



# U.S. NUCLEAR REGULATORY COMMISSION

## STANDARD REVIEW PLAN

### 13.5.1.1 ADMINISTRATIVE PROCEDURES - GENERAL

#### REVIEW RESPONSIBILITIES

**Primary** - Organization responsible for the review of human performance

**Secondary** - Organization responsible for the review of operator licensing

#### I. AREAS OF REVIEW

The organization responsible for human performance reviews the processes for development, implementation and control of administrative procedures of applicants (e.g., for a construction permit (CP), an operating license (OL), a standard design certification (DC), or a combined license (COL)) as described in its technical submittal. This section of the technical submittal should identify the procedures that provide for administrative control over safety-related activities for the operation of the facility. The submittal should also contain a target date for completion of administrative procedures prior to fuel load to allow sufficient time to allow for plant staff familiarization and to allow U.S. Nuclear Regulatory Commission (NRC) staff adequate time to review the procedures and to develop operator-licensing examinations.

Draft Revision 2—August 2014

Revision 2 – August 2016

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#### USNRC STANDARD REVIEW PLAN

This Standard Review Plan (SRP), NUREG-0800, has been prepared to establish criteria that the U.S. Nuclear Regulatory Commission (NRC) staff responsible for the review of applications to construct and operate nuclear power plants intends to use in evaluating whether an applicant/licensee meets the NRC regulations. The SRP is not a substitute for the NRC regulations, and compliance with it is not required. However, an applicant is required to identify differences between the design features, analytical techniques, and procedural measures proposed for its facility and the SRP acceptance criteria and evaluate how the proposed alternatives to the SRP acceptance criteria provide an acceptable method of complying with the NRC regulations.

The SRP sections are numbered in accordance with corresponding sections in Regulatory Guide (RG) 1.70, "Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants (LWR Edition)." Not all sections of RG 1.70 have a corresponding review plan section. The SRP sections applicable to a combined license application for a new light-water reactor (LWR) are based on RG 1.206, "Combined License Applications for Nuclear Power Plants (LWR Edition)."

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The administrative procedures that are addressed in this section are those procedures that provide for administrative control over safety-related activities for the operation of the facility. The application is not expected to include detailed written procedures.

The objective of this review is to ensure that the administrative procedures contain an adequate format, appropriate attributes, and level of detail, such that qualified plant staff are able to operate and to maintain the facility in a safe and efficient manner, and in compliance with its license, technical specifications, and applicable regulations. In addition, the review ensures that sufficient technical resources have been, are being, and will continue to be provided to adequately accomplish these objectives.

The areas of review, based on the type of application, are as follows.

1. Design Certification

The Design Certification review is focused on the evaluation of combined license action items pertaining to administrative procedures.

2. Construction Permit or Combined License

It should be recognized that the application may be received prior to development of detailed procedures and associated training materials. Implementation of commitments made by the applicant may be evaluated after issuance of the COL as part of the Construction Inspection Program.

The CP/COL review is focused on the applicant's administrative procedures. The application should contain a target date for completion of the procedures prior to fuel load to allow sufficient time to allow for plant staff familiarization and to allow NRC staff adequate time to review the procedures and to develop operator-licensing examinations.

Appendix A of American National Standards Institute ~~(ANSI)~~/American Nuclear Society ~~(ANSI/ANS)~~ -3.2-2012, "Typical Procedures for Pressurized Water Reactors and Boiling Water Reactors," should be used as guidance to assure the minimal procedural coverage for plant operating activities, including related maintenance activities.

3. Operating License or Combined License

For OL applicants, during the later stages of plant design, construction, and licensing, the applicant should provide evidence that the administrative procedures conform to the commitments made in the CP stage of licensing.

For COL holders, implementation of commitments made by the applicant is evaluated as part of the Construction Inspection Program.

The administrative procedures for OL applicants and COL holders are listed in Section I.2.

## II. REVIEW PROCEDURES

The review procedures described below are for the areas of review identified in Section I.2. The review procedures are based on the acceptance criteria. For deviations from the acceptance criteria, the staff should review the applicant's evaluation describing the proposed alternatives to the acceptance criteria and how the alternatives provide an acceptable method of complying with the relevant NRC requirements.

In preparing to review the application, the reviewer should become familiar with the references for this Standard Review Plan (SRP) section.

The information submitted in the application is to be reviewed against this SRP section. The reviewer's evaluation during the review is based on an inspection of the material presented in the application, on whether items of special safety significance are involved, and on the magnitude and uniqueness of the project. Any exceptions or alternatives presented in the application should be carefully reviewed to ensure that they are clearly defined and that an adequate basis for acceptance is provided.

The applicant will identify the references, regulatory guides (RGs), and codes and standards revision numbers used in the application. The reviewer should identify the versions of references, RGs, and codes and standards used in his review.

