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PR

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U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

Subject: Waterford 3 SES
Docket No. 50-382
License No. NPF-38
Technical Specification Change Request NPF-38-201

Gentlemen:

The attached description and safety analysis support a change to the Waterford 3 Technical Specifications (TS). The proposed change modifies Limiting Condition for Operation (LCO) 3.6.1.2 (Containment Leakage), the associated Action, and Surveillance Requirement (SR) 4.6.1.2. Technical Specification 6.15 air lock door seal leakage rate acceptance criteria is being changed from $0.01L_a$ to $0.005L_a$. Technical Specification 6.15 is also being modified to make the terms used in the Containment Leakage Rate Testing Program consistent with terms used in the TS.

This change corrects an error that inadvertently decreased the allowed outage time from 24 hours to 1 hour when the containment purge valve or containment air lock leakage rates are not within limits. This error was made in the Waterford 3 TS change request that was approved in Amendment 124. It was not the intent of Waterford 3 nor 10CFR50 Appendix J, Option B to decrease these allowed outage times. This TS change request justifies revising TS 3.6.1.2 to reference the specific TS for which it applies. In doing so, TS 3.6.1.3 (Containment Air Locks) will be entered when the containment air lock leakage rate is not within limit and TS 3.6.1.7 (Containment Ventilation Systems) will be entered when the containment purge valve leakage rate is not within limits. This will restore the allowed outage time to the pre-Amendment 124 time of 24 hours when the containment purge valve or containment air lock leakage rates are not within limits.

Waterford 3 is also proposing to change the air lock door seal leakage rate acceptance criteria to the pre-Amendment 124 value. The value was inadvertently changed when Waterford 3 utilized the model TS associated with NEI Guidelines for adopting 10CFR50, Appendix J, Option B. The change inadvertently revised the acceptance criteria to a less restrictive value. However, the less restrictive acceptance criteria was never utilized at Waterford 3. Plant Procedures continue to implement the more restrictive acceptance criteria.

This proposed change has been evaluated in accordance with 10CFR50.91(a)(1), using the criteria in 10CFR50.92(c), and it has been determined that this request involves no significant hazards consideration.

The circumstances surrounding this change do not meet the NRC's criteria for exigent or emergency review. However, due to the possibility of an unnecessary plant shutdown if a purge valve or containment air lock fails the leakage test while at power, an expeditious review is requested.

Should you have any questions or comments concerning this request, please contact Mr. Early Ewing at (504)739-6242.

Very truly yours,

C.M. Dugger
Vice President, Operations
Waterford 3

CMD/CED/ssf
Attachment: Affidavit
NPF-38-201

cc: E.W. Merschoff (NRC Region IV), C.P. Patel (NRC-NRR),
J. Smith, N.S. Reynolds, NRC Resident Inspectors Office,
Administrator Radiation Protection Division (State of Louisiana),
American Nuclear Insurers

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the matter of	)	
	)	
Entergy Operations, Incorporated	)	Docket No. 50-382
Waterford 3 Steam Electric Station	)	

AFFIDAVIT

Charles Marsha gger, being duly sworn, hereby deposes and says that he is Vice President Operations - Waterford 3 of Entergy Operations, Incorporated; that he is duly authorized to sign and file with the Nuclear Regulatory Commission the attached Technical Specification Change Request NPF-38-201; that he is familiar with the content thereof; and that the matters set forth therein are true and correct to the best of his knowledge, information and belief.

Charles Marshall Dugger
Vice President Operations - Waterford 3

STATE OF LOUISIANA)
) ss
PARISH OF ST. CHARLES)

Subscribed and sworn to before me, a Notary Public in and for the Parish and State above named this 25th day of September, 1997.

Notary Public

My Commission expires at death.

DESCRIPTION AND NO SIGNIFICANT HAZARDS CONSIDERATION
OF PROPOSED CHANGE NPF-38-201

The proposed change revises the Technical Specifications (TS) as follows:

- Limiting Condition for Operation (LCO) 3.6.1.2, "Containment Leakage" is revised to specify that "overall containment leakage rate" and the "secondary containment bypass leakage rate" are the containment leakage rates that apply to this LCO.

- Surveillance Requirement (SR) 4.6.1.2 is revised to be specific by referring to the "overall containment leakage rate" and the "secondary containment bypass leakage rate".

- TS 3.6.1.2 Action is revised to be specific by referring to the "overall containment leakage rate" and the "secondary containment bypass leakage rate". The Action is also being revised to make the Action consistent with the Applicability and NUREG-1432 (Revised Combustion Engineering Standard Technical Specifications) TS 3.6.1 Action.

