4. SURVEILLANCE STANDARDS

During Reactor Operational Conditions for which a Limiting Condition for Operation does not require a system/component to be operable, the associated surveillance requirements do not have to be performed. Prior to declaring a system/component operable, the associated surveillance requirement must be current. The above applicability requirements assure the operability of systems/components for all Reactor Operating Conditions when required by the Limiting Conditions for Operation.

4.1 OPERATIONAL SAFETY REVIEW

Applicability

Applies to items directly related to safety limits and limiting conditions for operation.

Objective

To specify the minimum frequency and type of surveillance to be applied to unit equipment and conditions.

Specification

4.1.1 The minimum frequency and type of surveillance required for reactor protection system and engineered safety feature protection system instrumentation when the reactor is critical shall be as stated in Table 4.1-1.

4.1.2 Equipment and sampling test shall be performed as detailed in Tables 4.1-2 and 4.1-3.

Bases

Check

Failures such as blown instrument fuses, defective indicators, or faulted amplifiers which result in "upscale" or "downscale" indication can be easily recognized by simple observation of the functioning of an instrument or system. Furthermore, such failures are, in many cases, revealed by alarm or annunciator action. Comparison of output and/or state of independent channels measuring the same variable supplements this type of built-in surveillance. Based on experience in operation of both conventional and nuclear systems, when the unit is in operation, the minimum checking frequency stated is deemed adequate for reactor system instrumentation.

Calibration

Calibration shall be performed to assure the presentation and acquisition of accurate information. The nuclear flux (power range) channels amplifiers shall be checked and calibrated if necessary, every shift against a heat balance standard. The frequency of heat balance checks will assure that the difference between the out-of-core instrumentation and the heat balance remains less than 4%.

dures at least once per 24 months

i. The Process Control Program and implementing procedures for solidification of radioactive wastes at least once per 24 months.

j. The performance of activities required by the Quality Assurance Program to meet criteria of Regulatory Guide 4.15, December 1977, at least once per 12 months.

k. Any other area of unit operation considered appropriate by the IOSRG or the Office of the President - GPUNC.

6.5.3.2 Audits of the following shall be performed under the cognizance of the Vice President - Technical Functions:

a. An independent fire protection and loss prevention program inspection and audit shall be performed annually utilizing either qualified offsite licensee personnel or an outside fire protection firm.

b. An inspection and audit of the fire protection and loss prevention program, by an outside qualified fire consultant at intervals no greater than 3 years.

RECORDS

6.5.3.3 Audit reports encompassed by sections 6.5.3.1 and 6.5.3.2 shall be forwarded for action to the management positions responsible for the areas audited within 60 days after completion of the audit. Upper management shall be informed per the Operation Quality Assurance Plan.

6.5.4 INDEPENDENT ON SITE SAFETY REVIEW GROUP (IOSRG)

STRUCTURE

6.5.4.1 The IOSRG shall be a full-time group of engineers, experienced in nuclear power plant engineering, operations and/or technology, independent of the unit staff, and located on site.

ORGANIZATION

6.5.4.2

a. The IOSRG shall consist of the Manager - Nuclear Safety and staff members who meet the qualifications of 6.5.4.5. Group expertise shall be multi-disciplined.

b. The IOSRG shall report to the Nuclear Safety Assessment Director.

FUNCTION

6.5.4.3 The periodic review functions of the IOSRG shall include the following on a selective and overview basis:

1) Evaluation for technical adequacy and clarity of procedures important to the safe operation of the unit.

2) Evaluation of unit operations from a safety perspective.

3) Assessment of unit nuclear safety programs.

4) Assessment of the unit performance regarding conformance to requirements related to safety.

5) Any other matter involving safe operations of the nuclear power plant that the Manager-Nuclear Safety deems appropriate for consideration.

AUTHORITY

6.5.4.4 The IOSRG shall have access to the unit and unit records as necessary to perform its evaluations and assessments. Based on its reviews, the IOSRG shall provide recommendation to the management positions responsible for the areas reviewed.

QUALIFICATIONS

6.5.4.5 The IOSRG engineers shall have either: (1) a Bachelor's Degree in Engineering or the Physical Sciences and three (3) years of professional level experience in the nuclear power field including technical supporting functions, or (2) eight (8) years of appropriate experience in nuclear power plant operations and/or technology. Credit toward experience will be given for advance degrees on a one-to-one basis up to a maximum of two (2) years.

RECORDS

6.5.4.6 Reports of evalutions and assessments encompassed in Section 6.5.4.3 shall be prepared, approved, and transmitted to the Nuclear Safety Assessment Director, TMI-1 and Nuclear Assurance Division Vice President, and the management positions responsible for the areas reviewed.