ENCLOSURE 3

PROPOSED TECHNICAL SPECIFICATIONS

Marked-up Technical Specification Basis Pages:

3.6-32
3.6-33
B 3.6-80
B 3.6-81
B 3.6-83

(Revised Technical Specification pages incorporating the proposed change are also attached.

3.6-32
3.6-33
3.6-34
3.6-34A
B 3.6-80
B 3.6-81
B 3.6-82
B 3.6-83

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. Required Action and associated Completion Time of Condition B not met.	C.1 Restore ice condenser door to OPERABLE status and closed positions.	48 hours
D. Required Action and associated Completion Time of Condition A or C not met.	D.1 Be in MODE 3. AND D.2 Be in MODE 5.	6 hours 36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.12.1	Verify all inlet doors indicate closed by the Inlet Door Position Monitoring System.	12 hours
SR 3.6.12.2	Verify, by visual inspection, each intermediate deck door is closed and not impaired by ice, frost, or debris.	7 days
SR 3.6.12.3	Verify, by visual inspection, each inlet door is not impaired by ice, frost, or debris. NOTE The 3 month performance due September 9, 1996 (per SR 3.02) may be extended until October 21, 1996.	3 months during first year after receipt of license AND 18 months

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
SR 3.6.12.4 Verify torque required to cause each inlet door to begin to open is ≤ 675 in-lb. ---------- NOTE ---------- The 3 month performance due September 9, 1996 (per SR 3.0.2 may be extended until October 21, 1996. ----------	3 months during first year after receipt of license AND 18 months
SR 3.6.12.5 Perform a torque test on a sampling of ≥ 50% of the inlet doors. ---------- NOTE ---------- The 3 month performance due September 9, 1996 (per SR 3.0.2 may be extended until October 21, 1996 ----------	3 months during first year after receipt of license AND 18 months
SR 3.6.12.6 Verify for each intermediate deck door: a. No visual evidence of structural deterioration; b. Free movement of the vent assemblies; and c. Free movement of the door.	3 months during first year after receipt of license AND 18 months

(continued)

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.6.12.3

Verifying, by visual inspection, that the ice condenser inlet doors are not impaired by ice, frost, or debris provides assurance that the doors are free to open in the event of a DBA. For this unit, the Frequency of 18 months (3 months during the first year after receipt of license) is based on door design, which does not allow water condensation to freeze, and operating experience, which indicates that the inlet doors very rarely fail to meet their SR acceptance criteria. Because of high radiation in the vicinity of the inlet doors during power operation, this Surveillance is normally performed during a shutdown.

INSERT A

SR 3.6.12.4

Verifying the opening torque of the inlet doors provides assurance that no doors have become stuck in the closed position. The value of 675 in-lb is based on the design opening pressure on the doors of 1.0 lb/ft^2. For this unit, the Frequency of 18 months (3 months during the first year after receipt of license) is based on the passive nature of the closing mechanism (i.e., once adjusted, there are no known factors that would change the setting, except possibly a buildup of ice; ice buildup is not likely, however, because of the door design, which does not allow water condensation to freeze). Operating experience indicates that the inlet doors usually meet their SR acceptance criteria. Because of high radiation in the vicinity of the inlet doors during power operation, this Surveillance is normally performed during a shutdown.

Insert A

SR 3.6.12.5

The torque test Surveillance ensures that the inlet doors have not developed excessive friction and that the return springs are producing a door return torque within limits. The torque test consists of the following:

1. Verify that the torque, T(OPEN), required to cause opening motion at the 40° open position is $\leq$ 195 in-lb;

(continued)

BASES

SURVEILLANCE REQUIREMENTS

SR 3.6.12.5 (continued)

2. Verify that the torque, T(CLOSE), required to hold the door stationary (i.e., keep it from closing) at the 40° open position is ≥ 78 in-lb; and

3. Calculate the frictional torque, T(FRICT) = 0.5 (T(OPEN) - T(CLOSE)), and verify that the T(FRICT) is ≤ 40 in-lb.

The purpose of the friction and return torque Specifications is to ensure that, in the event of a small break LOCA or SLB, all of the 24 door pairs open uniformly. This assures that, during the initial blowdown phase, the steam and water mixture entering the lower compartment does not pass through part of the ice condenser, depleting the ice there, while bypassing the ice in other bays. The Frequency of 18 months (3 months during the first year after receipt of license) is based on the passive nature of the closing mechanism (i.e., once adjusted, there are no known factors that would change the setting, except possibly a buildup of ice; ice buildup is not likely, however, because of the door design, which does not allow water condensation to freeze). Operating experience indicates that the inlet doors very rarely fail to meet their SR acceptance criteria. Because of high radiation in the vicinity of the inlet doors during power operation, this Surveillance is normally performed during a shutdown.