1. In reviewing and evaluating the information related to administrative procedures, the following points should be considered.
  - a. The applicant's plans for administrative procedures may not be fully developed. This is acceptable, provided that the commitment made by the applicant is sufficiently firm to ensure that the responsibility will be met. Administrative procedures can be verified during the Construction Inspection Program.
  - b. If the applicant has experience in the operation of a previously licensed nuclear power plant, the reviewer may seek independent information about non-licensed plant staff training through the appropriate NRC regional office.
2. Review procedures for this section consist of the following:
  - a. An evaluation of the information submitted in the application to determine that all areas identified in Section I, "Areas of Review," have been addressed.
  - b. A comparison of the information submitted in the application with the acceptance criteria in Section III, "Acceptance Criteria."
  - c. A review of the information provided by the NRC regional office position statement on the applicant's administrative procedures and commitments.
  - d. Verification of the administrative procedures through the Construction Inspection Program.

Based on the above, the reviewer will determine the overall acceptability of the applicant's administrative procedures.

### III. ACCEPTANCE CRITERIA

1. ~~4.~~ Acceptance criteria are based on meeting the relevant requirements of the following Commission regulations.

- 10 ~~40~~ CFR 26.27
- 10 CFR 50.34(a)(6)
- 10 CFR 50.34(b)(6)(i), (ii), (iii), and (iv)
- 10 CFR 50.34(f)(3)(i)
- 10 CFR 50.40(a)
- 10 CFR 50.54(l) and (p)(2)(ii)
- 10 CFR 52.47(a)(7) and (a)(8)
- 10 CFR 52.79(a)(14), (33), and (44)

The acceptance criteria are designed to meet ~~40 CFR~~ Title 10 of the Code of Federal Regulations (10 CFR) 50.40(a) as to administrative procedures in the determination of whether the applicant is technically qualified to engage in licensing activities, and 10 CFR 50.54(l) as to the applicant's designation of individuals responsible for directing the activities of licensed operators. Implementation of methods designed to meet the acceptance criteria may be verified through the Construction Inspection Program.

Specific criteria are as follows.

- a. The applicant has committed to RG 1.33, "Quality Assurance Program Requirements (Operation)." RG 1.33 endorses ANSI/ANS-3.2-2012, "Managerial, Administrative, and Quality Assurance Controls for the Operational Phase of Nuclear Power Plants."
- b. Administrative procedures will be developed for designating individuals responsible for directing the activities of licensed control-room operators. The process for defining and assigning the responsibilities of control-room supervisors and operators should comply with NUREG-0694, "TMI-Related Requirements for New Operating Licenses," Items I.A.1.2 and I.C.3.
- c. Administrative procedures will be developed for shift relief and turnover that comply with NUREG-0694, Item I.C.2.
- d. Administrative controls requiring supervisors and operators to be present in the control room should comply with RG 1.114, "Guidance to Operators at the Controls and to Senior Operators in the Control Room of a Nuclear Power Unit."
- e. Administrative controls designating a specific area within the control room as the "surveillance area," should conform to RG 1.114.
- f. Control room access should conform to the guidance described in NUREG-0694, Item I.C.4.
- g. Administrative procedures to provide feedback on operation, design, and construction of the facility should comply with 10 CFR 50.34(f)(3)(i) and with NUREG-0737, "Clarification of TMI Action Plan Requirements," Task Action Plan

Item I.C.5.

- h. Administrative controls governing crane operations must include a requirement that the operators of cranes over fuel pools be qualified and conduct themselves in accordance with the guidelines of ANSI-B30.2-1976, "Overhead and Gantry Cranes."
- i. A vendor interface program should ensure that vendor information for safety-related components is incorporated into plant documentation as described in Generic Letter (GL) 90-03, "Relaxation of Staff Position in Generic Letter 83-28."

## 2. ~~2.~~ Review Interfaces

Other SRP sections interface with this section as follows.

- a. The structure, functions, and responsibilities of the onsite organizations to operate and maintain the plant are reviewed in SRP Section 13.1.2, "Operating Organization."
- b. The licensed operator training program is reviewed in SRP Section 13.2.1, "Reactor Operator Requalification Program; Reactor Operator Training."
- c. The non-licensed plant staff training program is reviewed in SRP Section 13.2.2, "Non-Licensed Plant Staff Training."
- d. Additional guidance for identifying operational programs is provided in SRP, Section 13.4, "Operational Programs."
- e. Procedure adequacy is reviewed in SRP Section 13.5.2, "Operating and Emergency Operating Procedures."
- f. Human-factors engineering practices and guidelines are evaluated in SRP Section 18.0, "Human Factors Engineering."

## 3. Technical Rationale

Compliance with the relevant requirements of 10 CFR 50.40(a) requires the applicant to be technically qualified in order to engage in the administrative procedures activities associated with the design, construction, and operation of a nuclear power plant, in accordance with the regulations in 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities."

Compliance with the relevant requirements of 10 CFR 50.54(l) requires the applicant to be technically qualified as to the applicant's designation of individuals responsible for directing the activities of licensed operators in order to engage in the administrative procedures activities associated with the design, construction, and operation of a nuclear power plant in accordance with the regulations in 10 CFR Part 50.

