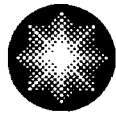


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**Constellation Energy**  
Generation Group

November 7, 2005

U. S. Nuclear Regulatory Commission  
Washington, DC 20555

**ATTENTION:** Document Control Desk

**SUBJECT:** R.E. Ginna Nuclear Power Plant  
Docket No. 50-244

Application for Amendment to Facility Operating License Revising Technical Specification, Section 3.9.3, to Allow Refueling Operations With the Containment Equipment Hatch Open.

In accordance with the provisions of 10 CFR 50.90, R.E. Ginna Nuclear Power Plant, LLC (Ginna LLC) is submitting a request for an amendment to the Technical Specifications (TS) for the R.E. Ginna Nuclear Power Plant.

The proposed amendment would revise Technical Specification Section 3.9.3 to allow refueling operations to be conducted with the containment equipment hatch open, provided that the hatch is capable of being closed under administrative control.

The proposed amendment is consistent with the guidance in Appendix B of Regulatory Guide 1.183, Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors. Although the scope of this amendment is limited to the containment equipment hatch penetration, it is consistent with the requirements contained Westinghouse Standard Technical Specifications (NUREG 1431, Revision 3) Section 3.9.4, and in the Calvert Cliffs Nuclear Power Plant Units 1 and 2 Technical Specifications, Section 3.9.3, Amendments 242 and 216 respectively. A similar amendment was approved for the Indian Point Nuclear Generating Station Unit Number 3 in a letter dated March 17, 2003, Accession Number ML030760135.

It has been determined that this amendment application does not involve a significant hazard consideration as determined per 10 CFR 50.92. Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment needs to be prepared in connection with the issuance of this amendment.

Enclosure 1 provides a description and assessment of the proposed changes. Enclosure 2 provides the existing TS pages marked up to show the proposed changes. Enclosure 3 provides revised (clean) TS

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pages. Enclosure 4 provides the existing TS Bases pages marked up to reflect the proposed change (for information only). Changes to the TS Bases will be provided in a future update in accordance with the Bases Control Program.

Approval of this amendment application is requested by September 1, 2006 to support Ginna's next scheduled refueling outage. Once approved, this amendment will be implemented within 60 days.

In accordance with 10 CFR 50.91, a copy of this amendment application is being provided to the designated New York State official.

Should you have questions regarding the information in this submittal, please contact Mr. George Wrobel at (585) 771-3535 or [George.Wrobel@constellation.com](mailto:George.Wrobel@constellation.com).

Very truly yours,  
*Mary G. Korsnick*  
Mary G. Korsnick

STATE OF NEW YORK                     :  
  :  
  : TO WIT:  
COUNTY OF WAYNE                    :

I, Mary G. Korsnick, begin duly sworn, state that I am Vice President, R.E. Ginna Nuclear Power Plant, LLC (Ginna LLC), and that I am duly authorized to execute and file this request on behalf of Ginna LLC. To the best of my knowledge and belief, the statements contained in this document are true and correct. To the extent that these statements are not based on my personal knowledge, they are based upon information provided by other Ginna LLC employees and/or consultants. Such information has been reviewed in accordance with company practice and I believe it to be reliable.

*Mary G. Korsnick*

Subscribed and sworn before me, a Notary Public in and for the State of New York and County of Wayne, this 7 day of November, 2005.

WITNESS my Hand and Notarial Seal:

*Sharon L. Miller*  
Notary Public

My Commission Expires:

SHARON L. MILLER  
Notary Public, State of New York  
Registration No. 01MI6017755  
Monroe County  
Commission Expires December 21, 2006

11-7-05

Date

Document Control Desk

November 7, 2005

Page 3

- Enclosures:
1. Evaluation of Proposed Change
  2. Proposed Technical Specification Changes (mark-up)
  3. Proposed Technical Specification Pages (retyped)
  4. Marked-up Copy of Technical Specification Bases

cc: S. J. Collins, NRC  
P.D. Milano, NRC  
Resident Inspector, NRC (Ginna)  
P.D. Eddy, NYSDPS

**Enclosure 1**

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**Evaluation of Proposed Changes**

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## **Evaluation of Proposed Change**

**Subject:** Application for Amendment to Facility Operating License Revising Technical Specification, Section 3.9.3, to allow refueling operations with the containment equipment hatch open.

