



U.S. NUCLEAR REGULATORY COMMISSION  
**STANDARD REVIEW PLAN**  
OFFICE OF NUCLEAR REACTOR REGULATION

13.5.1.2<sup>1</sup> ~~ADMINISTRATION~~ ADMINISTRATIVE<sup>2</sup> PROCEDURES - INITIAL TEST PROGRAM<sup>3</sup>

REVIEW RESPONSIBILITIES

Primary - ~~Licensee Qualifications Branch (LQB)~~ Quality Assurance and Maintenance Branch (HQMB)<sup>4</sup>

Secondary - None

I. AREAS OF REVIEW

~~LQB reviews the plant administrative procedures, as described in the applicant's safety analysis report (SAR). This section of the SAR should describe administrative procedures that provide administrative control over activities that are important to safety for the initial test program and operation of the facility. In general, it is not expected that detailed written procedures will be included in the SAR. The final safety analysis report (FSAR) should provide descriptions as to the nature and content of procedures as detailed below. No information is required in the preliminary safety analysis report. The Procedures and Text Review Branch (PTRB) reviews testing and operational procedures as described in SRP Section 13.5.2.~~

A. Administrative Procedures - General

~~This section reviews administrative procedures (13.5.1). These procedures include (a) those which provide the administrative controls in respect to procedures and (b) those which define and provide controls for operational activities of the plant staff. Parts (a) and (b) below describe the type of procedures that are included in the review.~~

~~Category (a) - Controls~~

DRAFT Rev. 0 - April 1996

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**USNRC STANDARD REVIEW PLAN**

Standard review plans are prepared for the guidance of the Office of Nuclear Reactor Regulation staff responsible for the review of applications to construct and operate nuclear power plants. These documents are made available to the public as part of the Commission's policy to inform the nuclear industry and the general public of regulatory procedures and policies. Standard review plans are not substitutes for regulatory guides or the Commission's regulations and compliance with them is not required. The standard review plan sections are keyed to the Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants. Not all sections of the Standard Format have a corresponding review plan.

Published standard review plans will be revised periodically, as appropriate, to accommodate comments and to reflect new information and experience.

Comments and suggestions for improvement will be considered and should be sent to the U.S. Nuclear Regulatory Commission, Office of Nuclear Reactor Regulation, Washington, D.C. 20555.

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- ~~1. Procedures review and approval~~
  - ~~2. Equipment control procedures~~
  - ~~3. Control of maintenance and modifications~~
  - ~~4. Fire protection procedures~~
  - ~~5. Crane operation procedures~~
  - ~~6. Temporary changes to procedures~~
  - ~~7. Temporary procedures~~
  - ~~8. Special orders of a transient or self-cancelling character~~
- ~~Category (b) - Specific Procedures~~
- ~~1. Standing orders to shift personnel including the authority and responsibility of the shift supervisor, senior operator in the control room, control room operator, and shift technical advisor~~
  - ~~2. Assignment of shift personnel to duty stations~~
  - ~~3. Shift relief and turnover~~
  - ~~4. Control room access~~
  - ~~5. Limitations on working hours~~
  - ~~6. Feedback of operating experience~~
  - ~~7. Shift supervisor administrative duties~~
  - ~~8. Verification of correct performance of operating activities~~
- ~~LQB coordinates as necessary with the PTRB to assure any special criteria for procedural controls governing testing and operational procedures are met.~~

~~B. Administrative Procedures - Initial Test Program<sup>5</sup>~~

~~LQBHQMB<sup>6</sup> also reviews<sup>7</sup> the administrative procedures that establish controls associated with the initial plant test program. This includes the system used to develop test procedures, the administrative controls that will govern the conduct of the test program, and the controls that will govern the review, evaluation, and approval of test results.~~

The following items are included:

1. Test Program Procedures

The system the applicant will use to develop, review, and approve individual test procedures is reviewed. The responsibilities of the organizational units that will perform these activities, the designated functions of each organizational unit, and the general steps to be followed in governing these activities are reviewed. The type and source of design performance information that will be, or is being, used in the development of detailed test procedures is reviewed.

2. Conduct of Test Program

The administrative controls that will govern the conduct of each major phase of the test program are reviewed. The following specific items are reviewed:

- a. The means used to ~~assure~~ ensure<sup>8</sup> that prerequisites are satisfied for individual tests.
- b. The procedures to be followed to ~~assure~~ ensure that plant modifications, or repairs that result from test program analysis, are performed.
- c. The procedure used to ensure that necessary retesting is performed following repairs or modifications.
- d. The controls that will be in effect to require adherence to approved test procedures.