- TS 6.15 air lock door seal leakage rate acceptance criteria is revised to $\leq 0.005L_a$.

- TS 6.15 is revised to make the terms used in the Containment Leakage Rate Testing Program consistent with terms used in the TS.

Existing Specification

See Attachment A

Marked-up Specification

See Attachment B

Proposed Specification

See Attachment C

Background

License Amendment 124 (issued on April 10, 1997) revised TS Sections 3.6 and 6.0 to incorporate 10 CFR50 Appendix J, Option B. Waterford 3 used the NEI guidelines (Nuclear Energy Institute Industry Guideline for Implementing Performance-Based Option of 10 CFR Part 50, Appendix J) to develop this change. The NEI guidelines consisted of marked-up pages from the Improved Standard Technical Specifications (ISTS). Waterford 3 only adopted the changes that specifically dealt with 10CFR50 Appendix J, Option B and improvements associated with the ISTS were not incorporated. An error was introduced in the Waterford 3 proposed TS change request as a result of this conversion. The error affects the TS by requiring entry into TS 3.6.1.2 when either the containment air lock or the containment purge valve leakage rates are not within limits, along with entering TS 3.6.1.7 (Containment Ventilation System) or TS 3.6.1.3 (Containment Air Locks). Since TS 3.6.1.2 has a more restrictive allowed outage time (1 hour via entry into TS 3.0.3) than either TS 3.6.1.3 or TS 3.6.1.7 (24 hours), the 1 hour AOT in TS 3.6.1.2 would be the most limiting.

Prior to Amendment 124, TS 3.6.1.2 contained the acceptance criteria (i.e., leakage limits) for the overall containment leakage rate and the secondary containment bypass leakage rate. The associated surveillance requirements in TS 3.6.1.2 required the airlock/door seal and purge valve surveillances to be conducted as specified in their individual LCOs (i.e., TS 3.6.1.3 "Containment Air Locks" and 3.6.1.7 "Containment Ventilation System"). This change proposes to make a less restrictive change to the Waterford 3 TS to restore the pre-Amendment 124 TS requirement to only enter TS 3.6.1.3 or TS 3.6.1.7 when either the containment air locks or the containment purge valve acceptance criteria are not met and not enter TS 3.6.1.2 unless the overall containment leakage or secondary bypass leakage also exceeds the specified limits.

Prior to Amendment 124, TS 3.6.1.3 SR 4.6.1.3.a contained the requirement that each air lock door seal leakage rate be verified to be $\leq 0.005L_a$. The NEI guidelines moved this acceptance criteria to TS 6.15. The NEI guideline model TS contained an acceptance criteria for the air lock door seal leakage rate of $\leq 0.01L_a$ which was inadvertently copied into the Waterford 3 proposed change.

Description and Safety Considerations

Technical Specification LCO 3.6.1.2 requires the containment leakage rates to be in accordance with the Containment Leakage Rate Testing Program. If the containment leakage rates cannot be maintained, the Action requires the leakage rates to be restored to within limits prior to increasing the Reactor Coolant System temperature

above 200°F. Surveillance Requirement (SR 4.6.1.2) requires the containment leakage rates to be determined in accordance with the Containment Leakage Rate Testing Program.

The proposed change will add the specific types of containment leakage that apply to LCO 3.6.1.2, the associated Action, and SR 4.6.1.2. The LCO is modified to require the overall containment leakage rate and the secondary containment bypass leakage rate to be in accordance with the Containment Leakage Rate Testing Program. The Action is modified to require the containment leakage rate(s) to be restored within 1 hour or to be in Hot Standby within 6 hours and Cold Shutdown within the following 30 hours. The SR is modified to require the overall containment leakage rate and the secondary containment bypass leakage rate to be determined in accordance with the Containment Leakage Rate Testing Program. This properly identifies the leakage rates that apply to TS 3.6.1.2 and maintains the allowance for entry into TS 3.6.1.3 or TS 3.6.1.7 when the leakage rate acceptance criteria for the containment air locks or containment purge valves, respectively, are not within limits.

This is a less restrictive change that increases the AOT from 1 hour to 24 hours when either the containment air lock or the containment purge valve leakage rates are not within limits. This change is acceptable based on the reasons described below. The overall containment leakage rate limits are not being changed (any leakage from the containment purge valves or from the air lock are required to be added to the overall leakage rate) and, therefore, the safety analysis containment leakage rate assumptions are being maintained. The increased AOT allows time to repair the leakage while limiting the time in the degraded condition. The longer period of time to perform repairs to restore the leakage rates may prevent a plant shutdown. A plant shutdown is a transient that places thermal stress on safety system components. Finally, this change restores the Waterford 3 AOTs, when the containment purge valve or containment air lock leakage rates are not within limits, to the pre-Amendment 124 AOTs which were inadvertently changed due to an error in the Waterford 3 TS change submittal.

