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50-366

NL-16-1582

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D. C. 20555-0001

Edwin I. Hatch Nuclear Plant Unit 1 and 2  
Request for License Amendment to Address  
Secondary Containment Access Openings

Ladies and Gentlemen:

In accordance with 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," Southern Nuclear Operating Company (SNC) requests an amendment to Renewed Facility Operating License Nos. DPR-57 and NPF-5 for the Edwin I. Hatch Nuclear Plant (HNP) Units 1 and 2. The proposed change revises Technical Specifications (TS) 3.6.4.1, "Secondary Containment," Surveillance Requirement (SR) 3.6.4.1.2 to provide an allowance for brief, inadvertent, simultaneous opening of redundant secondary containment access doors during normal entry and exit conditions.

This request is subdivided as follows:

- Enclosure 1 provides a description and evaluation of the proposed change.
- Enclosure 2 provides a markup of the affected TS pages.
- Enclosure 3 provides a clean copy of the affected TS pages.
- Enclosure 4 provides a markup of the affected TS Bases pages. The TS Bases pages are provided for information only, and do not require NRC approval.

SNC requests approval of the proposed license amendments by April 7, 2018. The proposed changes would be implemented within 90 days of issuance of the amendment.

This letter contains no NRC commitments. If you have any questions, please contact Ken McElroy at (205) 992-7369.

Mr. Justin T. Wheat states he is Nuclear Licensing Manager of Southern Nuclear Operating Company, is authorized to execute this oath on behalf of Southern Nuclear Operating Company and, to the best of his knowledge and belief, the facts set forth in this letter are true.

Respectfully submitted,

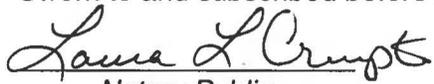


Justin T. Wheat  
Nuclear Licensing Manager

JTW/RMJ



Sworn to and subscribed before me this 7 day of April, 2017.



*Laura L. Crump*  
Notary Public

My commission expires: 10-8-2017

- Enclosures: 1. Evaluation of Proposed Change  
2. Markup of Proposed Technical Specifications Pages  
3. Clean Technical Specification Pages  
4. Markup of Proposed Technical Specifications Bases Pages

- cc: Southern Nuclear Operating Company  
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RType: CHA02.004

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Mr. J. H. Turner, Director - Environmental Protection Division

**Edwin I. Hatch Nuclear Plant Unit 1 and 2  
Request for License Amendment to Address  
Secondary Containment Access Openings**

**Enclosure 1**

**Evaluation of Proposed Change**

## 1.0 SUMMARY DESCRIPTION

In accordance with 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," Southern Nuclear Operating Company (SNC) requests an amendment to Renewed Facility Operating License Nos. DPR-57 and NPF-5 for the Edwin I. Hatch Nuclear Plant (HNP) Units 1 and 2. The proposed change revises Technical Specifications (TS) 3.6.4.1, "Secondary Containment," Surveillance Requirement (SR) 3.6.4.1.2 to provide an allowance for brief, inadvertent, simultaneous opening of redundant secondary containment access doors during normal entry and exit conditions

## 2.0 DETAILED DESCRIPTION

The proposed change addresses issues related to the secondary containment access openings. The secondary containment is a single-train system that performs a safety function. There is no redundant train or system that can perform the secondary containment function should the secondary containment be inoperable.

NUREG-1022, Revision 3, "Event Report Guidelines 10 CFR 50.72 and 50.73," discusses the reporting criteria contained in 10 CFR 50.72 and 50.73. The discussion of 50.72(b)(3)(v) and 50.73(a)(2)(v), "Any event or condition that could have prevented the fulfillment of the safety function," states, "There are a limited number of single-train systems that perform safety functions (e.g., the HPCI system in BWRs). For such systems, inoperability of the single train is reportable even though the plant TS may allow such a condition to exist for a limited time." The failure to meet the secondary containment SRs of TS 3.6.4.1 for any period of time requires declaring the secondary containment inoperable. Therefore, in accordance with the guidance of NUREG-1022, licensees must report the condition under 10 CFR 50.72 and 10 CFR 50.73, as applicable. This reporting requirement has resulted in numerous Licensee Event Reports (LERs) in the last several years even though in the vast majority of cases the secondary containment was restored to operable status quickly (i.e., much less than the four-hour Completion Time for an inoperable secondary containment) and the secondary containment continued to be capable of performing its safety function. These reports are an unwarranted use of licensee and NRC resources.