Insert A

SR 3.6.12.6

Verifying the OPERABILITY of the intermediate deck doors provides assurance that the intermediate deck doors are free to open in the event of a DBA. The verification consists of visually inspecting the intermediate doors for structural deterioration, verifying free movement of the vent assemblies, and ascertaining free movement of each door when lifted with the applicable force shown below:

(continued)

Insert A - Three Places

The surveillance frequency is modified by a Note that permits a one time extension until October 21, 1996 for performance of the three month surveillance whose due date (with 25 percent extension) falls on September 9, 1996. This provision allows performance of the surveillance to coincide with the plant mid-cycle outage and is justified by Reference 3.

BASES (continued)

REFERENCES

1. Watts Bar FSAR, Section 15.0, "Accident Analysis."

2. Title 10, Code of Federal Regulations, Part 50, Appendix K, "ECCS Evaluation Models."

INSERT:

3. TVA letter to NRC dated July 31, 1996 [VERIFY CORRECT DATE] - Proposed License Amendment - Containment Systems

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. Required Action and associated Completion Time of Condition B not met.	C.1 Restore ice condenser door to OPERABLE status and closed positions.	48 hours
D. Required Action and associated Completion Time of Condition A or C not met.	D.1 Be in MODE 3. AND D.2 Be in MODE 5.	6 hours 36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.12.1	Verify all inlet doors indicate closed by the Inlet Door Position Monitoring System.	12 hours
SR 3.6.12.2	Verify, by visual inspection, each intermediate deck door is closed and not impaired by ice, frost, or debris.	7 days

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SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.6.12.3	Verify, by visual inspection, each inlet door is not impaired by ice, frost, or debris.	-----NOTE------ The 3 month performance due September 9, 1996 (per SR 3.0.2) may be extended until October 21, 1996. --- 3 months during first year after receipt of license AND 18 months
SR 3.6.12.4	Verify torque required to cause each inlet door to begin to open is ≤ 675 in-lb.	-----NOTE------ The 3 month performance due September 9, 1996 (per SR 3.0.2) may be extended until October 21, 1996. --- 3 months during first year after receipt of license AND 18 months

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.6.12.5	Perform a torque test on a sampling of ≥ 50% of the inlet doors.	-----NOTE------ The 3 month performance due September 9, 1996 (per SR 3.0.2) may be extended until October 21, 1996. ---------- 3 months during first year after receipt of license AND 18 months
SR 3.6.12.6	Verify for each intermediate deck door: a. No visual evidence of structural deterioration; b. Free movement of the vent assemblies; and c. Free movement of the door.	3 months during first year after receipt of license AND 18 months

(continued)

SURVEILLANCE REQUIREMENTS (continued)

	SURVEILLANCE	FREQUENCY
SR 3.6.12.7	Verify, by visual inspection, each top deck door: a. Is in place; b. Free movement of top deck vent assembly; and c. Has no condensation, frost, or ice formed on the door that would restrict its opening.	92 days

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.6.12.3

Verifying, by visual inspection, that the ice condenser inlet doors are not impaired by ice, frost, or debris provides assurance that the doors are free to open in the event of a DBA. For this unit, the Frequency of 18 months (3 months during the first year after receipt of license - the 3 month performances during the first year after receipt of license may be extended to concide with plant outages) is based on door design, which does not allow water condensation to freeze, and operating experience, which indicates that the inlet doors very rarely fail to meet their SR acceptance criteria. Because of high radiation in the vicinity of the inlet doors during power operation, this Surveillance is normally performed during a shutdown. The surveillance frequency is modified by a Note that permits a one time extension until October 21, 1996 for performance of the three month surveillance whose due date (with 25 percent extension) falls on September 9, 1996. This provision allows performance of the surveillance to coincide with the plant mid-cycle outage and is justified by Reference 3.