- 1.0 DESCRIPTION
- 2.0 PROPOSED CHANGE
- 3.0 BACKGROUND
- 4.0 TECHNICAL ANALYSIS
- 5.0 REGULATORY ANALYSIS
  - 5.1 No Significant Hazards Consideration
  - 5.2 Applicable Regulatory Requirements/Criteria
- 6.0 ENVIRONMENTAL CONSIDERATION
- 7.0 REFERENCES

## 1.0 DESCRIPTION

This letter is a request to amend Operating License No. DPR-18 for the R. E. Ginna Nuclear Power Plant (Ginna).

The proposed change will revise the Operating License to allow refueling operations to be conducted with the containment equipment hatch open, provided that the hatch is capable of being closed under administrative control. The change will allow for more efficient outage operations, while ensuring that the dose to the public will be limited to within the requirements of Reference 1 and the criteria listed in Reference 2.

## 2.0 PROPOSED CHANGE

Section 3.9.3 of Ginna's Technical Specifications presently require that the containment equipment hatch be closed by one of three methods during core alterations or movement of irradiated fuel assemblies within containment. This is considered overly restrictive and unnecessarily disrupts outage operations during refueling activities. Depending on the closure method being utilized, the proposed change will allow either both equipment hatch doors, the closure plate access door, or the roll up door associated with the enclosure building to be open during refueling operations. The doors will be capable of being closed within 30 minutes under administrative control in the event of a fuel handling accident (FHA). The 30 minute requirement will be contained in the Technical Specification Bases, and controlled under the Bases Control Program per Ginna Technical Specification Section 5.5.13.

## 3.0 BACKGROUND

Ginna presently utilizes one of three methods for closure of the containment equipment hatch penetration during core alterations or movement of irradiated fuel assemblies within containment (see Ginna UFSAR 3.1.8.5.4). These include:

- The equipment hatch bolted in place (typically with at least 4 bolts evenly spaced) and one air lock door closed.
- Isolated by a closure plate that restricts air flow from containment which contains a door for emergency egress, or
- Isolated by a rollup door and enclosure building

Under the current requirements the equipment hatch, in effect, becomes unusable while performing certain refueling operations. This disrupts other outage activities or requires that refueling operations be ceased to move necessary outage related equipment into or out of containment. The continuity of the outage is disrupted creating unnecessary delays and scheduling conflicts. In addition to increasing the outage times, the disruption in continuity induces opportunities for human error.

Early in 2005, the NRC approved use of the Alternate Source Term (AST) Methodology for Ginna (Reference 3 and 4). Reference 5 determined the dose consequences of a Fuel Handling Accident (FHA) in containment and was reviewed by the NRC as part of the AST Submittal. This analysis demonstrates that the proposed change is acceptable. The control room in-leakage assumptions have since been validated by a tracer gas in-leakage test, performed in February 2005.

#### 4.0 TECHNICAL ANALYSIS

The proposed amendment will allow the following conditions to exist during core alterations or movement of irradiated fuel inside containment.

