ILRB.
9. ILRB assembles the proposed revision package, prepares a Federal Register notice of intent to revise a section of the SRP and sends the Federal Register notice to the Division of Rules and Records for issuance over the signature of the Branch Chief, ILRB.
10. ILRB also sends the proposed revision of the SRP to the Division of Information Support Services (DISS) for reproduction and distribution for public comment (usually 60 days). DISS makes distribution to the Standard Distribution List and provides copies to the public upon request.
11. The PRB prepares a final revision package that will also include a disposition of each substantive comment received.
12. The previous steps are repeated for processing the final revision package for approval.

## STANDARD REVIEW PLAN CONTENT

The individual SRP sections address, in detail, who performs the review, the matters that are reviewed, the basis for review, how the review is performed, and the conclusions that are sought.

One of the objectives of the SRP is to assign the review responsibilities to the review branches and to define the sometimes complex interfaces between them. Each SRP section identifies the branch that has the primary review responsibility for that section. In some review areas, the Primary Review Branch may require support and the branches that are assigned these secondary review responsibilities are also identified for each SRP section as appropriate.

Each Standard Review Plan document contains the following sections:

1. REVIEW RESPONSIBILITIES - This section identifies the Primary and Secondary Review Branches. There may or may not be a Secondary Review Branch.
2. Section I. AREAS OF REVIEW - This section describes the scope of review, i.e., what is being reviewed by the branch having primary review responsibility. This subsection contains a description of the systems, components, analyses, data, or other information that is reviewed as part of the particular Safety Analysis Report (SAR) section in question. It also contains a discussion of the information needed or the review expected from other branches to permit the Primary Review Branch to complete its review.
3. Section II. ACCEPTANCE CRITERIA - This section contains a statement of the purpose of the review, and identification of which NRC requirements are applicable, and the technical basis for determining the acceptability of the design or the programs within the scope of the area of review of the SRP section. The technical bases consist of specific criteria such as NRC regulatory guides, general design criteria, codes and standards, branch technical positions, and other criteria.
4. Section III. REVIEW PROCEDURES - This section lists the procedures to be used during various phases of nuclear reactor construction and operation. This section is generally a step-by-step procedure that the reviewer goes through to provide reasonable verification that the applicable safety criteria have been met.
5. Section IV. EVALUATION FINDINGS This section presents the type of conclusion that is sought for the particular review area. For each section, a conclusion of this type is included in the staff's Safety Evaluation Report (SER) in which the staff publishes the results of their review. The SER also contains a description of the review including such subjects as which aspects of the review were selected or emphasized; which matters were modified by the applicant, require additional information, will be resolved in the future, or remain unresolved; and where the plant's design or the applicant's programs deviate from the criteria stated in the SRP and the bases for any deviations from the SRP or exemptions from the regulations.

ATTACHMENT 1

6. Section V. IMPLEMENTATION - This section is designed to provide guidance to applicants and licensees regarding the HRC staff's plans for using the SRP section.
7. Section VI. REFERENCES - This section lists the references used in the review process.

## STANDARD REVIEW PLAN CONTROL SYSTEM

GENERAL

The Standard Review Plan Control System (SRPCS) provides the information necessary to manage both Type I and Type II SRP revisions. It is the responsibility of the Primary Review Branch (PRB) to enter a proposed revision to the SRP into the SRPCS as early as possible. If a decision is made at some later date that a revision to the SRP is not necessary, it can be deleted from the SRPCS. A firm decision on the need to revise an SRP is not a criterion for determining its entry into the SRPCS. Blank forms can be obtained from the SRP coordinator in the Inspection, Licensing and Research Integration Branch (ILRB). Completed SRPCS forms are to be sent to the SRP coordinator, ILRB, for entry into the SRPCS. Once the SRPCS forms are initiated, they will be updated on a quarterly basis by the PRB.

The format as well as an example for a SRPCS control sheet is shown in Exhibit 1. An explanation of the indicators used in the SRPCS control sheet is indicated below:

1. SRP Number ----- Standard Review Plan Section Number
2. Revision Type----- From NRR Office Letter No. 2, Revision 4
  - Ia - Incorporate previously approved requirements, corrections, and clarifications.
  - Ib - Incorporate new SRP positions that have been approved by appropriate authority as being so clearly needed that public comment would cause unacceptable delay in implementing them.
  - Ic - Incorporate clarifications, corrections, changes in names or assignment or branches, or other similar changes.
  - II - Incorporate new or revised requirements, positions or guidance that have not been approved by appropriate authority.
3. Schedule ----- Inactive - No SRP revision for this SRP section is currently identified.
  - Holding - SRP revision is necessary, but waiting for higher priority revision.
  - Active - SRP revision is in process.
  - Complete - SRP revision has been issued.

