

4. SURVEILLANCE REQUIREMENTS

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 plant equipment and conditions.

Specification

- a. Calibration, testing and checking of analog channels, and testing of logic channels shall be performed as specified in Table 4.1-1.
- b. Sampling and equipment tests shall be conducted as specified in Tables 4.1-2 and 4.1-3, respectively.
- c. Performance of any surveillance test outlined in these specifications is not immediately required if the plant condition is the same as the condition into which the plant would be placed by an unsatisfactory result of that test. Such tests will be performed before the plant is removed from the subject condition that has precluded the immediate need to run the test. If the test provisions require that a minimum higher system condition must first be established, the test will be performed promptly upon achieving this minimum condition.

Basis

A surveillance test is intended to identify conditions in a plant that would lead to a degradation of reactor safety. Should a test reveal such a condition, the Technical Specifications require that either immediately, or after a specified period of time, the plant be placed in a condition which mitigates or eliminates the consequences of additional related casualties or accidents. If the plant is already in a condition which satisfies the failure criteria of the test, then plant safety is not compromised and performance of the test yields information that is not necessary to determine safety limits or limiting conditions for operation of the plant. The surveillance test need not be performed, therefore, as long as the plant remains in this condition. However, this surveillance test should be performed prior to removing the plant from the subject condition that has precluded the immediate

need to run the test. In the situation in which the test provisions specify that the test must be performed at some minimum system condition, this condition will first be achieved and the test will be performed promptly thereafter prior to proceeding to a higher system condition.

a. Check

Failures such as blown instrument fuses, defective indicators, 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 action, and a Check supplements this type of built-in surveillance.

Based on experience in operation of both conventional and nuclear plant systems, the minimum Checking frequency of once per shift when the plant is in operation, is deemed adequate for reactor and steam system instrumentation.

b. Calibration

Calibrations are performed to ensure the presentation and acquisition of accurate information.

The nuclear flux (linear level) channels are calibrated daily against a heat balance standard to account for errors induced by changing rod patterns and core physics parameters.

Other channels are subject only to the "drift" errors induced within the instrumentation itself and, consequently, can tolerate longer intervals between calibration. Process system instrumentation errors induced by drift can be expected to remain within acceptable tolerances if recalibration is performed at intervals of each refueling shutdown.

Substantial calibration shifts within a channel (essentially a channel failure) will be revealed during routine checking and testing procedures.

Thus, minimum calibration frequencies of once-per-day for the nuclear flux (linear level) channels, and once each refueling shutdown for the process system channels is considered acceptable.

c. Testing

The minimum testing frequency for those instrument channels connected to the safety system is based on an average unsafe failure rate of

ATTACHMENT B

APPLICATION FOR AMENDMENT TO
OPERATING LICENSE

SAFETY EVALUATION

Consolidated Edison Company of New York, Inc.

Indian Point Unit No. 2
Docket No. 50-247
Facility Operating License No. DPR-26

August, 1975

Safety Evaluation

Consolidated Edison requests a change to Section 4.1 of the Indian Point Unit No. 2 Technical Specifications.

The specific revisions would require surveillance tests to be performed only when the plant is in a condition where such tests would be meaningful or necessary to assure reactor safety.

The proposed changes do not in any way alter the safety or accident analyses performed for Indian Point Unit No. 2. No unreviewed safety questions, therefore, are created by this request. The proposed changes have been reviewed by the Station Nuclear Safety Committee and by the Consolidated Edison Nuclear Facilities Safety Committee. Both committees concur that these changes do not represent a significant hazards consideration.