- If the equipment hatch is bolted in place and being utilized for containment closure, both doors in the associated personnel air lock would be permitted to be open. The doors would be under administrative control such that one door can be closed within the required time following a FHA. Closing the doors would be a simple evolution of swinging the door closed and securing it with a dogging wheel, which is easily accomplished within the 30 minute time restriction.
- If the closure plate is bolted in place and being utilized for containment closure, the associated emergency egress door would be permitted to be open. The door would be under administrative control such that the door can be closed within the required time following a FHA. In this configuration, the equipment hatch enclosure is unbolted and withdrawn from the containment shell via a rail system. The temporary plate is then bolted in place to close the opening. Located in the plate is an emergency egress door. Closing the emergency egress door is a simple evolution of closing and latching the door, which is easily accomplished within 30 minutes time restriction.
- If the enclosure building and roll up door are being utilized for containment closure, the roll up door would be permitted to be open. The door would be under administrative control such that it can be closed within the required time following a FHA. In this configuration, the equipment hatch enclosure is unbolted and withdrawn from the containment shell via a rail system. The overhead door is a steel roll-up type composed of hinged panels and capable of motorized or manual operation. It is attached to a non-pressure rated reinforced concrete enclosure built around the equipment hatch opening outside of containment. The door moves on a track attached to the enclosure and when opened, retracts into the enclosure. Closing the roll-up door is a simple evolution, comprised of electrically or manually operating the mechanism, which is easily accomplished within the 30 minute time restriction.

Ginna's process for implementing Technical Specification changes requires review and revision of all affected procedures. Procedure revisions require a technical review and evaluation of required training. Appendix B, Footnote 3, of Reference 2 discusses the administrative controls to close the hatch, and states in part, "Such administrative controls will generally require that a dedicated individual be present, with necessary equipment available, to restore containment closure should a fuel handling accident occur." Although an individual may be designated to perform the actions, the evolution at Ginna should not require a dedicated individual be stationed at the hatch opening in all cases. However, Ginna's process will validate the ability to achieve the 30 minute closure time, including stationing an individual if that is determined to be necessary.

The Ginna dose analysis (Reference 5) determined the dose consequences for a FHA in containment using the assumptions in the Ginna UFSAR Section 15.7.3 and consistent with the methodology described in Reference 2. The analysis conservatively assumed that the equipment hatch was open and the total activity release occurred over a period of two hours. An atmospheric dispersion coefficient ( $x/Q$ ) was used assuming the equipment hatch as a release point because it is the largest penetration and the shortest physical distance to the control room air intake. As part of Ginna's Extended Power Uprate (EPU) analysis and submittal (Reference 6), the FHA doses were reanalyzed. With the exception of the increased power, the methodology and assumptions in the analysis remained unchanged from that

previously approved. The increase in the FHA dose associated with the EPU is below the threshold requiring NRC review per 10CFR 50.59. However, for informational purposes, the following are the results of the analyses in rem TEDE.

Location	Calculated Dose	Calculated Dose	Limit - Reference 1/2
FHA Calculated Doses	AST - Previously Approved	EPU	
Control Room	1.16	1.4	5
Exclusion Area Boundary (EAB)	5.07E-1	6.1E-1	6.3
Low Population Zone (LPZ)	5.87E-2	7.0E-2	6.3

As can be seen from the above results, the calculated dose is well within the established limits assuming the penetration is open for the entire release. Additionally, the limits for the EAB and LPZ stated above are the criteria listed in Reference 2, and are 25 percent of the actual regulatory limit listed in Reference 1. The 30 minute administrative closure requirement is not credited in the analysis and adds additional conservatism.

## 5.0 REGULATORY ANALYSIS

### 5.1 No Significant Hazards Consideration

R.E. Ginna Nuclear Power Plant, LLC has evaluated whether or not a significant hazards consideration is involved with the proposed amendment(s) by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

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

Response: No.

The change has no impact on the probability of a FHA inside containment. It merely allows the transfer of equipment and personnel through the equipment hatch, and allows parallel activities. The refueling operations have spatial separation from the open hatch precluding interaction with refueling. Having the equipment hatch open will not impact the operation or operability of refueling equipment or the performance of the refueling crew.

Per Reference 2, the analysis was performed assuming a two hour release of radioactivity with the hatch open for the entire duration. An analysis assuming a closed hatch was not performed for comparison. This change merely allows plant conditions to exist that are assumed in the analysis. The relatively small off-site dose values shown in Section 4



above, and the additional conservatism provided by the requirement for administrative closure capability, demonstrates that any consequence to the public resulting from this change would be minimal.