ENCLOSURE 2

4. Office/Div/Br ----- First listed is Primary Review Branch with overall review responsibility; others listed are Secondary Review Branches.
5. SRP Manager ----- Primary Reviewers name who is the contact for review responsibility. If it is too early to identify an individual within a branch, the branch or section chief should be listed.
6. Revision Action ---
  - a - Incorporate new or revised regulations/Commission policy statement and orders.
  - b - Resolution of Generic Issues.
  - c - Incorporate new or revised Regulatory Guide or NUREG.
  - d - Incorporate new or revised guidance other than a, b, or c above.
  - e - Clarifications.
  - f - Housekeeping changes.
7. SRP Title ----- Standard Review Plan Section Title.
8. Base Revision/Date- Current Revision No./issue or SRP section in NUREG-0800.
9. Effective Revision/  
Date ----- Revision No./issue date of SRP section in effect after revision has been completed.
10. Revision  
Description ----- Brief description of proposed revision to SRP section.
11. Reference  
Document(s) ----- State reference to regulation change, Regulatory Guide, NUREG, Generic Issue, or memorandum which provides basis/authorization for proposed change.
12. Current Status ----- Brief statement of last action taken and next action planned.
13. Problems/  
Resolution ----- Identifies potential problems and describes what actions are necessary to resolve them.
14. SRP Processing ----- Selected significant milestone dates that are required for completing the SRP revision through its issuance.

STANDARD REVIEW PLAN CONTROL SYSTEM

<u>SRP Number</u>	<u>Revision Type</u>	<u>Schedule</u>	<u>Office/Div/Br</u>	<u>SRP Manager</u>	<u>Revision Action</u>
6.5.2	II	Active	NRR/DEST/ECEB	J. Wing	a

SRP Section Title----- Containment Spray as a Fission Product Cleanup System.

Base Revision/Date----- Revision 1, 7/81

Effective Revision/Date-- Revision 2, TBD

Revision Description----- Removes requirement for automatic additive system and revises basis for computing spray effectiveness.

Reference Document(s)----

Current Status----- SRP 6.5.2 revision is on hold until the revisions to Regulatory Guide's 1.3 and 1.4 are submitted to CRGR (Second Quarter 1988)

Problem/Resolution-----

SRP Processing-----

<u>Milestones</u>	<u>Original</u>	<u>Current</u>	<u>Actual</u>
SRP draft to vendor, divisions and SPEB for comments.			7/3/86
Incorporate comments, add BNL contribution.		7/31/86	
SRP package to Denton, NRR concurrence.		8/4/86	
SRP package to CRGR		8/11/86	1/15/87
CRGR review and approval		3/86	
EDO approval		4/86	
FRN issuance of SRP for public comment.		5/88	
OMB clearance (if applicable)		8/88	
Staff review of public comments on SRP completed.		9/88	
NRR Director SRP review complete.		10/88	
CRGR SRP review complete.		11/88	
EDO SRP approval.		11/88	
FRN for SRP		12/88	

ABBREVIATIONS

NRR DIVISIONS

DEST - Division of Engineering and Systems Technology  
EAD - Assistant Director for Engineering  
SAD - Assistant Director for Systems  
  
DLPQ - Division of Licensee Performance & Quality Evaluation  
DCEA - Division of Operational Events  
DREP - Division of Radiation Protection & Emergency Preparedness  
DRIS - Division of Reactor Inspection & Safeguards

NRR-BRANCHES

ECEB - Chemical Engineering Branch  
EMEB - Mechanical Engineering Branch  
EMTB - Materials Engineering Branch  
ESGB - Structural & Geosciences Branch  
ILRB - Inspection, Licensing and Research  
Integration Branch  
LHFB - Human Factors Assessment Branch  
LOLB - Operator Licensing Branch  
LPEB - Performance Evaluation Branch  
LQAB - Quality Assurance Branch  
OEAB - Events Assessment Branch  
OGCB - Generic Communications Branch  
OTSB - Technical Specifications Branch  
PEPB - Emergency Preparedness Branch  
PRAB - Risk Applications Branch  
PRPB - Radiation Protection Branch  
RSGB - Safeguards Branch  
RSIB - Special Inspection Branch  
RVIB - Vendor Inspection Branch  
SELB - Electrical Systems Branch  
SICB - Instrumentation & Control  
Systems Branch  
SPLB - Plant Systems Branch  
SRXB - Reactor Systems Branch