To prevent the need of reporting these issues, the following is proposed.

Proposed SR 3.6.4.1.2 Revision: The purpose of the proposed change is to provide an allowance for brief, inadvertent, simultaneous opening of both an inner and outer secondary containment access opening door during normal entry and exit conditions. While HNP has interlocks to prevent opening both an inner and outer door simultaneously, the interlocks may not be effective depending on the timing of the openings. Under the HNP TS, opening both an inner and outer door in an access opening at the same time would result in failure to meet SR 3.6.4.1.2, which requires one access door in each access opening to be closed. This situation requires declaring the secondary containment inoperable with the attendant reporting requirements. NUREG-1434, "Standard Technical Specifications General Electric BWR/6 Plants," SR 3.6.4.1.3 contains an exception for both doors in an access opening to be open simultaneously for normal entry and exit, but the HNP SRs do not have such an exception. The proposed change adds the NUREG-1434 BWR/6 exception to the HNP SRs.

Proposed Bases Revision: The TS 3.6.4.1 Secondary Containment Bases are revised consistent with the proposed change discussed above.

A markup of the proposed TS change is provided in Enclosure 2. Enclosure 4 provides a markup of the affected Bases pages. The TS Bases pages are provided for information only and do not require NRC approval.

### 3.0 TECHNICAL EVALUATION

The secondary containment is a structure that completely encloses the primary containment and those components that may contain primary system fluid. This structure forms a control volume that serves to hold up and dilute the fission products. It is possible for the secondary containment pressure to rise relative to the environmental pressure during design basis events. The Secondary Containment encompasses three separate zones: the Unit 1 reactor building (Zone I), the Unit 2 reactor building (Zone II), and the common refueling floor (Zone III). The secondary containment can be modified such that some zones are excluded from the secondary containment OPERABILITY requirements, provided certain requirements are met. These requirements are given in the respective Technical Requirements Manuals for Unit 1 and Unit 2.

For example, the Unit 1 reactor building (Zone I) can be excluded from the secondary containment OPERABILITY requirements while shutdown provided the following restrictions are met:

- 1) There are no Unit 1 operations with a potential for draining the vessel in progress.
- 2) The Unit 1 reactor is vented and coolant temperature is less than 212 F.
- 3) There are no openings from the refueling floor airspace to the Unit 1 reactor building airspace.

By meeting similar requirements, the Unit 2 reactor building can also be excluded from the secondary containment OPERABILITY requirements.

To prevent ground level exfiltration of radioactive material while allowing the secondary containment to be designed as a conventional structure, the secondary containment requires support systems to maintain the control volume pressure at less than atmospheric pressure during design basis events. During normal operation, non-accident ventilation systems are used to maintain the secondary containment at a negative pressure. However, the HNP TS do not require the secondary containment to be maintained at a negative pressure, with respect to the outside environment, during normal operation. Following a design basis accident (DBA), the non-accident ventilation systems are automatically tripped and isolated, and the safety related Standby Gas Treatment (SGT) system initiates to ensure the secondary containment pressure is less than, and is maintained less than, the external atmospheric pressure during the accident. Specifically, the SGT system draws the secondary containment down to a pressure of at least -0.20 inches of water, with respect to the outside environment.

The secondary containment boundary is the combination of walls, floor, roof, ducting, doors, hatches, penetrations and equipment that physically form the secondary containment. A secondary containment access opening contains one inner and one outer door. All secondary containment access doors are normally kept closed, except when the access opening is being used for entry and exit of personnel or equipment.

The safety function of the secondary containment is to contain, dilute, and hold up fission products that may leak from primary containment following a DBA to ensure the control room operator doses and offsite doses are within the regulatory limits. In conjunction with operation

of the SGT system and closure of certain valves whose lines penetrate the secondary containment, the secondary containment is designed to reduce the activity level of the fission products that bypass or leak from primary containment, or are released from the reactor coolant pressure boundary components located in secondary containment prior to release to the environment. For the secondary containment to be considered operable, it must have adequate leak tightness to ensure that the required vacuum can be established and maintained by the required SGT systems per LCO 3.6.4.3, "Standby Gas Treatment (SGT) System".