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 change more closely aligns the allowed plant conditions with those conditions assumed in an existing (analyzed) accident. Allowing movement of equipment through the equipment hatch during core alterations does not create any new accident initiators. Given the plant conditions, it does not affect system operation or the functions they perform. Therefore, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

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

Response: No.

The change does not create conditions different from or less conservative than, those assumed in the analysis, and is consistent with the regulatory guidance for performing that analysis. Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, R.E. Ginna Nuclear Power Plant, LLC concludes that the proposed amendment(s) present no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

## 5.2 Applicable Regulatory Requirements/Criteria

The regulatory basis for this change is contained in Reference 2, Appendix B, Item 5.3. The change to the Technical Specification and associated Basis implements the requirements of that guidance. The analyzed dose does not exceed any regulation or regulatory limits.

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 to the health and safety of the public.

## 6.0 ENVIRONMENTAL CONSIDERATION

A review 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, or

would change an inspection or surveillance requirement. 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(c) (9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

## 7.0 REFERENCES

1. 10 CFR 50.67, Accident Source Term
2. Regulatory Guide 1.183, Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors
3. Letter from Donna M. Skay (NRC) to Mary G. Korsnick, R.E. Ginna Nuclear Power Plant – Amendment Re: Modification of the Control Room Air Treatment System and Change to Dose Calculation Methodology to Alternate Source Term (TAC No. MB9123), dated February 25, 2005.
4. Letter from Donna M. Skay (NRC) to Mary G. Korsnick, R.E. Ginna Nuclear Power Plant – Correction to Amendment No. 87 Re: Modification of the Control Room Air Treatment System (TAC No. MB9123), dated May 18, 2005.
5. Ginna Station Design Analysis DA-NS-2002-004, Fuel Handling Accident Offsite and Control Room Doses, Revision 2.
6. Letter from Mary G. Korsnick (Ginna) to U.S. Nuclear Regulatory Commission, License Amendment Request Regarding Extended Power Uprate, dated July 7, 2005.

**Enclosure 2**  
**R.E. Ginna Nuclear Power Plant**

**Proposed Technical Specification Changes (Mark-up)**

3.9 REFUELING OPERATIONS

3.9.3 Containment Penetrations

LCO 3.9.3

The containment penetrations shall be in the following status:

*with the associated emergency egress door closed or capable of being closed under administrative control*

*with the roll up door closed or capable of being closed under administrative control.*

*closed or capable of being*

*under administrative control*

- a. The equipment hatch shall be either:
1. bolted in place with at least one access door closed;
  2. isolated by a closure plate that restricts air flow from containment, or
  3. isolated by a roll up door and enclosure building;
- b. One door in the personnel air lock shall be closed; and
- c. Each penetration providing direct access from the containment atmosphere to the outside atmosphere shall be either:
1. closed by a manual or automatic isolation valve, blind flange, or equivalent, or
  2. capable of being closed by an OPERABLE Containment Ventilation Isolation System.

APPLICABILITY: During CORE ALTERATIONS,  
During movement of irradiated fuel assemblies within containment.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more containment penetrations not in required status.	A.1 Suspend CORE ALTERATIONS.	Immediately
	<u>AND</u> A.2 Suspend movement of irradiated fuel assemblies within containment.	

