

### 13.4 REVIEW AND AUDIT

*Note: Implementation of the Improved Technical Specifications has placed the information contained in Section 13.4 into the scope of the Operational Quality Assurance Program. Therefore, any changes to Section 13.4 require evaluation under 10CFR50.54(a).*

#### 13.4.1 PLANT OPERATIONS REVIEW COMMITTEE

The Plant Operations Review Committee (PORC) shall be functional throughout the life of the plant to advise the Plant Manager on matters related to nuclear and environmental safety as described in Subsection 13.4.1.3.

##### 13.4.1.1 Organization

The PORC shall be composed of a Chair and five to ten members of the Susquehanna Nuclear, LLC management staff at the manager level or above. This includes individuals filling one of the manager positions described in subsections 13.1.1.1.3 or 13.1.2.2, individuals who meet or exceed the minimum experience, education and qualification requirement for one of the positions described in ANSI/ANS 3.1-1978 (paragraphs 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.4.1, 4.4.3, 4.4.5 or 4.6.1) or for the position described in NRC Reg. Guide 1.8, Rev. 1-R, 9/75, Section C). The Plant Manager will designate these positions in station administrative procedure(s). As minimum, representatives from the operations, maintenance, health physics, chemistry and engineering organizations shall be appointed to PORC.

##### Substitute Chairs

Should the Chair be unable to attend a meeting, the Plant Manager or other individual designated in writing by the Plant Manager shall serve as Substitute Chair. A Substitute Chair has all responsibility and authority of the PORC Chair.

##### Alternate Members

The Plant Manager shall appoint, in writing, alternate members who shall serve on a temporary basis; however, alternate members, including any Substitute Chair, who are voting participants in PORC shall hold a minority vote in all PORC activities.

##### Quorum

A quorum of the PORC necessary for the performance of the PORC responsibility and authority provisions of FSAR Subsections 13.4.1.3 and 13.4.1.4 shall consist of the PORC Chair or designated Substitute Chair and a majority of the PORC-appointed members, including designated alternate members. However, the number of permanent appointed members (including the designated Chair, if present) who are participating as voting members shall hold a majority vote in all PORC activities.

#### 13.4.1.2 Meetings

Meetings shall be held at least once per calendar month and as convened by the PORC Chair or designated Substitute Chair. The PORC shall maintain written minutes of each PORC meeting that, as a minimum, document the results of all PORC activities performed under the responsibility and authority provisions of Subsections 13.4.1.3 and 13.4.1.4. Copies of minutes from PORC meetings shall be sent to the Plant Manager, the Chief Nuclear Officer, and the Nuclear Safety Review Board (NSRB).

#### 13.4.1.3 Responsibility

The PORC is responsible for the duties listed below:

1. Review of procedures, programs and changes thereto requiring approval by the Plant Manager as specified in Section 13.4.5 of the FSAR.
2. Review of all administrative procedures as described in Appendix A to Regulatory Guide 1.33, Rev. 2 (February 1978) and changes thereto, other than editorial or typographical changes.
3. Review of all proposed tests and experiments conducted under the provisions of 10 CFR 50.59 or 10CFR72.48.
4. Review of all proposed changes to the SSES Technical Specifications, i.e., Appendix A of the Unit 1 or Unit 2 Operating Licenses, and requests for enforcement discretion.
5. Review of evaluations for all proposed changes or modifications to facility systems or equipment completed under the provisions of 10CFR50.59 or 10CFR72.48. This review shall include a full description of the change or modification and its purpose, identification of all components directly or indirectly affected, safety functions of affected systems/components, and effects on safety functions.
6. Review of 10CFR50.59 or 10CFR72.48 evaluations for procedures, tests, or experiments, and changes thereto.
7. Review of investigation results for violations of the Unit 1 or Unit 2 Technical Specifications that require notification to the NRC under 10CFR50.73, including cause evaluation and recommendations to prevent recurrence.
8. Review of events requiring notification to the NRC under 10CFR50.72 or 10CFR50.73.
9. Review of facility operations to detect potential nuclear safety hazards.
10. Performance of special reviews, investigations or analyses and reports thereon as requested by the Plant Manager or the Chair of the Nuclear Safety Review Board.