The secondary containment vacuum requirements, which demonstrate leak-tightness, and the SGT system, together ensure radioactive material is contained. As long as the required SGT subsystem(s) can draw the required vacuum on the secondary containment when needed, the secondary containment can perform its safety function and remains capable of containing fission products that may leak from primary containment following a DBA. Together with the operation of SGTS, this ensures the offsite doses are within the regulatory limits.

SR 3.6.4.1.2 currently requires verification that one door is closed in each secondary containment access opening. The intent of this requirement is to not breach secondary containment at any time when secondary containment is required operable. When required operable, all secondary containment access doors are normally kept closed, except when the access opening is being used for entry and exit.

As discussed in Section 2.0 above, the reporting requirements in 10 CFR 50.72 and 50.73 require prompt notification and submittal of an LER whenever the secondary containment is inoperable, regardless of the length of time of the inoperability or whether secondary containment could still fulfill its safety function. To address this situation, the following change is proposed which will allow the secondary containment to be operable during brief circumstances which currently would require declaring the secondary containment inoperable.

#### Proposed SR 3.6.4.1.2 Revision

SR 3.6.4.1.2 is proposed to be revised to include the same exception as the NUREG-1434 BWR/6 SR 3.6.4.1.3. The text in italics, below, is added.

*Verify one secondary containment access door in each access opening is closed, except when the access opening is being used for entry and exit.*

The NUREG-1434 BWR/6 SR 3.6.4.1.3 contains an exception for both doors in an access opening being opened simultaneously for normal entry and exit, but the current HNP SRs do not. This allowance is reasonable because the doors are under the continuous control of the person(s) accessing the doors, and the doors will be promptly closed following entry or exit, restoring the secondary containment boundary. The phrase "being used for entry and exit" ensures that the time that both doors may be open simultaneously is limited to the time it takes to traverse through a door, which is insignificant. Brief, simultaneous opening of secondary containment access doors is acceptable due to the low probability of an event that requires secondary containment during the short time in which the secondary containment access doors are open.

The intent of the proposed change is to allow for brief, inadvertent, simultaneous opening of redundant secondary containment access doors during normal entry and exit. Inadvertent, simultaneous opening of redundant doors could occur if, for example, an interlock were to fail due to an equipment issue. In that case, the equipment issue would be entered into the

Corrective Action Program for evaluation and disposition. This ensures that internal reporting, documenting, monitoring, and trending are performed to ensure the adequacy of the controls. In addition, interlock performance at HNP is monitored through the Maintenance Rule program. The proposed change does not involve planned simultaneous opening of redundant secondary containment access doors. For situations that involve planned simultaneous opening of the doors, either the secondary containment will not be required Operable, or the secondary containment will be declared inoperable and the appropriate TS action will be followed in accordance with the existing TS requirements.

For inadvertent, simultaneous opening of the doors, the administrative controls involve the fact that both doors are under continuous control of the individuals accessing the doors, and that the doors are promptly closed following entry and exit, restoring the secondary containment boundary. The phrase "being used for entry and exit" in the proposed change ensures that the time both doors may be open simultaneously is limited to the time it takes to traverse through a door, which is insignificant.

There are many doors in a nuclear power plant that are credited as barriers, such as fire doors, security doors, flooding doors, high energy line break doors, control room doors, and secondary containment doors. Administrative controls are applied to these types of doors and the person using the door is responsible for opening and closing the door securely and for not keeping the door open any longer than necessary for entry. Under the proposed change, secondary containment doors will be treated in a manner similar to other barrier doors. For example, TS 3.7.4 for HNP contains an LCO Note that allows the control room envelope (CRE) boundary to be opened intermittently under administrative control. The TS Bases state:

The LCO is modified by a Note allowing the CRE boundary to be opened intermittently under administrative controls. ...For entry and exit through doors, the administrative control of the opening is performed by the person(s) entering or exiting the area.

