

DEFINITIONS

MISCELLANEOUS DEFINITIONS

Operable - Operability

A system, subsystem, train, component or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified function(s). Implicit in this definition shall be the assumption that all necessary attendant instrumentation, controls, normal and emergency electrical power sources, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component or device to perform its function(s) are also capable of performing their related support function(s).

In Operation

A system or component is in operation if it is performing its design function.

CEA's

All full length shutdown and regulating control rods.

Part Length CEA's

CEA's which contain neutron absorbing material only in the lower quarter of their length.

Containment Integrity

Containment integrity is defined to exist when all of the following are met:

- (1) All nonautomatic containment isolation valves which are not required to be open during accident conditions and blind flanges are closed.
- (2) The equipment hatch is properly closed and sealed.
- (3) At least one door in the personnel air lock is properly closed and sealed.
- (4) All automatic containment isolation valves are operable or locked closed (or isolated by locked closed valves or blind flanges as permitted by limiting condition for operation).
- (5) The uncontrolled containment leakage satisfies Specification 3.5.

2.0 LIMITING CONDITIONS FOR OPERATION

2.0.1 General Requirements

Applicability

Applies to the operable status of all systems, subsystems, trains, components, or devices covered by the Limiting Conditions for Operation.

Objective

To specify corrective measures to be employed for system conditions not covered by or in excess of the Limiting Conditions for Operation.

Specification

- (1) In the event a Limiting Condition for Operation and/or associated action requirements cannot be satisfied because of circumstances in excess of those addressed in the specification, the unit shall be placed in at least HOT SHUTDOWN within 6 hours, in at least subcritical and $< 300^{\circ}\text{F}$ within the next 6 hours, and in at least COLD SHUTDOWN within the following 30 hours, unless corrective measures are completed that permit operation under the permissible action requirements for the specified time interval as measured from initial discovery or until the reactor is placed in an Operating Mode in which the specification is not applicable. Exceptions to these requirements shall be stated in the individual specifications.
- (2) When a system, subsystem, train, component, or device is determined to be inoperable solely because its emergency power source is inoperable, or solely because its normal power source is inoperable, it may be considered OPERABLE for the purpose of satisfying the requirements of its applicable Limiting Condition for Operation, provided: (1) its corresponding normal or emergency power source is OPERABLE; and (2) all of its redundant system(s), subsystem(s), train(s), component(s), and device(s) are OPERABLE, or likewise satisfy the requirements of this specification. Unless both conditions (1) and (2) are satisfied, the unit shall be placed in at least HOT SHUTDOWN within 6 hours, in at least subcritical and $< 300^{\circ}\text{F}$ within the next 6 hours, and in at least COLD SHUTDOWN within the following 30 hours. This specification is not applicable in Operating Modes 4 or 5.

Basis

- (1) This specification delineates corrective measures to be taken for circumstances not directly provided for in the system specific specifications and whose occurrence would violate the intent of the specification. For example, Specification 2.3 requires each Low Pressure Safety Injection (LPSI) pump to be operable and provides explicit corrective measures to

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be followed if one pump is inoperable. Under the terms of Specification 2.0.1(1), if more than one LPSI pump is inoperable, the unit must be placed in at least HOT SHUTDOWN within 6 hours, in at least subcritical and $< 300^{\circ}\text{F}$ within the following 6 hours, and in at least COLD SHUTDOWN within the following 30 hours, unless at least one LPSI pump were restored to operability. It is assumed that the unit is brought to the required mode within the required times by promptly initiating and carrying out the appropriate measures required by the specification.

- (2) This specification delineates what additional conditions must be satisfied to permit operation to continue, consistent with the system specific specifications for power sources, when a normal or emergency power source is not OPERABLE. It specifically prohibits operation when one division is inoperable because its normal or emergency power source is inoperable and a system, subsystem, train, component, or device in another division is inoperable for another reason.

The provisions of this specification permit the requirements associated with individual systems, subsystems, trains, components, or devices to be consistent with the specification of the associated electrical power source. It allows operation to be governed by the time limits of the requirements associated with the Limiting Condition for Operation for the normal or emergency power source, not the individual requirements for each system, subsystem, train, component, or device that is determined to be inoperable solely because of the inoperability of its normal or emergency power source.