11. Review of the Security Plan and changes thereto.
12. Review of the Emergency Plan and changes thereto.
13. Review of investigation results for every unplanned on-site release of radioactive material to the environs, including cause evaluation and recommendations to prevent recurrence.
14. Review of changes to the Process Control Program (PCP), Off-site Dose Calculation Manual (ODCM), and radwaste treatment systems.
15. Review of changes to the Technical Requirements Manual.
16. Review of Safety Limit Violation Reports prepared in accordance with TRM Section 4.3.1.2.

#### 13.4.1.4 Authority

The PORC shall:

- Recommend in writing to Plant Manager the approval or disapproval of Items 1 through 6, 11, 12, 14 and 15 considered under Subsection 13.4.1.3.
- Render determinations in writing with regard to whether or not each item considered under Subsection 13.4.1.3, Items 1, 2, 3, 5, 6, and 15, requires prior NRC approval pursuant to 10CFR50.59.
- Render determinations in writing with regard to whether or not each item considered under Subsection 13.4.1.3, Item 4, involves a “no significant hazards” consideration as defined in 10CFR50.92.
- Provide written notification within 24 hours to the Plant Manager, Chief Nuclear Officer and the Nuclear Safety Review Board of any disagreement between the PORC and the Plant Manager; however, the Plant Manager shall have responsibility for resolution of such disagreements.

#### 13.4.2 NUCLEAR SAFETY REVIEW BOARD

The Nuclear Safety Review Board (NSRB) was established and functional prior to initial fuel loading of Unit 1. This Committee shall verify that the operation of Susquehanna SES is performed in a safe manner consistent with Susquehanna Nuclear, LLC policy and rules, approved operating procedures, and license provisions.

The NSRB shall be chartered and shall review such areas as changes in the Technical Specifications, changes that may require prior NRC approval as determined through a 10CFR50.59 evaluation, and events that have been reported to the Nuclear Regulatory Commission (NRC) under 10CFR50.73. The NSRB shall be watchful for trends that are not obvious to the day-to-day observer.

#### 13.4.2.1 Charter

The NSRB shall be controlled by a Charter which describes the membership, responsibilities, reporting requirements and areas to be reviewed. The Charter and any revisions shall be approved by the Chief Nuclear Officer.

#### 13.4.2.2 Membership

The Nuclear Safety Review Board shall be comprised of at least eight, but not more than twelve, individuals.

The Chair, Vice Chair, and all members shall be appointed in writing by the Chief Nuclear Officer. Alternate members shall be appointed in advance in writing by the NSRB Chair, Vice Chair, or Chief Nuclear Officer. The alternates shall be involved only during legitimate absences of the principal members. No more than two alternates may participate as voting members at any one time.

The membership shall collectively possess experience and competence to review the following areas: plant operations, nuclear engineering, chemistry and radiochemistry, metallurgy, nondestructive testing, instrumentation and control, radiological safety, mechanical and electrical engineering, administrative controls, quality assurance and training, plus any other unique areas of Susquehanna SES that involve nuclear safety.

The NSRB Chair shall meet or exceed the qualification requirements of ANSI 3.1-1981, Section 4.7.1. Individual NSRB members providing independent review of the areas listed above shall meet or exceed the qualification requirements of ANSI 3.1-1981, Section 4.7.2. Per ANSI 3.1-1981, Section 4.1, exceptions to the educational requirements are permissible.

The NSRB membership shall have access to all aspects of Susquehanna SES operation, including files and personnel, to ensure its ability to independently review operational aspects of the plant. The NSRB membership shall be kept current on the happenings within areas of its responsibility, either through activities of its members or by reviewing reports submitted to the Chair.

#### 13.4.2.3 Sub-Committees

Sub-committees may be used by the NSRB when required, to assist in review of technical or detailed matters. Establishment, duties, and membership of subcommittees shall be described in the NSRB Charter. Individuals functioning as subcommittee chairs shall meet or exceed the requirements of ANSI/ANS 3.1-1981, Section 4.7. Per ANSI 3.1-1981, Section 4.1, exceptions to the educational requirements are permissible.