Compliance with the relevant requirements of 10 CFR 52.47, "Contents of Applications; Technical Information," and 10 CFR 52.79, "Contents of Applications; Technical Information in a Final Safety Analysis Report," requires the applicant to be technically qualified in order to

engage activities associated with the design, construction, and operation of a nuclear power plant, in accordance with the regulations in 10 CFR Part 52, “Licenses, Certifications, and Approvals for Nuclear Power Plants.”

Meeting the requirements of 10 CFR [Part 26](#), “Fitness for Duty Programs”; 10 CFR 50.40(a); 10 CFR 50.54(l); 10 CFR 52.47; and 10 CFR 52.79, provides reasonable assurance that the applicant is technically qualified to engage in the proposed activities and can develop and implement the administrative procedures necessary to safely design, construct, operate, and maintain the facility.

#### IV. EVALUATION FINDINGS

The reviewer verifies that the applicant has provided sufficient information and that the staff’s technical review and analysis support conclusions of the following type to be included in the staff’s Safety Evaluation Report (SER). The reviewer also states the bases for those conclusions.

##### 1. Design Certification

For DC reviews, the findings will also summarize, to the extent that the review is not discussed in other SER sections, the staff’s evaluation of interface requirements and COL action items relevant to this SRP section.

##### 2. Construction Permit or Combined License

The staff concludes that the administrative procedures are acceptable and meet the requirements of 10 CFR 50.34(b), 10 CFR 50.40(a), and 10 CFR 52.79(a). This conclusion is based on the following.

The applicant states that administrative procedures will be established to provide licensed operators and non-licensed plant staff with sufficient knowledge and operating experience to start up, operate, and maintain the plant in a safe manner. The administrative procedures are to be developed by the applicant and will meet the regulatory guidance of RG 1.33, “Quality Assurance Program Requirements (Operation).”

##### 3. Operating License or Combined License

Verification of the administrative procedures is accomplished through the Construction Inspection Program. The staff concludes that the administrative procedures are acceptable and meet the requirements of 10 CFR 50.34(b) and 10 CFR 52.79(a). This conclusion is based on the following.

The applicant states that the administrative procedures will provide reasonable assurance that decisions and actions by plant staff during all plant conditions will be made consistent with plant safety procedures and operational limits established to protect the public health and safety. The administrative procedures have been designed to meet the individual needs of the participants, depending upon their backgrounds, previous training, and expected job assignments. The administrative procedures will meet the guidelines of RG 1.33 and 10 CFR Part 52.

## V. IMPLEMENTATION

The staff will use this SRP section in performing safety evaluations of DC applications and license applications submitted by applicants pursuant to 10 CFR Part 50 or 10 CFR Part 52. Except when the applicant proposes an acceptable alternative method for complying with specified portions of the Commission's regulations, the staff will use the method described herein to evaluate conformance with Commission regulations.

Implementation schedules for conformance to parts of the review plan discussed herein are contained in the referenced RGs and NUREGs.

## VI. REFERENCES

1. ~~10 CFR Part 50, U.S. Code of Federal Regulations~~, "Licensing of Production and Utilization Facilities," Part 50, Chapter 1, Title 10, "Energy."
- ~~3.2.~~ 10 CFR Part 52, U.S. Code of Federal Regulations, "Licenses, Certifications, and Approvals for Nuclear Power Plants." Part 52, Chapter 1, Title 10, "Energy."
- ~~4.3.~~ American National Standards Institute/American Nuclear Society, ANSI/ANS 3.2-2012, "Managerial, Administrative and Quality Assurance Controls for the Operational Phase of Nuclear Power Plants-," LaGrange Park, IL.
- ~~5.4.~~ NUREG-0694 U.S. Nuclear Regulatory Commission, "TMI-Related Requirements for New Operating Licenses," NUREG-0694.
- ~~6.5.~~ NUREG-0711 U.S. Nuclear Regulatory Commission, "Human Factors Engineering Program Review Model-," NUREG-0711.
- ~~7.6.~~ NUREG-0737 U.S. Nuclear Regulatory Commission, "Clarification of TMI Action Plan Requirements-," NUREG-0737.
- ~~8.7.~~ RG 1.33 U.S. Nuclear Regulatory Commission, "Quality Assurance Program Requirements (Operation)-," Regulatory Guide 1.33.

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**PAPERWORK REDUCTION ACT STATEMENT**

The information collections contained in the draft Standard Review Plan are covered by the requirements of 10 CFR Part [26.10 CFR Part 50](#) and 10-[CFR Part 52](#), and were approved by the Office of Management and Budget, approval number [3150-0146](#), 3150-0011 and 3150-0151.

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**SRP Section 13.5.1.1  
Description of Changes**

**Section 13.2.1 – Reactor Operator Requalification Program;  
Reactor Operator Training**

This revision of SRP Section 13.5.1.1 has been restructured and reorganized to clarify staff guidance. To this end, while this guidance has been significantly revised, it does not contain new staff positions. A listing of detailed changes to this section from its previous revision has thus been omitted.