

13.5 PLANT PROCEDURES

13.5.1 ADMINISTRATIVE PROCEDURES

All safety-related operations at Susquehanna Steam Electric Station Units 1 and 2 are conducted in accordance with written and approved procedures. Plant personnel receive training in the use of appropriate procedures and the procedures are made available to them at strategic locations.

13.5.1.1 Procedure Conformance

Procedure topics follow the guidance specified by applicable portions of Regulatory Guide 1.33, Revision 2 and procedures are prepared following the guidance provided by ANSI N18.7-1976.

13.5.1.2 Preparation of Procedures

Procedures are prepared by the plant staff and support organizations under the direction of department management. Reviews of safety-related procedures use and changes thereto, are performed and approved as described in Section 13.4.

Applicable procedures are periodically reviewed to determine if changes are necessary or desirable. Applicable procedures are reviewed after significant system or equipment modification, and following an unusual incident, such as a hazardous condition, an unexpected transient, a significant operator error, or equipment malfunction where the procedures contributed to the cause of the incident, or where inadequate in mitigating the effects of the incident.

13.5.1.3 Procedures

Administrative Procedures establish rules and instructions pertaining to activities such as procedure preparation; plant personnel responsibilities and authorities; plant modification; corrective maintenance and preventive maintenance; safety tagging; temporary changes to approved procedures; review of plant documents; surveillance testing and in-service inspection; equipment control; fire protection; security and visitor control, access to containment; communication system; and temporary procedures of an administrative nature. Administrative Procedures governing shift operations include the reactor operator's authority and responsibility, the senior reactor operator's authority and responsibilities, the logbook usage and control, issuance and updating of special orders and the plans for meeting the requirements of 10CFR50.54(i), (j), (k), (l) and (m) (Fig. 13.5-2). The general format of Administrative Procedures includes: Title, purpose, references, and procedure sections.

13.5.2 OPERATING AND MAINTENANCE PROCEDURES

The general format of the Operating and Maintenance Procedures complies with ANSI N18.7-1976.

13.5.2.1 Control Room Operating Procedures

The following procedure categories delineate those procedures primarily performed by licensed operators in the control room. Procedural steps which specify immediate operator actions to prevent or mitigate the consequences of a serious condition are committed to memory by licensed operators.

13.5.2.1.1 Operating Procedures

The operating procedures include instructions for startup, normal, manual, and automatic modes of operation of each system or subsystem related to the safety of the plant. Detailed check off lists are included where appropriate with each procedure. These lists delineate the proper valve lineup, circuit breaker position, or switch position that is a prerequisite for the addressed mode of operation.

13.5.2.1.2 General Plant Procedures

General Plant Procedures provide the necessary instructions for the integrated operations of the plant. Check off lists are used for confirming completion of major steps in the proper sequence.

13.5.2.1.3 Off-Normal Procedures

Off-Normal Procedures specify operator actions for restoring an operating variable to its normal controlled value when it departs from its range, or to restore normal operating conditions following a perturbation. Such actions are invoked following an operator observation of an off-normal condition which, if not corrected, could degenerate into a condition requiring action under an Emergency Procedure.

13.5.2.1.4 Emergency Procedures

Emergency Procedures identify potential emergency conditions and provide guidance for operations during potential emergencies while allowing sufficient flexibility to accommodate variations. These procedures specify actions, including manipulation of controls, to: (1) avoid further degradation of abnormal conditions which in themselves do not constitute an accident but could lead to an accident or (2) reduce the consequences of an accident or hazardous condition that has occurred and that may require implementation of the Emergency Plan.

13.5.2.1.5 Alarm Response Procedures

Alarm Response Procedures are provided to guide operators in their response to control room alarm conditions. These procedures are classified in a manner permitting quick retrieval in response to an alarm condition.

13.5.2.1.6 Temporary Procedures

Temporary Procedures may be issued to direct operations during such activity as testing, refueling, maintenance and modifications; and to provide guidance in unusual situations not within the scope of existing procedures. Temporary procedures are only in effect for the duration of the applicable situation, and require the same review and approval process as other plant procedures as prescribed in Section 13.4.

13.5.2.2 Additional Operating and Maintenance Procedures

The following procedure categories delineate those procedures that are primarily performed outside the limits of the control room.

13.5.2.2.1 Chemistry Procedures

Chemistry Procedures are implemented to maintain coolant quality and concentrations of harmful agents within prescribed limits. These procedures include chemical and radiochemical analysis, sample collection and equipment instruction.