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.9.3.1	Verify each required containment penetration is in the required status.	7 days
SR 3.9.3.2	Verify each required containment purge and exhaust valve actuates to the isolation position on an actual or simulated actuation signal.	24 months

**Enclosure 3**  
**R.E. Ginna Nuclear Power Plant**

**Proposed Technical Specification Pages (retyped)**

3.9 REFUELING OPERATIONS

3.9.3 Containment Penetrations

LCO 3.9.3 The containment penetrations shall be in the following status:

- a. The equipment hatch shall be either:
  - 1. bolted in place with at least one access door closed or capable of being closed under administrative control,
  - 2. isolated by a closure plate that restricts air flow from containment with the associated emergency egress door closed or capable of being closed under administrative control, or
  - 3. isolated by a roll up door and enclosure building with the roll up door closed or capable of being closed under administrative control.
- b. One door in the personnel air lock shall be closed; and
- c. Each penetration providing direct access from the containment atmosphere to the outside atmosphere shall be either:
  - 1. closed by a manual or automatic isolation valve, blind flange, or equivalent, or
  - 2. capable of being closed by an OPERABLE Containment Ventilation Isolation System.

APPLICABILITY: During CORE ALTERATIONS,  
During movement of irradiated fuel assemblies within containment.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more containment penetrations not in required status.	A.1 Suspend CORE ALTERATIONS.  <u>AND</u>	Immediately

CONDITION	REQUIRED ACTION	COMPLETION TIME
	A.2 Suspend movement of irradiated fuel assemblies within containment.	Immediately

**SURVEILLANCE REQUIREMENTS**

SURVEILLANCE		FREQUENCY
SR 3.9.3.1	Verify each required containment penetration is in the required status.	7 days
SR 3.9.3.2	Verify each required containment purge and exhaust valve actuates to the isolation position on an actual or simulated actuation signal.	24 months



**Enclosure 4**  
**R.E. Ginna Nuclear Power Plant**

**Marked-up Copy of Technical Specification Bases**

The bases changes are being provided for information only to show the changes R.E. Ginna Nuclear Power Plant, LLC intends to make following NRC approval of this LAR. The bases are under R.E. Ginna Nuclear Power Plant, LLC control for all changes in accordance with Technical Specification 5.5.13.

B 3.9 REFUELING OPERATIONS

B 3.9.3 Containment Penetrations

BASES

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BACKGROUND

During CORE ALTERATIONS or movement of irradiated fuel assemblies within containment, a release of fission product radioactivity within containment will be restricted from escaping to the environment when the LCO requirements are met. In MODES 1, 2, 3, and 4, this is accomplished by maintaining containment OPERABLE as described in LCO 3.6.1, "Containment." In MODE 5, there are no accidents of concern which require containment. In MODE 6, the potential for containment pressurization as a result of an accident is not likely; therefore, requirements to isolate the containment from the outside atmosphere can be less stringent. The LCO requirements are referred to as "containment closure" rather than "containment OPERABILITY." Containment closure means that all potential escape paths are closed or capable of being closed. Since there is no potential for containment pressurization, the Appendix J leakage criteria and tests are not required.

and control room

50.67

The containment serves to contain fission product radioactivity that may be released from the reactor core following an accident, such that offsite radiation exposures are maintained within the requirements of 10 CFR 100. Additionally, the containment provides radiation shielding from the fission products that may be present in the containment atmosphere following accident conditions.

The containment equipment hatch, which is part of the containment pressure boundary, provides a means for moving large equipment and components into and out of containment. During CORE ALTERATIONS or movement of irradiated fuel assemblies within containment, the equipment hatch must be bolted in place. Good engineering practice dictates that a minimum of 4 bolts be used to hold the equipment hatch in place and that the bolts be approximately equally spaced. As an alternative, the equipment hatch opening can be isolated by a closure plate that restricts air flow from containment or by an installed roll up door and enclosure building.

Both equipment hatch air lock doors, the closure plate door, or the enclosure building roll up door may remain open if able to be closed under administrative control within 30 minutes.

The containment equipment and personnel air locks, which are also part of the containment pressure boundary, provide a means for personnel access during MODES 1, 2, 3, and 4 in accordance with LCO 3.6.2, "Containment Air Locks." Each air lock has a door at both ends. The doors are normally interlocked to prevent simultaneous opening when containment OPERABILITY is required. During periods of plant shutdown when containment closure is not required, the door interlock mechanism may be disabled, allowing both doors of an air lock to remain open for extended periods when frequent containment entry is necessary.