ASSIGNMENT OF REVIEW RESPONSIBILITIES  
(PRIMARY AND SECONDARY BRANCHES)

SRP Section	Rev. No.	Primary Review Branch	Secondary Review Branch
CHAPTER 1 Introduction and General Description of Plant			
1.8 Interfaces for Standard Design	1	All Review Branches	
CHAPTER 2 Site Characteristics			
2.1.1 Site Location and Description	2	ESGB	NONE
2.1.2 Exclusion Area Authority and Control	2	ESGB	NONE
2.1.3 Population Distribution	2	ESGB	PRPB
2.2.1 - 2.2.2 Identification of Potential Hazards in Site Vicinity	2	ESGB	ECEB
2.2.3 Evaluation of Potential Accidents	2	ESGB	ECEB
2.3.1 Regional Climatology	2	PRPB	NONE
2.3.2 Local Meteorology	2	PRPB	NONE
2.3.3 Onsite Meteorological Measurements Programs	2	PRPB	NONE
App. A to 2.3.3	2	PRPB	NONE
2.3.4 Short-Term Diffusion Estimates for Accidental Atmospheric Releases	1	PRPB	NONE

SRP Section	Rev. No.	Primary Review Branch	Secondary Review Branch
2.3.5 Long-Term Diffusion Estimates	2	PRPB	NONE
2.4.1 Hydrologic Description	2	ESGB	NONE
App. A to 2.4.1	2	ESGB	NONE
2.4.2 Floods	2	ESGB	NONE
2.4.3 Probable Maximum Flood (PMF) on Streams and Rivers	2	ESGB	NONE
2.4.4 Potential Dam Failures	2	ESGB	NONE
2.4.5 Probable Maximum Surge and Seiche Flooding	2	ESGB	NONE
2.4.6 Probable Maximum Tsunami Flooding	2	ESGB	NONE
2.4.7 Ice Effects	2	ESGB	NONE
2.4.8 Cooling Water Canals and Reservoirs	2	ESGB	NONE
2.4.9 Channel Diversions	2	ESGB	NONE
2.4.10 Flood Protection Requirements	2	ESGB	NONE
2.4.11 Cooling Water Supply	2	ESGB	NONE

SRP Section	Rev. No.	Primary Review Branch	Secondary Review Branch
2.4.12 Groundwater	2	ESGB	NONE
BTP HGEB-1	2	ESGB	NONE
2.4.13 Accidental Releases of Liquid Effluents in Ground and Surface Waters	2	ESGB	SPSB
2.4.14 Technical Specifications and Emergency Operation Requirements	2	ESGB	NONE
2.5.1 Basic Geologic and Seismic Information	2	ESGB	NONE
2.5.2 Vibratory Ground Motion	1	ESGB	NONE
2.5.3 Surface Faulting	2	ESGB	NONE
2.5.4 Stability of Subsurface Materials and Foundations	2	ESGB	NONE
2.5.5 Stability of Slopes	2	ESGB	NONE
CHAPTER 3 Design of Structures, Components, Equipment and Systems			
3.2.1 Seismic Classification	1	EMEB	ESGB
3.2.2 System Quality Group Classification	1	EMEB	NONE
App. A to 3.2.2	1	EMEB	NONE

SRP Section	Rev. No.	Primary Review Branch	Secondary Review Branch
App. B to 3.2.2	1	EMEB	NONE
App. C to 3.2.2	1	EMEB	NONE
APP. D to 3.2.2	1	EMEB	NONE
3.3.1 Wind Loadings	2	ESGB	NONE
3.3.2 Tornado Loadings	2	ESGB	NONE
3.4.1 Flood Protection	2	SPLB	ESGB
3.4.2 Analysis Procedures	2	ESGB	NONE
3.5.1.1 Internally Generated Missiles (Outside Containment)	2	SPLB	NONE
3.5.1.2 Internally Generated Missiles (Inside Containment)	2	SPLB	NONE
3.5.1.3 Turbine Missiles	2	EMTB	NONE
3.5.1.4 Missiles Generated by Natural Phenomena	2	SPLB	NONE
BTP ASB 3-2	2	SPLB	NONE
3.5.1.5 Site Proximity Missiles (Except Aircraft)	1	ESGB	NONE
3.5.1.6 Aircraft Hazards	2	ESGB	NONE

SRP Section	Rev. No.	Primary Review Branch	Secondary Review Branch
3.5.2 Structures, Systems, and Components to be Protected from Externally Generated Missiles	2	SPLB	NONE
3.5.3 Barrier Design Procedures	1	ESGB	NONE
App. A to 3.5.3	0	ESGB	NONE
3.6.1 Plant Design for Protection Against Postulated Piping Failures in Fluid Systems Outside Containment	1	SPLB	NONE
BTP ASB 3-1	1	SPLB	NONE
3.6.2 Determination of Rupture Locations and Dynamic Effects Associated with the Postulated Rupture of Piping	1	EMEB	NONE
BTP MEB 3-1	1	EMEB	NONE
3.7.1 Seismic Design Parameters	1	ESGB	NONE
3.7.2 Seismic System Analysis	1	ESGB	NONE
3.7.3 Seismic Subsystem Analysis	1	ESGB	NONE
3.7.4 Seismic Instrumentation	1	ESGB	NONE
3.8.1 Concrete Containment	1	ESGB	NONE

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App. to 3.8.1	0	ESGB	NONE
3.8.2 Steel Containment	1	ESGB	NONE
3.8.3 Concrete and Steel Internal Structures of Steel or Concrete Containments	1	ESGB	NONE
3.8.4 Other Seismic Category I Structures	1	ESGB	NONE
App. A to 3.8.4	0	ESGB	NONE
App. B to 3.8.4	0	ESGB	NONE
App. C to 3.8.4	0	ESGB	NONE
App. D to 3.8.4	0	ESGB	NONE
3.8.5 Foundations	1	ESGB	NONE
3.9.1 Special Topics for Mechanical Components	2	EMEB	NONE
3.9.2 Dynamic Testing and Analysis of Systems, Components, and Equipment	2	EMEB	NONE
3.9.3 ASME Code Class 1, 2, and 3 Components, Component Supports, and Core Support Structures	1	EMEB	NONE
App. A to 3.9.3	1	EMEB	NONE

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3.9.4 Control Rod Drive Systems	2	EMEB	NONE
3.9.5 Reactor Pressure Vessel Internals	2	EMEB	NONE
3.9.6 Inservice Testing of Pumps and Valves	2	EMEB	NONE
3.10 Seismic Qualification of Category I Instrumentation and Electrical Equipment	2	EMEB	SICB
3.11 Environmental Design of Mechanical and Electrical Equipment	2	SPLB	RVIB SICB
CHAPTER 4 Reactor			
4.2 Fuel System Design	2	SRXB	NONE
App. A to 4.2	0	SRXB	NONE
4.3 Nuclear Design	2	SRXB	NONE
BTP CPB 4.3-1	2	SRXB	NONE
4.4 Thermal and Hydraulic Design	1	SRXB	NONE
App. to 4.4	1	SRXB	NONE
4.5.1 Control Rod Drive Structural Materials	2	EMTB	NONE

SRP Section	Rev. No.	Primary Review Branch	Secondary Review Branch
4.5.2 Reactor Internal and Core Support Materials	2	EMTB	NONE
4.6 Functional Design of Control Rod Drive System	1	SRXB	SPLB
CHAPTER 5 Reactor Coolant System and Connected Systems			
5.2.1.1 Compliance with the Codes and Standards Rule, 10 CFR § 50.55a	2	EMEB	NONE
5.2.1.2 Applicable Code Cases	2	EMEB	NONE
5.2.2 Overpressure Protection	1	SRXB	NONE
BTP RSB 5-2	0	SRXB	NONE
5.2.3 Reactor Coolant Pressure Boundary Materials	2	EMTB	NONE
BTP MTEB 5-7	2	EMTB	NONE
5.2.4 Reactor Coolant Pressure Boundary Inservice Inspection and Testing	1	EMTB	NONE
5.2.5 Reactor Coolant Pressure Boundary Leakage Detection	1	SPLB	NONE
5.3.1 Reactor Vessel Materials	1	EMTB	NONE