#### 13.4.2.4 Consultants

Consultants shall be used as determined by the NSRB Chair, Vice Chair, or Chief Nuclear Officer to provide expert advice to the NSRB.

#### 13.4.2.5 Meeting Frequency

The NSRB shall meet at least once per calendar quarter during the initial year of each Unit operation following fuel loading and not less than twice a year thereafter.

#### 13.4.2.6 Quorum

The quorum of the NSRB necessary for the performance of the NSRB review and audit functions pursuant to Subsection 13.4.2.8 and Subsection 13.4.2.9 shall consist of not less than a majority of all members, or designated alternates, and shall be subject to the following constraints: the Chair or designated alternate shall be present for all formal meetings and no more than a minority of the quorum shall have line responsibility for operation of the units.

#### 13.4.2.7 Records

Records of NSRB activities shall be provided, approved and distributed as indicated below:

- a. Minutes of each NSRB meeting shall be prepared, approved and forwarded promptly to the Chief Nuclear Officer following each meeting.
- b. Reports of reviews encompassed by Subsection 13.4.2.8, below, shall be prepared, approved and forwarded promptly to the Chief Nuclear Officer and appropriate members of management having responsibility in the reviewed area following completion of the review.
- c. Audit reports encompassed by Subsection 13.4.2.9, below, shall be forwarded to the Chief Nuclear Officer and to the management positions responsible for the areas audited within 30 days after completion of the audit by the auditing organization.

#### 13.4.2.8 Responsibility

The NSRB shall be responsible for the review of:

- a. 10CFR50.59 evaluations that were performed to determine whether prior NRC approval is required for 1) proposed changes to procedures, equipment, or systems and 2) proposed tests or experiments.
- b. Proposed changes to procedures, equipment or systems that require prior NRC approval, as determined through a 10CFR50.59 evaluation.
- c. Proposed tests or experiments that require prior NRC approval, as determined through a 10CFR50.59 evaluation.
- d. Proposed changes to Technical Specifications or the Operating License.
- e. Violations of codes, regulations, orders, Technical Specifications, license requirements, or of internal procedures or instructions having nuclear safety significance.

- f. Significant operating abnormalities or deviations from normal and expected performance of facility equipment that affect nuclear safety.
- g. Events requiring notification to the Commission under 10CFR50.73.
- h. All recognized indications of an unanticipated deficiency in some aspect of design or operation of structures, systems, or components that could affect nuclear safety.
- i. Reports and meeting minutes of the PORC.
- j. The health of accredited training programs.

#### 13.4.2.9 NSRB Audit Program

All Susquehanna Nuclear, LLC Audit Program audits shall be performed under the cognizance of the NSRB, and at a frequency as described below or in FSAR Subsection 17.2.18. These audits shall at a minimum encompass:

- a. The conformance of unit operation to provisions contained within the Technical Specifications and applicable license conditions.
- b. The performance, training and qualifications of the entire facility staff.
- c. The results of actions taken to correct deficiencies occurring in facility equipment, structures, systems or method of operation that affect nuclear safety.
- d. The performance of activities required by the Operational Quality Assurance Program to meet the criteria of 10CFR50, Appendix B.
- e. Any other area of unit operation considered appropriate by the NSRB or the Chief Nuclear Officer.
- f. The Fire Protection Program and implementing procedures every 24 months.
- g. An independent fire protection and loss prevention inspection and audit shall be performed every 24 months utilizing either qualified off-site licensee personnel or an outside fire protection firm.
- h. An inspection and audit of the Fire Protection and Loss Prevention Program shall be performed by an outside qualified fire protection consultant at intervals no greater than 36 months.
- i. The Radiological Environmental Monitoring program and the results thereof.
- j. The Offsite Dose Calculation Manual (ODCM) and implementing procedures.
- k. The Process Control Program (PCP) and implementing procedures for solidification of radioactive wastes.
- l. The performance of activities required by the Quality Assurance Program to meet the criteria of Regulatory Guide 4.15, Revision 1, February 1979.