During CORE ALTERATIONS or movement of irradiated fuel assemblies within containment, containment closure is required; therefore, the door interlock mechanism may remain disabled, but one air lock door must always remain closed in the personnel and equipment hatch (unless the equipment hatch is isolated by a closure plate or the roll-up door and associated enclosure building).

The requirements for containment penetration closure ensure that a release of fission product radioactivity within containment will be restricted from escaping to the environment. The closure restrictions are sufficient to restrict fission product radioactivity release from containment due to a fuel handling accident during refueling.

The Containment Purge and Exhaust System includes two subsystems. The Shutdown Purge System includes a 36 inch purge penetration and a 36 inch exhaust penetration. The second subsystem, a Mini-Purge System, includes a 6 inch purge penetration and a 6 inch exhaust penetration. During MODES 1, 2, 3, and 4, the shutdown purge and exhaust penetrations are isolated by a blind flange with two O-rings that provide the necessary boundary. The two air operated valves in each of the two mini-purge penetrations can be opened intermittently, but are closed automatically by the Containment Ventilation Isolation Instrumentation System. Neither of the subsystems is subject to a Specification in MODE 5.

In MODE 6, large air exchangers are used to support refueling operations. The normal 36 inch Shutdown Purge System is used for this purpose, and each air operated valve is closed by the Containment Ventilation Isolation Instrumentation in accordance with LCO 3.3.5, "Containment Ventilation Isolation Instrumentation."

The Mini-Purge System also remains operational in MODE 6, and all four valves are also closed by the Containment Ventilation Isolation Instrumentation.

The other containment penetrations that provide direct access from containment atmosphere to outside atmosphere must be isolated on at least one side. Isolation may be achieved by an OPERABLE automatic isolation valve, or by a manual isolation valve, blind flange, or equivalent. Equivalent isolation methods may include use of a material that can provide a temporary, atmospheric pressure, ventilation barrier for the other containment penetrations during fuel movements.

APPLICABLE  
SAFETY  
ANALYSES

During CORE ALTERATIONS or movement of irradiated fuel assemblies within containment, the most severe radiological consequences result from a fuel handling accident. The fuel handling accident is a postulated event that involves damage to irradiated fuel (Ref. 1). Fuel handling accidents, analyzed using the criteria of Reference 2, include dropping a single irradiated fuel assembly and handling tool or a heavy object onto other irradiated fuel assemblies. The requirements of LCO 3.9.6, "Refueling Cavity Water Level," and the minimum decay time of 100 hours prior to CORE ALTERATIONS ensure that the release of fission product radioactivity, subsequent to a fuel handling accident, results in doses that are within the guideline values specified in 10 CFR 100. Standard Review Plan (SRP), Section 15.7.4, Rev. 1 (Ref. 2), requires containment closure even though this is not an assumption of the accident analyses. The acceptance limits for offsite radiation exposure is 05 rem (Ref. 3).

Per 10CFR 50.67, Accident Source Term, the NRC approved the Alternate Source Term Methodology in Reference 3 as amended by Reference 4.

50.67

Containment penetrations satisfy Criterion 3 of the NRC Policy Statement since these are assumed in the SRP.

LCO

This LCO limits the consequences of a fuel handling accident in containment by limiting the potential escape paths for fission product radioactivity released within containment. The LCO requires any penetration providing direct access from the containment atmosphere to the outside atmosphere to be closed except for the OPERABLE containment purge and exhaust penetrations. For the OPERABLE containment purge and exhaust penetrations, this LCO ensures that at least one valve in each of these penetrations is isolable by the Containment Ventilation Isolation System.