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5.3.2 Pressure-Temperature Limits	1	EMTB	NONE
BTP MTEB 5-2	1	EMTB	NONE
5.3.3 Reactor Vessel Integrity	1	EMTB	NONE
5.4 Preface	1	NONE SCHEDULED	NONE
5.4.1.1 Pump Flywheel Integrity (PWR)	1	EMTB	NONE
5.4.2.1 Steam Generator Materials	2	EMTB	ECEB
BTP MTEB 5-3	2	ECEB	EMTB
5.4.2.2 Steam Generator Tube Inservice Inspection	1	EMTB	NONE
5.4.6 Reactor Core Isolation Cooling System (BWR)	3	SRXB	NONE
5.4.7 Residual Heat Removal (RHR) System	3	SRXB	NONE
BTP RSB 5-1	2	SRXB	NONE
5.4.8 Reactor Water Cleanup System (BWR)	2	ECEB	NONE

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5.4.11 Pressurizer Relief Tank	2	SPLB	NONE
5.4.12 Reactor Coolant System High Point Vents	0	SRXB	NONE
CHAPTER 6 Engineered Safety Features			
6.1.1 Engineered Safety Features Materials	2	EMTB	ECEB
BTP MTEB 6-1	2	ECEB	EMTB
6.1.2 Protective Coating Systems (Paints) - Organic Materials	2	ECEB	NONE
6.2.1 Containment Functional Design	2	SPLB	NONE
6.2.1.1.A PWR Dry Containments, Including Subatmospheric Containments	2	SPLB	NONE
6.2.1.1.B Ice Condenser Containments	2	SPLB	NONE
6.2.1.1.C Pressure-Suppression Type BWR Containments	6	SPLB	NONE
App. I to 6.2.1.1.C	1	SPLB	NONE
App. A to 6.2.1.1.C	2	SPLB	NONE
App. B to 6.2.1.1.C	0	SPLB	NONE

SRP Section	Rev. No.	Primary Review Branch	Secondary Review Branch
6.2.1.2 Subcompartment Analysis	2	SPLB	NONE
6.2.1.3 Mass and Energy Release Analysis for Postulated Loss-of-Coolant Accidents	1	SPLB	NONE
6.2.1.4 Mass and Energy Release Analysis for Postulated Secondary System Pipe Ruptures	1	SPLB	NONE
6.2.1.5 Minimum Containment Pressure Analysis for Emergency Core Cooling System Performance Capability Studies	2	SPLB	NONE
BTP CSB 6-1	2	SPLB	NONE
6.2.2 Containment Heat Removal Systems	4	SPLB	NONE
6.2.3 Secondary Containment Functional Design	2	SPLB	NONE
BTP CSB 6-3	2	SPLB	NONE
6.2.4 Containment Isolation System	2	SPLB	NONE
BTP CSB 6-4	2	SPLB	NONE
6.2.5 Combustible Gas Control in Containment	2	SPLB	ECEB

SRP Section	Rev. No.	Primary Review Branch	Secondary Review Branch
App. A to 6.2.5	2	SPLB	NONE
BTP CSB 6-2	2	SPLB	NONE
6.2.6 Containment Leakage Testing	2	SPLB	NONE
6.2.7 Fracture Prevention of Containment Pressure Boundary	0	EMTB	NONE
6.3 Emergency Core Cooling System	2	SRXB	NONE
BTP RSB 6-1	1	SRXB	NONE
6.4 Control Room Habitability Systems	2	SPLB	ECEB PRPB
App. A to 6.4	2	SPLB	NONE
6.5.1 ESF Atmosphere Cleanup Systems	2	SPLB	PRPB
6.5.2 Containment Spray as a Fission Product Cleanup System	1	ECEB	SPLB PRPB
6.5.3 Fission Product Control Systems and Structures	2	SPLB	NONE
6.5.4 Ice Condenser as a Fission Product Cleanup System	2	ECEB	SPLB PRPB
6.6 Inservice Inspection of Class 2 and 3 Components	1	EMTB	NONE