SR 3.6.12.4

Verifying the opening torque of the inlet doors provides assurance that no doors have become stuck in the closed position. The value of 675 in-lb is based on the design opening pressure on the doors of 1.0 lb/ft^2. For this unit, the Frequency of 18 months (3 months during the first year after receipt of license - the 3 month performances during the first year after receipt of license may be extended to concide with plant outages) is based on the passive nature of the closing mechanism (i.e., once adjusted, there are no known factors that would change the setting, except possibly a buildup of ice; ice buildup is not likely, however, because of the door design, which does not allow water condensation to freeze). Operating experience indicates that the inlet doors usually meet their SR acceptance criteria. Because of high radiation in the vicinity of the inlet doors during power operation, this Surveillance is normally performed during a shutdown. The surveillance frequency is modified by a Note that permits a one time extension until October 21, 1996 for performance of the three month surveillance whose due date (with 25 percent extension) falls on September 9, 1996. This provision

(continued)

BASES

SURVEILLANCE REQUIREMENTS

SR 3.6.12.4 (continued)

allows performance of the surveillance to coincide with the plant mid-cycle outage and is justified by Reference 3.

SR 3.6.12.5

The torque test Surveillance ensures that the inlet doors have not developed excessive friction and that the return springs are producing a door return torque within limits. The torque test consists of the following:

1. Verify that the torque, T(OPEN), required to cause opening motion at the 40° open position is $\leq$ 195 in-lb;

2. Verify that the torque, T(CLOSE), required to hold the door stationary (i.e., keep it from closing) at the 40° open position is $\geq$ 78 in-lb; and

3. Calculate the frictional torque, T(FRICT) = 0.5 {T(OPEN) - T(CLOSE)}, and verify that the T(FRICT) is $\leq$ 40 in-lb.

The purpose of the friction and return torque Specifications is to ensure that, in the event of a small break LOCA or SLB, all of the 24 door pairs open uniformly. This assures that, during the initial blowdown phase, the steam and water mixture entering the lower compartment does not pass through part of the ice condenser, depleting the ice there, while bypassing the ice in other bays. The Frequency of 18 months (3 months during the first year after receipt of license - the 3 month performances during the first year after receipt of license may be extended to concide with plant outages) is based on the passive nature of the closing mechanism (i.e., once adjusted, there are no known factors that would change the setting, except possibly a buildup of ice; ice buildup is not likely, however, because of the door design, which does not allow water condensation to freeze). Operating experience indicates that the inlet doors very rarely fail to meet their SR acceptance criteria. Because of high radiation in the vicinity of the inlet doors during power operation, this Surveillance is normally performed during a shutdown. The surveillance frequency is modified by a Note that permits a one time extension until October 21, 1996 for

(continued)

BASES

SURVEILLANCE REQUIREMENTS

SR 3.6.12.5 (continued)

performance of the three month surveillance whose due date (with 25 percent extension) falls on September 9, 1996. This provision allows performance of the surveillance to coincide with the plant mid-cycle outage and is justified by Reference 3.

SR 3.6.12.6

Verifying the OPERABILITY of the intermediate deck doors provides assurance that the intermediate deck doors are free to open in the event of a DBA. The verification consists of visually inspecting the intermediate doors for structural deterioration, verifying free movement of the vent assemblies, and ascertaining free movement of each door when lifted with the applicable force shown below:

	Door	Lifting Force
a.	Adjacent to crane wall	< 37.4 lb
b.	Paired with door adjacent to crane wall	≤ 33.8 lb
c.	Adjacent to containment wall	≤ 31.8 lb
d.	Paired with door adjacent to containment wall	≤ 31.0 lb

The 18 month Frequency (3 months during the first year after receipt of license) is based on the passive design of the intermediate deck doors, the frequency of personnel entry into the intermediate deck, and the fact that SR 3.6.12.2 confirms on a 7 day Frequency that the doors are not impaired by ice, frost, or debris, which are ways a door would fail the opening force test (i.e., by sticking or from increased door weight).

SR 3.6.12.7

Verifying, by visual inspection, that the top deck doors are in place, not obstructed, and verifying free movement of the vent assembly provides assurance that the doors are performing their function of keeping warm air out of the ice condenser during normal operation, and would not be

(continued)

BASES

SURVEILLANCE REQUIREMENTS

SR 3.6.12.7 (continued)

obstructed if called upon to open in response to a DBA. The Frequency of 92 days is based on engineering judgment, which considered such factors as the following:

a. The relative inaccessibility and lack of traffic in the vicinity of the doors make it unlikely that a door would be inadvertently left open;

b. Excessive air leakage would be detected by temperature monitoring in the ice condenser; and

c. The light construction of the doors would ensure that, in the event of a DBA, air and gases passing through the ice condenser would find a flow path, even if a door were obstructed.

REFERENCES

1. Watts Bar FSAR, Section 15.0, "Accident Analysis."

2. Title 10, Code of Federal Regulations, Part 50, Appendix K, "ECCS Evaluation Models."

3. TVA Letter to NRC dated July 31, 1996 - Proposed License Amendment - Containment Systems