Reference 5 assumes that the equipment hatch is open for the duration of the accident. However, to provide a factor of safety, Appendix B to Reference 6 stipulates open penetrations be closed within 30 minutes

and equipment hatch

APPLICABILITY

The containment penetration requirements are applicable during CORE ALTERATIONS or movement of irradiated fuel assemblies within containment because this is when there is a potential for a fuel handling accident. In MODES 1, 2, 3, and 4, containment penetration requirements are addressed by LCO 3.6.1. In MODES 5 and 6, when CORE ALTERATIONS or movement of irradiated fuel assemblies within containment are not being conducted, the potential for a fuel handling accident does not exist. Therefore, under these conditions, no requirements are placed on containment penetration status.

For the OPERABLE equipment hatch penetration, this LCO ensures that the penetration is either closed or capable of being closed under administrative control

ACTIONS

A.1 and A.2

If the containment equipment hatch (or its closure plate or roll up door and associated enclosure building), air lock doors, or any containment penetration that provides direct access from the containment atmosphere to the outside atmosphere is not in the required status, including the Containment Ventilation Isolation System not capable of automatic actuation when the purge and exhaust valves are open, the plant must be placed in a condition where the isolation function is not needed. This is accomplished by immediately suspending CORE ALTERATIONS and movement of irradiated fuel assemblies within containment. Performance of these actions shall not preclude completion of movement of a component to a safe position.

SURVEILLANCE  
REQUIREMENTS

SR 3.9.3.1

are in the

status

This SR demonstrates that each of the containment penetrations required to be in its closed position is in that position. The Surveillance on the open purge and exhaust valves will demonstrate that the valves are not blocked or otherwise prevented from closing (e.g., solenoid unable to vent).

The Surveillance is performed every 7 days during CORE ALTERATIONS or movement of irradiated fuel assemblies within containment. The Surveillance interval is selected to be commensurate with the normal duration of time to complete fuel handling operations. As such, this Surveillance ensures that a postulated fuel handling accident that releases fission product radioactivity within the containment will not result in a release of fission product radioactivity to the environment.

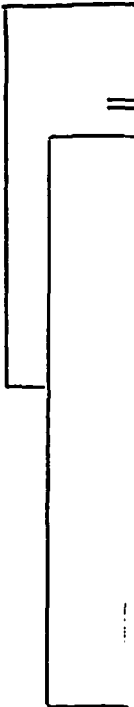
SR 3.9.3.2

This SR demonstrates that each containment purge and exhaust valve actuates to its isolation position on manual initiation or on an actual or simulated high radiation signal. The 24 month Frequency maintains consistency with other similar instrumentation and valve testing requirements. In LCO 3.3.5, the Containment Ventilation Isolation instrumentation requires a CHANNEL CHECK every 24 hours and a COT every 92 days to ensure the channel OPERABILITY during refueling operations. Every 24 months an ACTUATION LOGIC TEST and CHANNEL CALIBRATION is performed. These Surveillances will ensure that the valves are capable of closing after a postulated fuel handling accident to limit a release of fission product radioactivity from the containment.

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REFERENCES

1. UFSAR, Section 15.7.
2. NUREG-800, Section 15.7.4, Rev. 1, July 1981.
3. ~~Letter from D. M. Grutchfield, NRC, to J. Maier, RG&E, Subject: "Fuel Handling Accident Inside Containment," dated October 7, 1981.~~

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3. Letter from Donna M. Skay (NRC) to Mary G. Korsnick (Ginna), R.E. Ginna Nuclear Power Plant – Modification of the Control Room Emergency Air Treatment System and Change to Dose Calculation Methodology to Alternate Source Term (TAC No. MB9123), February 25, 2005.
  4. Letter from Donna M. Skay (NRC) to Mary G. Korsnick (Ginna), R.E. Ginna Nuclear Power Plant – Correction to Amendment No. 87 Re: Modification of the Control Room Emergency Air Treatment System (TAC No: MB9123), May 18, 2005.
  5. Ginna Station Design Analysis DA-NS-2002-004, Fuel Handling Accident Off-site and Control Room Doses, Revision 2
  6. Regulatory Guide 1.183, Alternate Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors