

ENCLOSURE 1

PROPOSED CHANGES TO SEQUOYAH NUCLEAR PLANT UNIT 1
TECHNICAL SPECIFICATIONS

8006020183

EMERGENCY CORE COOLING SYSTEMS (ECCS)

3/4.5.2 ECCS SUBSYSTEMS - T_{avg} Greater Than or Equal to 350°F

LIMITING CONDITION FOR OPERATION

3.5.2 Two independent ECCS subsystems shall be OPERABLE with each subsystem comprised of:

- a. One OPERABLE centrifugal charging pump,
- b. One OPERABLE safety injection pump,
- c. One OPERABLE residual heat removal heat exchanger,
- d. One OPERABLE residual heat removal pump, and
- e. An OPERABLE flow path capable of taking suction from the refueling water storage tank on a safety injection signal and automatically transferring suction to the containment sump during the recirculation phase of operation.

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

- a. With one ECCS subsystem inoperable, restore the inoperable subsystem to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- b. In the event the ECCS is actuated and injects water into the Reactor Coolant System, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 90 days describing the circumstances of the actuation and the total accumulated actuation cycles to date. The current value of the usage factor for each affected safety injection nozzle shall be provided in this Special Report whenever its value exceeds 0.70.
- c. The provisions of specification 3.0.4 are not applicable for entry into MODES 3 and 4 when system inoperability has been determined solely on unresolved piping support or restraint deficiencies.

SURVEILLANCE REQUIREMENTS

4.5.2 Each ECCS subsystem shall be demonstrated OPERABLE:

- a. At least once per 12 hours by verifying that the following valves are in the indicated positions with power to the valve operators removed:

EMERGENCY CORE COOLING SYSTEMS (ECCS)

3/4.5.3 ECCS SUBSYSTEMS - T_{avg} Less Than 350°F

LIMITING CONDITION FOR OPERATION

3.5.3 As a minimum, one ECCS subsystem comprised of the following shall be OPERABLE:

- a. One OPERABLE centrifugal charging pump,
- b. One OPERABLE residual heat removal heat exchanger,
- c. One OPERABLE residual heat removal pump, and
- d. An OPERABLE flow path capable of taking suction from the refueling water storage tank upon being manually realigned and automatically transferring suction to the containment sump during the recirculation phase of operation.

APPLICABILITY: MODE 4.

ACTION:

- a. With no ECCS subsystem OPERABLE because of the inoperability of either the centrifugal charging pump or the flow path from the refueling water storage tank, restore at least one ECCS subsystem to OPERABLE status within 1 hour or be in COLD SHUTDOWN within the next 20 hours.
- b. With no ECCS subsystem OPERABLE because of the inoperability of either the residual heat removal heat exchanger or residual heat removal pump, restore at least one ECCS subsystem to OPERABLE status or maintain the Reactor Coolant System T_{avg} less than 350°F by use of alternate heat removal methods.
- c. In the event the ECCS is actuated and injects water into the Reactor Coolant System, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 90 days describing the circumstances of the actuation and the total accumulated actuation cycles to date.
- d. The provisions of specification 3.0.4 are not applicable for entry into MODES 3 and 4 when system inoperability has been determined solely on unresolved piping support or restraint deficiencies.

CONTAINMENT SYSTEMS

3/4.6.2 DEPRESSURIZATION AND COOLING SYSTEMS

CONTAINMENT SPRAY SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.2.1 Two independent containment spray systems shall be OPERABLE with each spray system capable of taking suction from the RWST and transferring suction to the containment sump.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- a. With one containment spray system inoperable, restore the inoperable spray system to OPERABLE status within 72 hours or be in HOT STANDBY within the next 6 hours; restore the inoperable spray system to OPERABLE status within the next 48 hours or be in COLD SHUTDOWN within the next 30 hours.
- b. The provisions of specification 3.0.4 are not applicable for entry into MODES 3 and 4 when system inoperability has been determined solely on unresolved piping support or restraint deficiencies

SURVEILLANCE REQUIREMENTS

4.6.2.1 Each containment spray system shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying that each valve (manual, power operated or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.
- b. By verifying, that on recirculation flow, each pump develops a discharge pressure of greater than or equal to 140 psig when tested pursuant to Specification 4.0.5.
- c. At least once per 18 months during shutdown, by:
 1. Verifying that each automatic valve in the flow path actuates to its correct position on a Containment Pressure--High-High test signal.
 2. Verifying that each spray pump starts automatically on a Containment Pressure--High-High test signal.
- d. At least once per 5 years by performing an air or smoke flow test through each spray header and verifying each spray nozzle is unobstructed.

CONTAINMENT SYSTEMS

3/4.6.3 CONTAINMENT ISOLATION VALVES

LIMITING CONDITION FOR OPERATION

3.6.3.1 The containment isolation valves specified in Table 3.6-2 shall be OPERABLE with isolation times as shown in Table 3.6-2.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- a. With one or more of the isolation valve(s) specified in Table 3.6-2 inoperable, maintain at least one isolation valve OPERABLE in each affected penetration that is open and either:
 1. Restore the inoperable valve(s) to OPERABLE status within 4 hours, or
 2. Isolate each affected penetration within 4 hours by use of at least one deactivated automatic valve secured in the isolation position, or
 3. Isolate each affected penetration within 4 hours by use of at least one closed manual valve or blind flange; or
 4. Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. The provisions of specification 3.0.4 are not applicable for entry into MODES 3 and 4 when system inoperability has been determined solely on unresolved piping support or restraint deficiencies.

SURVEILLANCE REQUIREMENTS

4.6.3.1.1 The isolation valves specified in Table 3.6-2 shall be demonstrated OPERABLE prior to returning the valve to service after maintenance, repair or replacement work is performed on the valve or its associated actuator, control or power circuit by performance of a cycling test and verification of isolation time.

4.6.3.1.2 Each isolation valve specified in Table 3.6-2 shall be demonstrated OPERABLE during the COLD SHUTDOWN or REFUELING MODE at least once per 18 months by:

- a. Verifying that on a Phase A containment isolation test signal, each Phase A isolation valve actuates to its isolation position.
- b. Verifying that on a Phase B containment isolation test signal, each Phase B isolation valve actuates to its isolation position.

PLANT SYSTEMS

AUXILIARY FEEDWATER SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.1.2 At least three independent steam generator auxiliary feedwater pumps and associated flow paths shall be OPERABLE with:

- a. Two feedwater pumps, each capable of being powered from separate shutdown boards, and
- b. One feedwater pump capable of being powered from an OPERABLE steam supply system.

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

- a. With one auxiliary feedwater pump inoperable, restore at least three auxiliary feedwater pumps (two capable of being powered from separate shutdown boards and one capable of being powered by an OPERABLE steam supply system) to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- b. The provisions of specification 3.0.4 are not applicable for entry into MODES 3 and 4 when system inoperability has been determined solely on unresolved piping support or restraint deficiencies.

SURVEILLANCE REQUIREMENTS

4.7.1.2 Each auxiliary feedwater pump shall be demonstrated OPERABLE:

- a. At least once per 31 days by:
 1. Verifying that each motor driven pump develops a differential pressure of greater than or equal to 1397 psid on recirculation flow.
 2. Verifying that the steam turbine driven pump develops a differential pressure of greater than or equal to 1183 psid on recirculation flow when the secondary steam supply pressure is greater than 842 psig. The provisions of Specification 4.0.4 are not applicable for entry into MODE 3.
 3. Verifying that each non-automatic valve in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position, and
 4. Verifying that each automatic control valve in the flow path is OPERABLE whenever the auxiliary feedwater system is placed in automatic control or when above 10% of RATED THERMAL POWER.

ENCLOSURE 2

REASONS AND JUSTIFICATIONS FOR PROPOSED CHANGES
TO SEQUOYAH NUCLEAR PLANT UNIT 1
TECHNICAL SPECIFICATIONS

ENCLOSURE

1. Specification 3.5.2, Page 3/4 5-5

TVA is in the process of verifying the adequacy of the as-built piping supports and restraints relative to the requirements of OIE Bulletin 79-14 and the letter from J. P. O'Reilly to H. G. Parris dated April 29, 1980. As specified in the letter, all required actions will be resolved before initial criticality. The proposed change will allow operating mode changes to take place with unresolved piping support or restraint deficiencies. As stated above, the deficiencies will be resolved before initial criticality. Therefore, the requested change is only applicable during the period before initial criticality. At that time, the technical specification will be restored to its original form. TVA will notify the NRC of each instance that the provisions of this change are invoked.

Before initial criticality, no fission product inventory exists. The decay heat load is negligible. Therefore, operation in modes 3 or 4 for up to 72 hours (as allowed by the ACTION statement) with unresolved piping support or restraint deficiencies poses no additional risk to the health and safety of the public.

2. Specification 3.5.5, Page 3/4 5-9

Same as above

3. Specification 3.6.2.1, Page 3/4 6-16

Same as above

4. Specification 3.6.3.1, Page 3/4 6-17

Same as above

5. Specification 3.7.1.2, Page 3/4 7-5

Same as above