The change also proposes to revise the air lock door seal leakage rate acceptance criteria in TS 6.15.b.2 from $0.01L_a$ to $0.005L_a$. This is a more restrictive change to correct an error that was made while incorporating the provisions into the TS to implement 10CFR50 Appendix J Option B criteria. The NEI guidelines that were used to develop the proposed change contained a less restrictive air lock door seal leakage rate acceptance criteria of $0.01L_a$. The less restrictive value was in brackets meaning that a site specific value was required. However, Waterford 3 inadvertently adopted this value which was incorporated in Amendment 124. The less restrictive value of $0.01L_a$ has never been used as the acceptance criteria for the air lock door seal leakage rate. Waterford 3 procedures currently contain an air lock door seal leakage rate acceptance criteria equal to $0.005L_a$. Waterford 3 will continue using the more restrictive air lock door seal leakage rate acceptance criteria, which is controlled administratively.

This change also includes administrative changes to TS 3.6.1.2 and TS 6.15.

The current TS 3.6.1.2 Action requires RCS temperature to not exceed 200°F if the containment leakage rates are not within limits. The temperature of 200°F is the transition temperature between Modes 5 and 4. This Action is not consistent with the Applicability for TS 3.6.1.2 (Modes 1, 2, 3, and 4). The Action is being changed to require containment leakage rate(s) to be restored within limits within 1 hour or be in Mode 3 in 6 hours and Mode 5 in the following 30 hours. This change is acceptable because the Action and the Applicability will be consistent, and the requirement not to exceed 200°F is captured in TS 3.0.4 which does not allow Mode changes unless the requirements of the limiting condition for operation are satisfied for the higher mode.

The change to TS 6.15 proposes to make the containment leakage rate terms used in the TS and the Containment Leakage Rate Testing Program consistent. Currently 6.15.a refers to the containment leakage rate acceptance criteria, TS 6.15.b.2 refers to the leakage rate for each (air lock) door, and TS 6.15.c refers to combined bypass leakage rate. The proposed change revises TS 6.15.a to refer to the overall containment leakage rate, TS 6.15.b.2 to refer to the leakage rate for each (air lock) door seal, and TS 6.15.c to refer to the secondary containment bypass leakage rate. This is an administrative change which makes the containment leakage rate terms in TS Section 3.6, TS Section 6.0, and the Containment Leakage Rate Testing Program consistent.

No Significant Hazards Consideration

The proposed change described above shall be deemed to involve a significant hazards consideration if there is a positive finding in any of the following areas:

1. Will operation of the facility in accordance with this proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

   Response: No

   The proposed change adds the specific type of containment leakage to the Limiting Condition for Operation (LCO), Action, and Surveillance Requirement (SR) in the Containment Leakage Technical Specification (TS) which results in increasing the allowed outage time from 1 hour to 24 hours when the containment purge valve or containment air lock leakage rates are not within limits. The proposed change revises the air lock door seal leakage rate acceptance criteria. Also, the proposed change revises the Actions in the Containment Leakage TS to be consistent with the Applicability, and revises

terms in the Containment Section and Administrative Controls Section of the TS to be consistent with the Containment Leakage Rate Testing Program. This change will not affect the probability of an accident. The containment purge valve and air lock leakage rates are not an initiator of any analyzed event. This change corrects two errors that were made in the Waterford 3 10CFR50 Appendix J. Option B, TS change request that was approved in TS Amendment 124. The first error inadvertently decreased the allowed outage time from 24 hours to 1 hour when either the containment purge valve or containment air lock leakage rate acceptance criteria is not met. The second error inadvertently increased the acceptance criteria for the air lock door seal leakage. The revised air lock door seal leakage rate acceptance criteria was never used at Waterford 3. This change also administratively changes the Containment Leakage TS Action and terms in the TS for consistency.

The proposed change will not affect the consequences of an accident. The amount of leakage from the containment purge valve and from the containment air lock will still be included in the overall combined containment leak rate. Neither the overall containment leakage rate limit nor the Action required to be taken if the overall containment leakage rate were exceeded is being changed. The Containment Leakage TS Action will be consistent with the Applicability and TS 3.0.4 will prohibit entry into Mode 4 (RCS temperature > 200°F), unless the overall containment leakage rate is within limit. The revised air lock acceptance criteria was never used. Waterford 3 will continue using the more restrictive acceptance criteria which is controlled administratively. This proposed change does not affect the mitigation capabilities of any component or system, nor does it affect the assumptions relative to the mitigation of accidents or transients.