3. Review, Evaluation, and Approval of Test Results

The procedures that will govern the review, evaluation, and approval of test results for each phase of the test program are reviewed, including the specific controls to be used to ~~assure~~ ensure notification of responsible organizations, such as design organizations, when test acceptance criteria are not met and the specific controls established to resolve such problems. The applicant's controls relating to the methods and schedules for approval of test data for each major phase are reviewed as well as the methods used for initial review of parts of multiple tests (e.g., hot functional testing) prior to proceeding with the test phase.

Review Interfaces:<sup>9</sup>

~~EQBHQMB~~<sup>10</sup> coordinates as necessary with the ~~PTRB~~ Human Factors Assessment Branch (HHFB)<sup>11</sup> to ~~assure~~ ensure that any special criteria for procedural controls governing testing and operational procedures are met.

~~The Procedures and Text Review Branch (PTRB) reviews testing and operational procedures as described in SRP Section 13.5.2.~~<sup>12</sup>

## II. ACCEPTANCE CRITERIA

~~EQBHQMB~~<sup>13</sup> acceptance criteria are based on meeting the relevant requirements of 10 CFR Part 50, §50.40(a) and<sup>14</sup> (b),<sup>15</sup> as it relates to the administrative procedures program contributing to the determination that the licensee applicant<sup>16</sup> is technically qualified to engage in licensing activities, and §50.54(1), as it relates to the licensee designating individuals to be responsible for directing the licensed activities of licensed operators.

### A. Administrative Procedures - General

~~The available staff positions applicable to this SRP section are as follows. (Note - where regulatory guides are referenced, the current issue of the guide at the time of the review shall be used.)~~

- ~~1. The guidance described in Section 5.2 of ANSI/ANS 3.2, as endorsed by Regulatory Guide 1.33.~~
- ~~2. The requirement of 10 CFR Part 50, §50.54(1).~~
- ~~3. The plant procedures for shift relief and turnover should conform to the guidance of Task Action Plan Item I.C.2 of NUREG-0694.~~
- ~~5. Limits on working hours should conform to the guidance described in Task Action Plan Item I.A.1.3 of NUREG-0737.~~
- ~~6. Control room access should conform to the guidance described in Item I.C.4 of NUREG-0694.~~
- ~~7. The procedure for the feedback of operating information should conform to the guidance described in Task Action Plan Item I.C.5 of NUREG-0737.~~
- ~~8. The procedure for verifying the correct performance of operating activities should conform to the guidance described in Task Action Plan Item I.C.6 of NUREG-0737.~~
- ~~9. Administrative controls governing crane operations are to include a requirement that the crane operators who operate cranes over fuel pools be qualified and conduct themselves in accordance with the guidelines of ANSI B30.2-1976 (Chapter 2-3), "Overhead and Gentry Cranes."<sup>17</sup>~~

### B. Administrative Procedures - Initial Test Program

## 1. Test Procedures

The applicant's administrative and organizational system that will be used to develop, review, and approve individual test procedures should provide for appropriate levels of review prior to final approval. The individuals performing these functions should meet the qualification requirements described in Section 4.4.6 of ANS 3.1<sup>18</sup> draft revision dated 12-6-79. The applicant should utilize system designers to provide the test objectives and acceptance criteria used in developing detailed test procedures. The participating system designers should include those of the nuclear steam supply system vendor, architect-engineer, and other major contractors, subcontractors, and vendors, as appropriate.

## 2. Conduct of Test Program

- a. The test program should be conducted by appropriately qualified personnel using detailed procedures approved by designated management positions within the applicant's organization.
- b. The controls used by the applicant to ~~assure~~ ensure that test prerequisites are met should include requirements for inspections, checks, etc.; require identification of test personnel completing data forms or checksheets; and require identification of dates of completion.
- c. The controls provided for plant modification and repairs, identified as a result of plant testing, are found to be acceptable if (1) the controls are sufficient to ~~assure~~ ensure the required repairs modifications will be made, (2) the controls will ~~assure~~ ensure retesting is conducted following such modifications or repairs, and (3) the controls will ~~assure~~ ensure a review of any proposed facility modifications by the original design organization or other designated design organizations. The applicant's requirements for documentation associated with such controls should permit audits to be made to ~~assure~~ ensure proper implementation of controls.
- d. The controls pertaining to adherence to test procedures and to methods for changing test procedures are found to be acceptable based on the reviewer's judgment. Modifications to startup test procedures should be made in accordance with technical specifications for post-fuel loading tests.