- m. The Emergency Plan and implementing procedures
- n. The Fitness-for-Duty Program
- o. The Security Plan and implementing procedures
- p. The Access Authorization Program
- q. The Dry Fuel Storage Program
- r. The Chemistry Program
- s. The Radiological Protection Program (Health Physics)
- t. The Environmental Protection Program

#### 13.4.2.10 Authority

The NSRB reports to and advises the Chief Nuclear Officer on those areas of responsibility specified in FSAR Subsections 13.4.2.8 and 13.4.2.9.

#### 13.4.3 AUDIT PROGRAM

The Susquehanna Nuclear, LLC Audit Program for the operational phase of Susquehanna SES is described in FSAR Subsection 17.2.18.

#### 13.4.4 PROCESS CONTROL PROGRAM (PCP)

The PCP shall be approved by the Commission prior to implementation.

Licensee initiated changes to the PCP:

1. Shall be submitted to the Commission in the Annual Radiological Effluent Release Report for the period in which the change(s) was made. This submittal shall contain:
  - a. Sufficiently detailed information to totally support rationale for the change without benefit of additional or supplemental information;
  - b. A determination that the change did not reduce the overall conformance of the solidified waste product to existing criteria for solid wastes; and
  - c. Documentation of the fact that the change has been reviewed and recommended for approval by the PORC.
2. Shall become effective upon review and approval by the Plant Manager.

13.4.5 TECHNICAL REVIEW AND CONTROL

The following procedures and programs, and changes thereto (other than editorial or typographical changes) shall be reviewed as described in paragraphs 'a' through 'f' below:

- Procedures and programs used to implement the requirements presented in the SSES Technical Requirements Manual.
  - Procedures and programs listed in SSES Technical Specification Section 5.4.1.
  - Procedures and programs listed in SSES Technical Requirements Manual Section 4.4.1.
  - Other procedures that affect plant nuclear safety, as determined by the Plant Manager.
- a. Each such procedure, program or procedure change shall be independently reviewed by an individual knowledgeable in the area affected. The reviewer shall be someone other than the individual who prepared the procedure, program, or procedure change.
  - b. Individuals responsible for reviews performed in accordance with Subsection 13.4.5.a, above, shall be previously designated by a process approved by the Plant Manager. This process shall also include a determination of whether or not additional, cross-disciplinary, review is necessary. If deemed necessary, such a review shall be performed by the review personnel of the appropriate discipline.  
  
Individuals responsible for reviews performed in accordance with Subsection 13.4.5.a, above, shall meet or exceed the qualifications stated in Section 4.4 of ANSI N18.1 – 1971 for the appropriate discipline.
  - c. When an initial screening reveals that a specific change needs a 10CFR50.59 evaluation to determine whether the change requires prior NRC approval, this evaluation shall be included in the procedure review. For those changes that require prior NRC approval, NRC approval shall be obtained prior to approval of the procedure.
  - d. Written records of reviews performed in accordance with Subsection 13.4.5.a, above, including recommendations for approval, shall be prepared and maintained.
  - e. Each such procedure, program, or procedure change shall be approved prior to implementation. Approval authority is as follows:
    - 1) Technical Specification and Technical Requirement Manual programs/procedures that specify approval by the plant manager shall be approved by the Plant Manager.
    - 2) Upper tier procedures, and changes thereto, shall be approved by the Plant Manager.
    - 3) Lower tier procedures, and changes thereto, that require a 10CFR50.59 evaluation shall be approved by the Plant Manager.
    - 4) Lower tier procedures, and changes thereto, that do not require a 10CFR50.59 evaluation shall be approved by the appropriate Susquehanna Nuclear, LLC manager or supervisor.



- 5) Each procedure, and changes thereto, that is established to implement those portions of the radiological effluent and environmental monitoring programs and those portions of the ODCM that are the responsibility of Plant Chemistry shall be approved by the Manager-Plant Chemistry/Environmental.
- f. Each procedure shall be reviewed periodically as set forth in administrative procedures.