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6.7 Main Steam Isolation Valve Leakage Control System (BWR)	2	SPLB	NONE
CHAPTER 7 Instrumentation and Controls			
7.1 Instrumentation and Controls - Introduction	3	SICB	NONE
Table 7.1 Acceptance Criteria and Guidelines for Instrumen- tation and Controls Systems Important to Safety.....	3	SICB	NONE
Table 7-2 TMI Action Plan Requirements for Instru- mentation and Controls Systems Important to Safety	0	SICB	NONE
App. A to 7.1	1	SICB	NONE
App. B to 7.1	0	SICB	NONE
7.2 Reactor Trip System	2	SICB	NONE
App. A to 7.2	2	SICB	NONE
7.3 Engineered Safety Features Systems	2	SICB	NONE
App. A to 7.3	2	SICB	NONE
7.4 Safe Shutdown Systems	2	SICB	NONE
7.5 Information Systems Important to Safety	3	SICB	NONE

SRP Section	Rev. No.	Primary Review Branch	Secondary Review Branch
7.6 Interlock Systems Important to Safety	2	SICB	NONE
7.7 Control Systems	3	SICB	NONE
App. 7-A Branch Technical Positions (ICSB)	2	SICB	NONE
App. 7-B General Agenda, Station Site Visits	1	SICB	NONE
CHAPTER 8 Electric Power			
8.1 Electric Power-Introduction	2	SELB	NONE
Table 8-1	2	SELB	NONE
8.2 Offsite Power System	3	SELB	NONE
App. A to 8.2	0	SELB	NONE
8.3.1 A-C Power Systems (Onsite)	2	SELB	NONE
Appendix	2	SELB	NONE
8.3.2 D-C Power Systems (Onsite)	2	SELB	NONE
App. 8-A Branch Technical Position (PSB)	2	SELB	NONE
App. 8-B General Agenda, Station Site Visits	0	SELB	NONE

SRP Section	Rev. No.	Primary Review Branch	Secondary Review Branch
CHAPTER 9 Auxiliary Systems			
9.1.1 New Fuel Storage	2	SPLB	NONE
9.1.2 Spent Fuel Storage	3	SPLB	ECEB
9.1.3 Spent Fuel Pool Cooling and Cleanup System	1	SPLB	ECEB
9.1.4 Light Load Handling System (Related to Refueling)	2	SPLB	NONE
9.1.5 Overhead Heavy Load Handling Systems	0	SPLB	NONE
9.2.1 Station Service Water System	4	SPLB	NONE
9.2.2 Reactor Auxiliary Cooling Water Systems	3	SPLB	NONE
9.2.3 Demineralized Water Makeup System	2	ECEB	SPLB
9.2.4 Potable and Sanitary Water Systems	2	SPLB	NONE
9.2.5 Ultimate Heat Sink	2	SPLB	NONE
BTP ASB 9-2 Residual Decay Energy	2	SPLB	NONE
9.2.6 Condensate Storage Facilities	2	SPLB	NONE

SRP Section	Rev. No.	Primary Review Branch	Secondary Review Branch
9.3.1 Compressed Air System	1	SPLB	NONE
9.3.2 Process and Post-Accident Sampling Systems	2	ECEB	SPLB
9.3.3 Equipment and Floor Drainage System	2	SPLB	NONE
9.3.4 Chemical and Volume Control System (PWR) (Including Boron Recovery System)	2	ECEB	SPLB SRXB
9.3.5 Standby Liquid Control System (BWR)	2	SRXB	ECEB SPLB
9.4.1 Control Room Area Ventilation System	2	SPLB	NONE
9.4.2 Spent Fuel Pool Area Ventilation System	2	SPLB	NONE
9.4.3 Auxiliary and Radwaste Area Ventilation and System	2	SPLB	NONE
9.4.4 Turbine Area Ventilation System	2	SPLB	NONE
9.4.5 Engineered Safety Feature Ventilation System	2	SPLB	NONE
9.5.1 Fire Protection Program	3	ECEB	SPLB
BTP CHEB 9.5.1 Fire Protection	2	ECEB	SPLB



SRP Section	Rev. No.	Primary Review Branch	Secondary Review Branch
9.5.2 Communications Systems	2	SICB	NONE
9.5.3 Lighting Systems	2	SELB	NONE
9.5.4 Emergency Diesel Engine Fuel Oil Storage and Transfer System	2	SPLB	ECEB
9.5.5 Emergency Diesel Engine Cooling Water System	2	SPLB	NONE
9.5.6 Emergency Diesel Engine Starting System	2	SPLB	NONE
9.5.7 Emergency Diesel Engine Lubrication System	2	SPLB	NONE
9.5.8 Emergency Diesel Engine Combustion Air Intake and Exhaust System	2	SPLB	NONE
CHAPTER 10 Steam and Power Conversion System			
10.2 Turbine Generator	2	SPLB	NONE
10.2.3 Turbine Disk Integrity	1	EMTB	NONE
10.3 Main Steam Supply System	3	SPLB	NONE
10.3.6 Steam and Feedwater System Materials	2	EMTB	NONE