## 3. Review, Evaluation, and Approval of Test Results

- a. The controls that will govern the review, evaluation, and approval of test results should provide for a technical evaluation of test results ~~of by~~<sup>19</sup> qualified personnel and approval of test results ~~in or by~~<sup>20</sup> personnel in designated management positions in the applicant's organization.

- b. Design organizations should be notified and should participate in the resolution of problems involving design that result in or contribute to a failure to meet test acceptance criteria.
- c. The applicant should establish the requirement that test data for each major test phase will be reviewed and approved prior to beginning the next phase of testing.
- d. The applicant should establish the requirement that test data at each major power test plateau or power/flow test condition will be reviewed and approved before proceeding to the next test level during the power ascension test phase.

#### Technical Rationale:<sup>21</sup>

The technical rationale for application of these acceptance criteria to reviewing administrative procedures is discussed in the following paragraphs:

1. Compliance with the relevant requirements of 10 CFR 50.40(a) and (b) requires that the licensee will adhere to certain established standards and be technically qualified to engage in proposed activities.

10 CFR 50.40(a) and (b) apply to this section because the administrative procedures program contributes to the determination that an applicant is technically qualified by ensuring that necessary controls, policies, and programs are in place to carry out activities in an appropriate and controlled manner as required by 10 CFR 50, Appendix A, Criterion 1, and Appendix B, Criterion XI.

Meeting these requirements provides assurance that the applicant will adhere to the standards established in the regulation and is technically qualified to engage in and support proposed activities and that activities important to safety are administratively controlled by adequate procedures.<sup>22</sup>

### III. REVIEW PROCEDURES

The review under this SRP section consists of a detailed comparison of the information submitted with the acceptance criteria of subsection II above, as applicable to the FSAR.<sup>23</sup> When the reviewer has determined that each of these criteria has been satisfied, based upon the statements made by the applicant in the SAR, the review under this SRP section is complete.

This detailed comparison form of review is applicable to those items for which acceptance criteria are defined in subsection II. For those remaining items (primarily those providing operational controls), the reviewer must use his<sup>24</sup> judgment in determining that adequate controls have been provided by the applicant.

For standard design certification reviews under 10 CFR Part 52, the procedures above should be followed, as modified by the procedures in SRP Section 14.3 (proposed), to verify that the design set forth in the standard safety analysis report, including inspections, tests, analysis, and acceptance criteria (ITAAC), site interface requirements and combined license action items,

meet the acceptance criteria given in subsection II. SRP Section 14.3 (proposed) contains procedures for the review of certified design material (CDM) for the standard design, including the site parameters, interface criteria, and ITAAC.<sup>25</sup>

#### IV. EVALUATION FINDINGS

The reviewer verifies that the information presented and his the<sup>26</sup> review supports the following type of conclusion to be used in the staff's safety evaluation report.

The staff concludes that the administrative procedures are acceptable and contribute to meeting the requirements of 10 CFR Part 50, §50.40(a) and<sup>27</sup> (b) and §50.54(t).<sup>28</sup> This conclusion is based on the following:

The applicant has described the program and procedures that provide administrative controls over activities important to safety. These include the activities of the preparation, review, and approval of plant operating and maintenance procedures, the responsibility and duties of shift personnel, shift relief and turnover procedures, access to the control room, limitations on working hours, the feedback of operating information to plant personnel, the procedure for verifying the correct performance of operating activities, and the administrative provisions for the control of the initial plant test program. We have reviewed these provisions and find they meet the staff guidance described in Section 5.2 of ANSI/ANS 3.2 and in Regulatory Guide 1.33 and the applicable parts of the Task Action Plan Items I.A.1.2, I.A.1.3, I.C.2, I.C.3, I.C.4, I.C.5, and I.C.6. The applicant has also met the guidelines of ANSI B30.2 and<sup>29</sup> Section 4.4.6 of ANS 3.1.<sup>30</sup>

In addition, the implementation of an administrative procedures program contributes to the finding required by 10 CFR Part 50, §50.40(b), i.e., that the applicant is technically qualified (to operate a nuclear power plant).