HNP has multiple secondary containment access openings that can be used to access the reactor building while the unit is online. Each of these access openings has some form of control, either engineered or administrative, to prevent the simultaneous opening of more than one door in an access opening. The engineered controls consist of interlocks that prevent two doors from being opened simultaneously and door alarms. The administrative controls consist of training and communication to station personnel, door signage, and in some cases may include procedural requirements to contact other station organizations (e.g., Security, Radiation Protection, or Main Control Room personnel) to obtain permission prior to traversing through a door. The proposed license amendment does not impact the existing engineered and administrative controls.

The latest radiological consequence analysis for the HNP Units 1 and 2 postulated loss of coolant accident (LOCA) used the alternative source term methodology and was approved by the NRC on September 30, 2016 (Accession No. ML16235A287). It is documented in Unit 2 UFSAR Section 15.3. (This UFSAR section is common to both units.) This analysis assumes a 10-minute secondary containment drawdown time to the TS required negative pressure. During this 10-minute time frame, all leakage from the primary containment, except for MSIV leakage, is assumed to go directly to the environment, at ground level. After 10 minutes, all leakage from the primary containment enters the secondary containment, except for 2% which is assumed to bypass the secondary containment. The analysis shows acceptable doses to the occupants of the main control room (MCR) and the technical support center (TSC) and to persons located at

the exclusion area boundary (EAB) and the low population zone (LPZ). Design basis accidents other than LOCA, such as main steam line break and control rod drop accident, do not credit holdup in the secondary containment. Hence, they are not impacted by this change.

The design basis dose analysis for the fuel handling accident (FHA) considers two cases:

- Case 1 takes credit for SGTS operation such that all releases are filtered and elevated after reactor building drawdown.
- Case 2 does not credit SGTS operation such that all releases are unfiltered and at ground level for the duration of the accident.

Case 2, which is unaffected by this change, remains bounding. Doses for Case 2 are within regulatory limits.

The typical secondary containment drawdown time is around 1.5 minutes. Based on this information, SNC has confirmed that the brief, inadvertent, simultaneous opening of both an inner and outer personnel access door during normal entry and exit conditions, and their prompt closure by normal means, is bounded by the radiological dose consequence analysis. In the unlikely event that an accident would occur when both personnel access doors are open for entry or exit, the brief time required to close one of the doors is small compared to the 10 minutes assumed in the accident analysis for reducing the post-accident secondary containment pressure to 0.20 inch of vacuum water gauge, and will not result in an increase in any onsite or offsite dose.

#### Proposed Bases Revisions

The TS 3.6.4.1 Secondary Containment Bases are revised consistent with the proposed change discussed above.

## **4.0 REGULATORY EVALUATION**

### 4.1 Applicable Regulatory Requirements/Criteria

The following regulatory requirements have been considered:

- 10 CFR 50.36, "Technical specifications," in which the NRC established its regulatory requirements related to the contents of the TS. Specifically, 10 CFR 50.36(c)(2) states, in part, "Limiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility." 10 CFR 50.36(c)(3) states, "Surveillance requirements are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions of operation will be met."

The proposed change to secondary containment SR 3.6.4.1.2 does not affect compliance with these regulations.

For HNP Unit 2, the applicable 10 CFR Part 50, Appendix A, General Design Criteria, was considered as follows:

- Criterion 16 – Containment Design. Reactor containment and associated systems shall be provided to establish an essentially leak-tight barrier against the uncontrolled release of radioactivity to the environment and to assure that the containment design conditions important to safety are not exceeded for as long as postulated accident conditions require.

HNP Unit 1 was not licensed to the 10 CFR 50, Appendix A, General Design Criteria. The Unit 1 Updated Final Safety Analysis Reports, Appendix F, "Conformance to Atomic Energy Commission (AEC) Criteria," provides an assessment against the draft General Design Criteria published in 1967. As such, for HNP Unit 1, the applicable Draft General Design Criteria, issued July 1967, was considered as follows:

- Criterion 10 – Containment shall be provided. The containment structure shall be designed to sustain the initial effects of gross equipment failures, such as a large coolant boundary break, without loss of required integrity and, together with other engineered safety features as may be necessary, to retain for as long as the situation requires the functional capability to protect the public.

The proposed change does not alter the design of the secondary containment or its ability to establish an essentially leak-tight barrier against the uncontrolled release of radioactivity.

#### 4.2 No Significant Hazards Consideration

In accordance with 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," Southern Nuclear Operating Company (SNC) requests an amendment to Renewed Facility Operating License Nos. DPR-57 and NPF-5 for the Edwin I. Hatch Nuclear Plant (HNP) Units 1 and 2. The proposed change revises Technical Specifications (TS) 3.6.4.1, "Secondary Containment," Surveillance Requirement (SR) 3.6.4.1.2 to provide an allowance for brief, inadvertent, simultaneous opening of redundant secondary containment access doors during normal entry and exit conditions

According to 10 CFR 50.92, "Issuance of amendment," paragraph (c), a proposed amendment to an operating license involves no significant hazards consideration if operation of the facility in accordance with the proposed amendment would not:

- 1) Involve a significant increase in the probability or consequences of any accident previously evaluated; or
- 2) Create the possibility of a new or different kind of accident from any accident previously evaluated; or
- 3) Involve a significant reduction in a margin of safety.

SNC has evaluated the proposed change, using the criteria in 10 CFR 50.92, and has determined that the proposed change does not involve a significant hazards consideration. The following information is provided to support a finding of no significant hazards consideration.

Enclosure 1 to NL-16-1582  
Evaluation of Proposed Change

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No

The proposed change allows temporary conditions during which secondary containment SR 3.6.4.1.2 is not met. The secondary containment is not an initiator of any accident previously evaluated. As a result, the probability of any accident previously evaluated is not increased.

Since the access doors are only opened briefly, were an accident to occur with both doors simultaneously open, the doors would close quickly enough such that the SGTS would not be hindered in its ability to adequately draw down the secondary containment within the time assumed in the accident analysis. The dose consequences would therefore be no worse than assumed in the current HNP accident analysis and within the federal guidelines of 10 CFR 50.67. As a result, the consequences of an accident previously evaluated are not significantly increased.

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

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No

The proposed change does not alter the protection system design, create new failure modes, or change any modes of operation. The proposed change does not involve a physical alteration of the plant, and no new or different kind of equipment will be installed. Consequently, there are no new initiators that could result in a new or different kind of accident.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No

The proposed change allows temporary conditions during which secondary containment SR 3.6.4.1.2 is not met. The allowance for both an inner and outer secondary containment access door to be open simultaneously for entry and exit does not affect the safety function of the secondary containment as the doors are promptly closed after entry or exit, thereby restoring the secondary containment boundary. In addition, brief, inadvertent, simultaneous opening and closing of redundant secondary containment access doors during normal entry and exit conditions does not affect the ability of the Standby Gas Treatment system to establish the required secondary containment vacuum. Therefore, the safety function of the secondary containment is not affected.

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

Based on the above evaluation, SNC concludes that the proposed amendment presents no significant hazards consideration under the standards set forth in 10 CFR 50.92, paragraph (c), and accordingly, a finding of no significant hazards consideration is justified.

#### 4.3 Conclusions

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or the health and safety of the public.

### **5.0 ENVIRONMENTAL CONSIDERATION**

SNC has determined that the proposed amendment would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, "Standards for Protection Against Radiation." However, the proposed amendment does not involve: (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22, "Criterion for categorical exclusion; identification of licensing and regulatory actions eligible for categorical exclusion or otherwise not requiring environmental review," paragraph (c)(9). Therefore, pursuant to 10 CFR 51.22, paragraph (b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

**Edwin I. Hatch Nuclear Plant Unit 1 and 2  
Request for License Amendment to Address  
Secondary Containment Access Openings**

**Enclosure 2**

**Markup of Proposed Technical Specifications Pages**

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. (continued)	C.2 Suspend CORE ALTERATIONS.	Immediately
	<u>AND</u> C.3 Initiate action to suspend OPDRVs.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.6.4.1.1 Verify all secondary containment equipment hatches are closed and sealed.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.1.2 Verify one secondary containment access door in each access opening is closed, <u>except when the access opening is being used for entry and exit.</u>	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.1.3 -----NOTE----- The number of standby gas treatment (SGT) subsystem(s) required for this Surveillance is dependent on the secondary containment configuration, and shall be one less than the number required to meet LCO 3.6.4.3, "Standby Gas Treatment (SGT) System," for the given configuration. ----- Verify secondary containment can be drawn down to $\geq 0.20$ inch of vacuum water gauge in $\leq 10$ minutes using required standby gas treatment (SGT) subsystem(s).	In accordance with the Surveillance Frequency Control Program