Therefore, the proposed change will not involve a significant increase in the probability or consequences of any accident previously evaluated.

2. Will operation of the facility in accordance with this proposed change create the possibility of a new or different type of accident from any accident previously evaluated?

Response: No.

The proposed change adds the specific type of containment leakage to the LCO, Action, and SR in the Containment Leakage TS. This results in increasing the allowed outage time from 1 hour to 24 hours when the containment purge valve or containment air lock leakage rates are not within limits. The proposed change revises the air lock door seal leakage rate acceptance criteria. Also, the proposed change revises the Actions in the Containment Leakage TS to be consistent with the Applicability, and revises terms in the Containment Section

and Administrative Controls Section of the TS to be consistent with the Containment Leakage Rate Testing Program. Neither the design nor configuration of the plant, or how the plant is operated is being changed due to the addition of the specific types of leakage from the Containment Leakage Rate Testing Program, corrections made to the air lock door seal leakage rate acceptance criteria, or the changes made to make the Actions consistent. There has been no physical change to plant systems, structures, or components nor will these changes reduce the ability of any of the safety-related equipment required to mitigate anticipated operational occurrences or accidents. Therefore, the proposed change will not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Will operation of the facility in accordance with this proposed change involve a significant reduction in a margin of safety?

Response: No

The proposed change adds the specific type of containment leakage to the LCO, Action, and SR in the Containment Leakage TS. This results in increasing the allowed outage time from 1 hour to 24 hours when the containment purge valve or containment air lock leakage rates are not within limits. The proposed change revises the air lock door seal leakage rate acceptance criteria. Also, the proposed change revises the Actions in the Containment Leakage TS to be consistent with the Applicability, and revises terms in the Containment Section and Administrative Controls Section of the TS to be consistent with the Containment Leakage Rate Testing Program. The proposed revision to the Action and making the containment leakage rate terms consistent are administrative changes that have no technical impact on the TS.

The pre-amendment 124 Waterford 3 TS and NUREG-1432 allowed entry into specific Actions with allowed outage times greater than 1 hour (24 hours) when the air lock and purge valve leakage rate acceptance criteria could not be met. This change restores this allowed outage time which was inadvertently changed due to an error in the TS change request. The increased allowed outage time may prevent an unnecessary plant shutdown which is a plant transient. Plant shutdowns produce thermal stress on components in the Reactor Coolant System and the potential for a plant upset that could challenge safety systems. This change decreases the possibility of a plant shutdown by replacing the 1 hour allowed outage time with a 24 hour allowed outage time when the containment purge valve or containment air lock leakage is not within limits. Also, the overall containment leakage rate limits are not being changed and are required to be maintained.

The revision to the air lock door seal acceptance criteria is a more restrictive change to correct an error made by Waterford 3 in the TS change request approved in Amendment 124. The less restrictive acceptance criteria was never used; Waterford 3 continued testing to the more restrictive acceptance criteria.

Therefore, the proposed change will not involve a significant reduction in a margin of safety.

Safety and Significant Hazards Determination

Based on the evaluation above, it is concluded that: (1) the proposed change does not constitute a significant hazards consideration as defined by 10CFR50.92; and (2) there is a reasonable assurance that the health and safety of the public will not be endangered by the proposed change; and (3) this action will not result in a condition which significantly alters the impact of the station on the environment as described in the NRC final environmental statement.

Environmental Assessment

This proposed Technical Specification change has been evaluated against criteria for and identification of licensing and regulatory actions requiring environmental assessment in accordance with 10CFR51.21. It has been determined that the proposed change meets the criteria for categorical exclusion as provided for under 10CFR51.22(c)(9). The following is a discussion of how the proposed Technical Specification change meets the criteria for categorical exclusion.

10CFR51.22(c)(9): Although the proposed change involves revising requirements with respect to inspection or Surveillance Requirements,

(i) the proposed change involves No Significance Hazards Consideration (refer to the No Significance Hazards Consideration Determination section of this Technical Specification Change Request);

(ii) there are no significant changes in the types or significant increase in the amounts of any effluents that may be released offsite since the proposed change does not affect the generation of any radioactive effluents nor does it affect any of the permitted release paths; and

(iii) there is no significant increase in individual or cumulative occupational radiation exposure.

Accordingly, the proposed change meets the eligibility criteria for categorical exclusion set forth in 10CFR51.22(c)(9). Based on the aforementioned and pursuant to 10CFR51.22 (b), no environmental assessment or environmental impact statement need be prepared in connection with issuance of an amendment to the Technical Specification incorporating the proposed change of this request.

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ATTACHMENT A