13.5.2.2.2 Emergency Plan Procedures

The Emergency Plan establishes the concepts, evaluation criteria, and actions that are necessary to limit and mitigate the consequences of radiological incidents and unusual events including natural hazards and civil occurrences. The Emergency Plan Procedures are implementing procedures which provide the response which is required to ensure public health and safety.

13.5.2.2.3 Environmental Surveillance Procedures

The Environmental Monitoring Procedures provide the measurement and documentation of environmental information of a radiological or nonradiological nature to evaluate the effect on the environment, if any, resulting from the operation of the plant. These procedures will be performed, by the appropriate Group, in accordance with specifications that define the scope of testing and the test frequency.

13.5.2.2.4 Radiation Protection Procedures

Radiation Protection Procedures are written to govern the implementation of the Radiation Protection Program described in Section 12.5. These procedures detail various aspects of the Radiation Protection Program including equipment operating instructions, control of access and stay time, as low as reasonably achievable program, radiation surveys, contamination surveys, airborne radioactive material surveys, personnel monitoring, and training.

13.5.2.2.5 Instrument and Control Procedures

Instrument and Control Procedures provide for the required periodic calibration and testing of safety related plant instrumentation, calibration of measuring and test equipment and instrument maintenance. These procedures have provisions for taking the instrument out of service, assuring accuracies adequate to keep safety parameters within operational and safety limits, recording the date, as-found condition, corrective actions, as-left condition, identification of personnel performing the test, and restoration of the instrument to normal operating status.

13.5.2.2.6 Maintenance Procedures

Maintenance Procedures are written to maintain mechanical and electrical safety-related equipment at the quality required for it to perform its intended function. This category also includes procedures for implementation of the preventive maintenance program for mechanical and electrical safety-related equipment. Included are procedures that provide for the calibration and testing of protective relays. These procedures have provisions for recording the date, as-found condition, corrective action, as-left condition, and identification of personnel performing the test.

13.5.2.2.7 Procurement and Material Control Procedures

Procurement and Material Control Procedures provide for the proper procurement, documentation, and control of those materials and components associated with safety-related structures or systems. These procedures are sufficiently detailed to ensure that materials and components are purchased and handled in a controlled manner in accordance with applicable standards.

13.5.2.2.8 Radwaste Management Procedures

Radiation Protection Section has Radwaste Operating Procedures for solid radwaste systems to provide administrative controls for the shipment of solid radwaste. This includes the Process Control Program Procedures that ensure regulatory requirements are met for processing and packaging solid radioactive waste, and Transportation Procedures to ensure compliance with 10 CFR Part 71 and all DOT requirements as defined in 49 CFR Parts 100-177.

Radiation Protection also has Procedures for the release of batch quantities of liquids, from sumps or berm areas via tankers, with controls to ensure approval from chemistry prior to release.

Operations/Chemistry Section has Radwaste Operating Procedures for the liquid radwaste processing equipment, for controlling liquid releases from process equipment and/or for controlling gaseous releases. This includes provisions which provide administrative controls to allow liquid radwaste releases, when required data, analyses and approvals are completed.

13.5.2.2.9 Reactor Engineering Procedures

Reactor Engineering Procedures in conjunction with Operating Procedures provide for the monitoring and evaluation of core thermal and hydraulic parameters. In addition, these procedures provide methods for evaluating fuel exposure, isotopic composition, core flux levels, and nuclear instrumentation setpoints as they relate to core power and flow.

13.5.2.2.10 Records Procedures

Records Procedures provide for the preparation and retention of plant records. Records to be retained are identified in ANSI N45.2.9-1974. These procedures will also address storage requirements and retention periods.

13.5.2.2.11 Security Procedures

Security Procedures are written to describe and implement the security requirements for the plant. These procedures include, but are not necessarily limited to, the subjects listed in Section 4.2.1 of ANSI N18.17-1973.

13.5.2.2.12 Surveillance Procedures

Surveillance procedures are written to provide for operability verification of safety-related structures and components in accordance with Technical Specifications and Technical Requirements Manual (FSAR Chapter 16). Surveillance performance is scheduled for conformance to frequencies established in Technical Specifications and Technical Requirements Manual.

13.5.2.2.13 Fire Protection Procedures

FPRR Table 5.0-1 Section B addresses the Fire Protection Administrative Procedures, Controls, and Fire Brigade.

Security-Related Information

Figure Withheld Under 10 CFR 2.390