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. (continued)	C.2 Suspend CORE ALTERATIONS.	Immediately
	<u>AND</u> C.3 Initiate action to suspend OPDRVs.	Immediately

SURVEILLANCE REQUIREMENTS

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SR 3.6.4.1.1 Verify all secondary containment equipment hatches are closed and sealed.	In accordance with the Surveillance Frequency Control Program
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(continued)

**Edwin I. Hatch Nuclear Plant Unit 1 and 2  
Request for License Amendment to Address  
Secondary Containment Access Openings**

**Enclosure 3**

**Clean Technical Specification Pages**

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. (continued)	C.2 Suspend CORE ALTERATIONS.	Immediately
	<u>AND</u> C.3 Initiate action to suspend OPDRVs.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.4.1.1	Verify all secondary containment equipment hatches are closed and sealed.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.1.2	Verify one secondary containment access door in each access opening is closed, except when the access opening is being used for entry and exit.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.1.3	<p>-----NOTE-----</p> <p>The number of standby gas treatment (SGT) subsystem(s) required for this Surveillance is dependent on the secondary containment configuration, and shall be one less than the number required to meet LCO 3.6.4.3, "Standby Gas Treatment (SGT) System," for the given configuration.</p> <p>-----</p> <p>Verify secondary containment can be drawn down to <math>\geq 0.20</math> inch of vacuum water gauge in <math>\leq 10</math> minutes using required standby gas treatment (SGT) subsystem(s).</p>	In accordance with the Surveillance Frequency Control Program

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. (continued)	C.2 Suspend CORE ALTERATIONS.	Immediately
	<u>AND</u> C.3 Initiate action to suspend OPDRVs.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.6.4.1.1 Verify all secondary containment equipment hatches are closed and sealed.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.1.2 Verify one secondary containment access door in each access opening is closed, except when the access opening is being used for entry and exit.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.1.3 -----NOTE----- The number of standby gas treatment (SGT) subsystem(s) required for this Surveillance is dependent on the secondary containment configuration, and shall be one less than the number required to meet LCO 3.6.4.3, "Standby Gas Treatment (SGT) System," for the given configuration. ----- Verify secondary containment can be drawn down to $\geq 0.20$ inch of vacuum water gauge in $\leq 10$ minutes using required standby gas treatment (SGT) subsystem(s).	In accordance with the Surveillance Frequency Control Program

(continued)

**Edwin I. Hatch Nuclear Plant Unit 1 and 2  
Request for License Amendment to Address  
Secondary Containment Access Openings**

**Enclosure 4**

**Markup of Proposed Technical Specifications Bases Pages**

BASES

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ACTIONS  
(continued)

C.1, C.2, and C.3

Movement of irradiated fuel assemblies in the secondary containment, CORE ALTERATIONS, and OPDRVs can be postulated to cause fission product release to the secondary containment. In such cases, the secondary containment is the only barrier to release of fission products to the environment. CORE ALTERATIONS and movement of irradiated fuel assemblies must be immediately suspended if the secondary containment is inoperable.

Suspension of these activities shall not preclude completing an action that involves moving a component to a safe position. Also, action must be immediately initiated to suspend OPDRVs to minimize the probability of a vessel draindown and subsequent potential for fission product release. Actions must continue until OPDRVs are suspended.

Required Action C.1 has been modified by a Note stating that LCO 3.0.3 is not applicable. If moving irradiated fuel assemblies while in MODE 4 or 5, LCO 3.0.3 would not specify any action. If moving irradiated fuel assemblies while in MODE 1, 2, or 3, the fuel movement is independent of reactor operations. Therefore, in either case, inability to suspend movement of irradiated fuel assemblies would not be a sufficient reason to require a reactor shutdown.

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SURVEILLANCE  
REQUIREMENTS

SR 3.6.4.1.1 and SR 3.6.4.1.2

Verifying that secondary containment equipment hatches ~~and one access door in each access opening~~ are closed ensures that the infiltration of outside air of such a magnitude as to prevent maintaining the desired negative pressure does not occur ~~and. Verifying that all such openings are closed~~ provides adequate assurance that exfiltration from the secondary containment will not occur.