For example, Specification 2.7 requires in part that two emergency diesel generators be OPERABLE. The specification provides for 7 days per month out-of-service time when one emergency diesel generator is not OPERABLE. If the definition of OPERABLE were applied without consideration of Specification 2.0.1(2), all systems, subsystems, trains, components, and devices supplied by the inoperable emergency power source would also be inoperable. This would dictate invoking the applicable corrective measures for each of the applicable Limiting Conditions for Operation. However, the provisions of Specification 2.0.1(2) permit the time limits for continued operation to be consistent with the requirements for the inoperable emergency diesel generator instead, provided the other specified conditions are satisfied. In this case, this would mean that the corresponding normal power source must be OPERABLE, and all redundant systems, subsystems, trains, components, and devices must be OPERABLE, or otherwise satisfy Specification 2.0.1(2) (i.e., be capable of performing their design

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function and have at least one normal and one emergency power source OPERABLE). If they are not satisfied, shutdown is required in accordance with this specification.

As a further example, Specification 2.7 requires in part that two physically independent circuits between the offsite transmission network and the onsite Class IE distribution system be OPERABLE. The specification provides a 24-hour out-of-service time when both required offsite circuits are not OPERABLE. If the definition of OPERABLE were applied without consideration of Specification 2.0.1(2), all systems, subsystems, trains, components, and devices supplied by the inoperable normal power sources, both of the offsite circuits, would also be inoperable. This would dictate invoking the applicable measures for each of the applicable LCO's. However, the provisions of Specification 2.0.1(2) permit the time limits for continued operation to be consistent with the corrective measures for the inoperable normal power sources instead, provided the other specified conditions are satisfied. In this case, this would mean that for one division the emergency power source must be OPERABLE (as must be the components supplied by the emergency power source) and all redundant systems, subsystems, trains, components, and devices in the other division must be OPERABLE, or likewise satisfy Specification 2.0.1(2) (i.e., be capable of performing their design functions and have an emergency power source OPERABLE). In other words, both emergency power sources must be OPERABLE and all redundant systems, subsystems, trains, components, and devices in both divisions must also be OPERABLE. If these conditions are not satisfied, shutdown is required in accordance with this specification.

In Operating Modes 4 or 5, Specification 2.0.1(2) is not applicable, and thus the individual requirements for each applicable Limiting Condition for Operation in these modes must be adhered to.

DISCUSSION

The Omaha Public Power District received a letter from the Nuclear Regulatory Commission, dated April 10, 1980, requesting that Technical Specification revisions be proposed in order to define the use of the term OPERABLE and to specify corrective actions to be taken when plant operating conditions have degraded beyond the circumstances addressed by existing Limiting Conditions for Operation (LCO). The specifications proposed herein are submitted in response to the Commission's letter.

These specifications require that the plant be placed in a hot shutdown condition within six (6) hours from the time a condition is found which exceeds a LCO. Six (6) hours permit a controlled and orderly shutdown through the normal boration method at the maximum rampdown rate of approximately 20% per hour. Effecting a shutdown in less than six (6) hours would require emergency boration and/or the use of reactor control rods which are used for shutdown purposes only when a rapid automatic or manual trip is required to protect operating equipment from damage or ensure public health and safety. The use of control rods or emergency boration to shutdown the plant when a LCO is violated could have the potential for causing an operational transient at a time when safety related equipment is degraded and defense in depth is not available to mitigate the consequences of the transient. For example, in the event that two (2) trains of the safety injection system are inoperable, sound safety practice dictates that the plant be shutdown as carefully as possible in order that the safety injection system is not challenged. A safe, orderly shutdown can be accomplished within six (6) hours at the Fort Calhoun Station. The District's position on this subject was relayed to Mr. Wagner and Mr. Wetmore of the Commission's staff during a telephone conversation on July 24, 1980.

The proposed Technical Specifications are administrative. They do not represent an unreviewed safety question, since no existing Technical Specifications are modified, except to clarify the term OPERABLE. The new Specification 2.0.1 also provides additional clarification in the application of the term OPERABLE/OPERABILITY. The proposed changes are consistent with Combustion Engineering Standard Technical Specifications.

JUSTIFICATION FOR FEE CLASSIFICATION

The proposed amendment is deemed to be Class II, within the meaning of 10 CFR 170.22, because it is administrative in nature and has no safety or environmental significance. It only seeks to clarify the term OPERABLE and provide additional clarification in the application of the term OPERABLE/OPERABILITY.