SRP Section	Rev. No.	Primary Review Branch	Secondary Review Branch
10.4.1 Main Condensers	2	SPLB	NONE
10.4.2 Main Condenser Evacuation System	2	SPLB	NONE
10.4.3 Turbine Gland Sealing System	2	SPLB	NONE
10.4.4 Turbine Bypass System	2	SPLB	NONE
10.4.5 Circulating Water System	2	SPLB	NONE
10.4.6 Condensate Cleanup System	2	ECEB	NONE
10.4.7 Condensate and Feedwater System	3	SPLB	NONE
BTP ASB 10-2 Water Hammer	3	SPLB	NONE
10.4.8 Steam Generator Blowdown System (PWR)	2	ECEB	NONE
10.4.9 Auxiliary Feedwater System (PWR)	2	SPLB	NONE
BPT ASB 10-1 Auxiliary Feedwater System	2	SPLB	NONE
CHAPTER 11 Radioactive Waste Management			
11.1 Source Terms	2	SPLB <sup>4</sup>	PRPB
11.2 Liquid Waste Management Systems	2	SPLB	PRPB
11.3 Gaseous Waste Management Systems	2	SPLB	PRPB

SRP Section	Rev. No.	Primary Review Branch	Secondary Review Branch
BTP ETSB 11-5 Gaseous Waste Systems	0	SPLB	PRPB
11.4 Solid Waste Management Systems	2	SPLB	PRPB
BTP ETSB 11-3 Solid Waste Systems	2	SPLB	PRPB
App. 11.4-A to SRP 11.4	0	SPLB	PRPB
11.5 Process and Effluent Radiological Monitoring Instrumentation and Sampling Systems	3	SPLB	PRPB
App 11.5-A to SRP 11.5			
CHAPTER 12 Radiation Protection			
12.1 Assuring That Occupational Radiation Exposures are as Low as is Reasonably Achievable	2	PRPB	NONE
12.2 Radiation Sources	2	PRPB	NONE
12.3 - 12.4 Radiation Protection Design Features	2	PRPB	NONE
12.5 Operational Radiation Protection Program	2	PRPB	NONE
CHAPTER 13 Conduct of Operations			
13.1.1 Management and Technical Support Organization	2	LPEB	PRPB
13.1.2 - 13.1.3 Operating Organization	2	LPEB	NONE

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13.2.1 Reactor Operator Training	0	LHFB	LOLB
13.2.2 Training for Non-Licensed Plant Staff	0	LHFB	NONE
13.3 Emergency Planning	2	PEPB	NONE
13.4 Operational Review	2	LPEB	NONE
13.5.1 Administration Procedures	0	LPEB	NONE
13.5.2 Operating and Maintenance Procedures	1	LHFB	NONE
Appendix A to SRP 13.5.2	0	LHFB	NONE
13.6 Physical Security	2	RSGB	NONE
CHAPTER 14 Initial Test Program			
14.1 Initial Plant Test Programs - PSAR	2	LHFB	NONE
14.2 Initial Plant Test Programs - FSAR	2	LHFB	NONE
14.3 Standard Plant Designs, Initial Test Program - Final Design Approval (FDA)	1	LHFB	NONE
CHAPTER 15 Accident Analysis			
15.0 Introduction	2	DEST	NONE

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15.1.1 - 15.1.4 Decrease in Feedwater Temperature, Increase in Feedwater Flow, Increase in Steam Flow, and Inadvertent Opening of a Steam Generator Relief Safety Valve	1	SRXB	NONE
15.1.5 Steam System Piping Failures Inside and Outside of Containment (PWR)	2	SRXB	PRPB
App. A to SRP 15.1.5	2	SRXB	NONE
15.2.1 - 15.2.5 Loss of External Load, Turbine Trip, Loss of Condenser Vacuum Closure of Main Steam Isolation Valve (BWR), and Steam Pressure Regulation Failure (Closed)	1	SRXB	NONE
15.2.6 Loss of Nonemergency AC Power to the Station Auxiliaries	1	SRXB	NONE
15.2.7 Loss of Normal Feedwater Flow	1	SRXB	NONE
15.2.8 Feedwater System Pipe Breaks Inside and Outside Containment (PWR)	1	SRXB	PRPB/SELB
15.3.1 - 15.3.2 Loss of Forced Reactor Coolant Flow Including Trip of Pump and Flow Controlled Malfunctions	1	SRXB	NONE
15.3.3 - 15.3.4 Reactor Coolant Pump Rotor Seizure and Reactor Coolant Pump Shaft Break	2	SRXB	SELB