SR 3.6.4.1.1 also requires equipment hatches to be sealed. In this application, the term "sealed" has no connotation of leak tightness. ~~Maintaining secondary containment OPERABILITY requires verifying one door in the access opening is closed. An access opening contains one inner and one outer door. The intent is not to breach the secondary containment at any time when secondary containment is required. This is achieved by maintaining the inner or outer portion of the barrier closed at all times. However, all secondary containment access doors are normally kept closed, except when the access opening is being used for entry and exit or when maintenance is being performed on an access opening.~~ When the secondary containment configuration excludes Zone I and/or Zone II, ~~this~~ these SRs also includes verifying the hatches ~~and doors~~ separating the common refueling floor zone from the reactor building(s). The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

(continued)

SR 3.6.4.1.2

Verifying that one secondary containment access door in each access opening is closed provides adequate assurance that exfiltration from the secondary containment will not occur. An access opening contains one inner and one outer door. The intent is to not breach the secondary containment, which is achieved by maintaining the inner or outer portion of the barrier closed except when the access opening is being used for entry and exit. The phrase "being used for entry and exit" ensures the time both doors may be open simultaneously is limited to the time it takes to traverse through a door, which is insignificant. When the secondary containment configuration excludes Zone I and/or Zone II, this SRs also includes verifying the doors separating the common refueling floor zone from the reactor building(s).

The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

(continued)

BASES

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ACTIONS

C.1, C.2, and C.3 (continued)

fission product release to the secondary containment. In such cases, the secondary containment is the only barrier to release of fission products to the environment. CORE ALTERATIONS and movement of irradiated fuel assemblies must be immediately suspended if the secondary containment is inoperable.

Suspension of these activities shall not preclude completing an action that involves moving a component to a safe position. Also, action must be immediately initiated to suspend OPDRVs to minimize the probability of a vessel draindown and subsequent potential for fission product release. Actions must continue until OPDRVs are suspended.

Required Action C.1 has been modified by a Note stating that LCO 3.0.3 is not applicable. If moving irradiated fuel assemblies while in MODE 4 or 5, LCO 3.0.3 would not specify any action. If moving irradiated fuel assemblies while in MODE 1, 2, or 3, the fuel movement is independent of reactor operations. Therefore, in either case, inability to suspend movement of irradiated fuel assemblies would not be a sufficient reason to require a reactor shutdown.

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SURVEILLANCE  
REQUIREMENTS

SR 3.6.4.1.1 and SR 3.6.4.1.2

Verifying that secondary containment equipment hatches ~~and one access door in each access opening~~ are closed ensures that the infiltration of outside air of such a magnitude as to prevent maintaining the desired negative pressure does not occur ~~and~~. ~~Verifying that all such openings are closed~~ provides adequate assurance that exfiltration from the secondary containment will not occur. SR 3.6.4.1.1 also requires equipment hatches to be sealed. In this application, the term "sealed" has no connotation of leak tightness. ~~Maintaining secondary containment OPERABILITY requires verifying one door in the access opening is closed. An access opening contains one inner and one outer door. The intent is not to breach the secondary containment at any time when secondary containment is required. This is achieved by maintaining the inner or outer portion of the barrier closed at all times. However, all secondary containment access doors are normally kept closed, except when the access opening is being used for entry and exit or when maintenance is being performed on an access opening.~~ When the secondary containment configuration excludes Zone I and/or Zone II, ~~these~~this SRs also includes verifying the hatches ~~and doors~~ separating the common refueling floor zone from the reactor building(s). The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

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SR 3.6.4.1.2

Verifying that one secondary containment access door in each access opening is closed provides adequate assurance that exfiltration from the secondary containment will not occur. An access opening contains one inner and one outer door. The intent is to not breach the secondary containment, which is achieved by maintaining the inner or outer portion of the barrier closed except when the access opening is being used for entry and exit. The phrase "being used for entry and exit" ensures the time both doors may be open simultaneously is limited to the time it takes to traverse through a door, which is insignificant. When the secondary containment configuration excludes Zone I and/or Zone II, this SRs also includes verifying the doors separating the common refueling floor zone from the reactor building(s).

The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

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