For design certification reviews, the findings will also summarize, to the extent that the review is not discussed in other safety evaluation report sections, the staff's evaluation of inspections, tests, analyses, and acceptance criteria (ITAAC), including design acceptance criteria (DAC), site interface requirements, and combined license action items that are relevant to this SRP section.<sup>31</sup>

#### V. IMPLEMENTATION

The following is intended to provide guidance to applicants and licensees regarding the NRC staff's plans for using this SRP section.

This SRP section will be used by the staff when performing safety evaluations of license applications submitted by applicants pursuant to 10 CFR 50 or 10 CFR 52.<sup>32</sup> Except in those cases in which the applicant proposes an acceptable alternative method for complying with specified portions of the Commission's regulations, the method described herein will be used by the staff in its evaluation of conformance with Commission regulations.

The provisions of this SRP section apply to reviews of applications docketed six months or more after the date of issuance of this SRP section.<sup>33</sup>

Implementation schedules for conformance to parts of the method discussed herein are contained in the reference regulatory guide and NUREGs.

## VI. REFERENCES<sup>34</sup>

1. 10 CFR ~~Part 50~~ §50.40, "Common Standard."
2. ~~10 CFR Part 50, §50.54, "Conditions of Licenses."~~
3. Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operation)."<sup>35</sup>
4. ~~NUREG-0578, "TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations."~~
5. ~~NUREG-0694, "TMI-Related Requirements for New Operating Licenses."~~
6. ~~NUREG-0737, "Clarification of TMI Action Plan Requirements."~~
- 4.<sup>36</sup> 10CFR 50, Appendix A, Criterion I, "Quality Standards and Records"
5. 10 CFR 50, Appendix B, Criterion XI, "Test Control"

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**SRP Draft Section 13.5.1.21**  
Attachment A - Proposed Changes in Order of Occurrence

Item numbers in the following table correspond to superscript numbers in the redline/strikeout copy of the draft SRP section.

Item	Source	Description
1.	PRB Comment Resolution	This SRP section was split from the original SRP Section 13.5.1 at the direction of the PRB. <b>The Redline and Strikeout text is relative to the previous version of Section 13.5.1.</b>
2.	Editorial modification	Changed title from "Administration Procedures" to "Administrative Procedures," consistent with the wording in the text.
3.	PRB Comment Resolution	SRP Section 13.5.1 has been divided into new SRP Sections 13.5.1.1 and 13.5.1.2 based on the primary Areas of Review (i.e., Administrative Procedures-General and Administrative Procedures-Initial Test Program) in SRP Section 13.5.1. The SRP Section number and title have been revised to reflect this division of review areas.
4.	Current primary review branch abbreviation	Changed PRB to Quality Assurance and Maintenance Branch (HQMB).
5.	PRB Comment Resolution	SRP Section 13.5.1 has been divided into new SRP Sections 13.5.1.1 and 13.5.1.2 based on the primary Areas of Review (i.e., Administrative Procedures-General and Administrative Procedures-Initial Test Program) in SRP Section 13.5.1. The text related to discussion of the review for general administrative procedures is deleted from 13.5.1.2 . This deleted text is included in new SRP Section 13.5.1.1.
6.	Current primary review branch abbreviation	Changed PRB to HQMB.
7.	PRB Comment Resolution, Editorial	Deleted "also" consistent with the restructuring of the SRP Section.
8.	Editorial modification	Changed "assure" to "ensure" (global change for this SRP section).
9.	SRP-UDP format item	Added "Review Interfaces" to AREAS OF REVIEW.
10.	Current primary review branch abbreviation	Changed PRB to HQMB.
11.	Current review branch abbreviation	Changed review interface branch to Human Factors Assessment Branch (HHFB).
12.	PRB Comment Resolution	Deleted review interface with SRP Section 13.5.2 in accordance with PRB comments.
13.	Current primary review branch abbreviation	Changed PRB to HQMB.