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15.4.1 Uncontrolled Control Rod Assembly Withdrawal from a Subcritical or Low Power Startup Condition	2	SRXB	NONE
15.4.2 Uncontrolled Control Rod Assembly Withdrawal at Power	2	SRXB	NONE
15.4.3 Control Rod Misoperation (System Malfunction of Operator Error)	2	SRXB	NONE
15.4.4 - 15.4.5 Startup of an Inactive Loop or Recirculation Loop at an Incorrect Temperature, and Flow Controller Malfunction Causing an Increase in BWR Core Flow Rate	1	SRXB	NONE
15.4.6 Chemical and Volume Control System Malfunction That Results in a Decrease in the Boron Concentration in the Reactor Coolant (PWR)	1	SRXB	NONE
15.4.7 Inadvertent Loading and Operation of a Fuel Assembly in an Improper Position	1	SRXB	NONE
15.4.8 Spectrum of Rod Ejection Accidents (PWR)	2	SRXB	PRPB
App. A to SRP 15.4.8	1	PRPB	SRXB/SELB
15.4.9 Spectrum of Rod Drop Accidents (BWR)	2	SRXB	PRPB

SRP Section	Rev. No.	Primary Review Branch	Secondary Review Branch
App. A to SRP 15.4.9	2	PRPB	SRXB/SELB
15.5.1 - 15.5.2 Inadvertent Operation of ECCS and Chemical and Volume Control System Malfunction That Increases Reactor Coolant Inventory	1	SRXB	NONE
15.6.1 Inadvertent Opening of a PWR Pressurizer Relief Valve or a BWR Relief Valve	1	SRXB	NONE
15.6.2 Radiological Consequences of the Failure of Small Lines Carrying Primary Coolant Outside Contain- ment	2	PRPB	SELB
15.6.3 Radiological Consequences of Steam Generator Tube Failure (PWR)	2	PRPB	SRXB/SELB
15.6.4 Radiological Consequences of Main Steam Line Failure Outside Containment (BWR)	2	PRPB	SRXB/SELB
15.6.5 Loss-of-Coolant Accidents Resulting from Spectrum of Postulated Piping Breaks Within the Reactor Coolant Pressure Boundary	2	SRXB	PRPB
App. A to SRP 15.6.5	1	PRPB	SPLB/SELB
App. B to SRP 15.6.5	1	PRPB	SPLB/SELB
App. C to SRP 15.6.5	2	PRPB	SPLB/SELB
App. D to SRP 15.6.5	1	PRPB	SPLB/SELB

SRP Section	Rev. No.	Primary Review Branch	Secondary Review Branch
15.7.1 Waste Gas System Failure	1	SPLB	ESGB
15.7.2 Radioactive Liquid Waste System Leak or Failure (Release to Atmosphere)	1	SPLB	ESGB
15.7.3 Postulated Radioactive Release Due to Liquid-Containing Tank Failures	2	SPLB	ESGB
15.7.4 Radiological Consequences of Fuel Handling Accidents	1	PRPB	SPLB
15.7.5 Spent Fuel Cask Drop Accidents	2	PRPB	SPLB
15.8 Anticipated Transients Without Scram	1	SRXB	NONE
Appendix to SRP 15.8	1	SRXB	NONE
CHAPTER 16 Technical Specifications			
16.0 Technical Specifications	1	OTSB	DEST
CHAPTER 17 Quality Assurance			
17.1 Quality Assurance During the Design and Construction Phases	2	LQAB	DEST
17.2 Quality Assurance During the Operations Phase	2	LQAB	DEST
CHAPTER 18 Human Factors Engineering			



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18.0 Human Factors Engineering/Standard Review Plan Development	1	LHFB	NONE
18.1 Control Room	0	LHFB	NONE
App. A to SRP 18.1	0	LHFB	NONE
18.2 Safety Parameter Display System	0	LHFB	SICB SPLB
App. A to SRP 18.2	LHFB	NONE	SICB SPLB