**SRP Draft Section 13.5.1.21**  
Attachment A - Proposed Changes in Order of Occurrence

Item	Source	Description
14.	PRB Comment Resolution	Added paragraph "(a)" from 10 CFR 50.40 in accordance with PRB comments.
15.	Editorial modification	Provided correct format for citing references to Title 10 of the Code of Federal Regulations (global change for this section)
16.	PRB Comment Resolution	Replaced "licensee" with "applicant" in accordance with PRB comments.
17.	PRB Comment Resolution	SRP Section 13.5.1 has been divided into new SRP Sections 13.5.1.1 and 13.5.1.2 based on the primary Areas of Review (i.e., Administrative Procedures-General and Administrative Procedures-Initial Test Program) in SRP Section 13.5.1. The text related to discussion of the review for general administrative procedures is deleted from 13.5.1.2 . This deleted text is included in new SRP Section 13.5.1.1.
18.	Update standard	This standard should be updated to the 1993 version if a comparison supports updating the citation.
19.	Editorial modification	Changed to improve usage and clarify meaning.
20.	Editorial modification	Changed to improve usage and clarify meaning.
21.	SRP-UDP format item	Added "Technical Rationale" to ACCEPTANCE CRITERIA.
22.	SRP-UDP format item	Added technical rationale for 10 CFR 50.40(a) and (b).
23.	PRB Comment Resolution	The term "FSAR" was changed to "SAR" to provide consistency throughout the section and to be more general with regard to applicability of the SRP review guidance.
24.	Editorial modification	Deleted "his" to eliminate gender-specific reference.
25.	SRP-UDP Guidance, Implementation of 10 CFR 52	Added standard paragraph to address application of Review Procedures in design certification reviews.
26.	Editorial modification	Replaced "his" with "the" to eliminate gender-specific reference.
27.	Editorial, PRB Comment Resolution	Paragraph "(a)" of 10 CFR 50.40 was added to the Acceptance Criteria in accordance with PRB comments. The Evaluation Findings are revised to be consistent with the PRB's change.

**SRP Draft Section 13.5.1.21**  
Attachment B - Cross Reference of Integrated Impacts

Item	Source	Description
28.	PRB Comment Resolution	SRP Section 13.5.1 has been divided into new SRP Sections 13.5.1.1 and 13.5.1.2 based on the primary Areas of Review (i.e., Administrative Procedures-General and Administrative Procedures-Initial Test Program) in SRP Section 13.5.1. The text related to discussion of the review for general administrative procedures is deleted from 13.5.1.2 . This deleted text is included in new SRP Section 13.5.1.1.
29.	PRB Comment Resolution	SRP Section 13.5.1 has been divided into new SRP Sections 13.5.1.1 and 13.5.1.2 based on the primary Areas of Review (i.e., Administrative Procedures-General and Administrative Procedures-Initial Test Program) in SRP Section 13.5.1. The text related to discussion of the review for general administrative procedures is deleted from 13.5.1.2 . This deleted text is included in new SRP Section 13.5.1.1.
30.	Update standard	This standard should be updated to the 1993 version if a comparison supports updating the citation.
31.	SRP-UDP Format Item, Implement 10 CFR 52 Related Changes	To address design certification reviews a new paragraph was added to the end of the Evaluation Findings. This paragraph addresses design certification specific items including ITAAC, DAC, site interface requirements, and combined license action items.
32.	SRP-UDP Guidance, Implementation of 10 CFR 52	Added standard sentence to address application of the SRP section to reviews of applications filed under 10 CFR Part 52, as well as Part 50.
33.	SRP-UDP Guidance	Added standard paragraph to indicate applicability of this section to reviews of future applications.
34.	PRB Comment Resolution	SRP Section 13.5.1 has been divided into new SRP Sections 13.5.1.1 and 13.5.1.2 based on the primary Areas of Review (i.e., Administrative Procedures-General and Administrative Procedures-Initial Test Program) in SRP Section 13.5.1. References related to discussion of the review for general administrative procedures is deleted from 13.5.1.2 . These deleted references are included in new SRP Section 13.5.1.1 as appropriate.
35.	Update standard	This standard should be updated to the 1994 version if a comparison supports updating the citation.
36.	PRB Comment Resolution	New references to 10 CFR 50, Appendix A, GDC 1 and Appendix B, Criterion XI were added in accordance with PRB comments. These documents were added (by the PRB) to the discussion in the Technical Rationale.

**SRP Draft Section 13.5.1.21**  
Attachment B - Cross Reference of Integrated Impacts

<b>Integrated Impact No.</b>	<b>Issue</b>	<b>SRP Subsections Affected</b>
	No Integrated Impacts were incorporated in this SRP Section.	