Entergy

Entergy Nuclear Operations, Inc.
Vermont Yankee
P.O. Box 0500
185 Old Ferry Road
Brattleboro, VT 05302-0500
Tel 802 257 5271

September 20, 2006

Docket No. 50-271
BVY 06-088
TAC No. MC 9668

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

Reference:
1. Letter, Entergy to USNRC, "Vermont Yankee Nuclear Power Station, License No. DPR-28, License Renewal Application," BVY 06-009, dated January 25, 2006.
2. Letter, USNRC to VYNPS, "Requests for Additional Information for the Review of Vermont Yankee Nuclear Power Station License Renewal Application", NVY 06-114, dated August 15, 2006.
3. Letter, USNRC to VYNPS, "Requests for Additional Information for the Review of Vermont Yankee Nuclear Power Station License Renewal Application", NVY 06-115, dated August 16, 2006.

Subject: **Vermont Yankee Nuclear Power Station**
License No. DPR-28 (Docket No. 50-271)
License Renewal Application, Amendment 14

On January 25, 2006, Entergy Nuclear Operations, Inc. and Entergy Nuclear Vermont Yankee, LLC (Entergy) submitted the License Renewal Application (LRA) for the Vermont Yankee Nuclear Power Station (VYNPS) as indicated by Reference 1. Attachments 1 and 2 provide responses to References 2 and 3 respectively.

NRC Commitments 37 and 38 have been included in Revision 2 of the License Renewal Commitment List enclosed as Attachment 3.

Should you have any questions concerning this letter, please contact Mr. James DeVincentis at (802) 258-4236.

I declare under penalty of perjury that the foregoing is true and correct, executed on September 20, 2006.

Sincerely,

Ted A. Sullivan
Site Vice President
Vermont Yankee Nuclear Power Station

Attachments 1, 2 and 3
cc: See next page

A117

cc: Mr. James Dyer, Director
U.S. Nuclear Regulatory Commission
Office O5E7
Washington, DC 20555-00001

Mr. Samuel J. Collins, Regional Administrator
U.S. Nuclear Regulatory Commission, Region 1
475 Allendale Road
King of Prussia, PA 19406-1415

Mr. Jack Strosnider, Director
U.S. Nuclear Regulatory Commission
Office T8A23
Washington, DC 20555-00001

Mr. Jonathan Rowley, Senior Project Manager
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
MS-O-11F1
Rockville, MD 20853

Mr. James J. Shea, Project Manager
U.S. Nuclear Regulatory Commission
Mail Stop O8G9A
Washington, DC 20555

USNRC Resident Inspector
Entergy Nuclear Vermont Yankee, LLC
P.O. Box 157 *(for mail delivery)*
Vernon, Vermont 05354

Mr. David O'Brien, Commissioner
VT Department of Public Service
112 State Street – Drawer 20
Montpelier, Vermont 05620-2601

Diane Curran, Esq.
Harmon, Curran, Spielberg & Eisenberg, LLP
1726 M Street, N.W., Suite 600
Washington, D.C. 20036

Attachment 1

Vermont Yankee Nuclear Power Station

License Renewal Application Supplement

Amendment 14

Section 2.3.3.8, Fire Protection – Water
Section 2.3.3.9, Fire Protection – Carbon Dioxide

RAI Responses

RAI 2.3.3.8-1 to 2.3.3.8-11
RAI 2.3.3.9-1 to 2.3.3.9-3

RAI 2.3.3.8-1

License renewal application (LRA) drawing LRA-G-191163-SH-01-0, "Fire Protection System Inner Loop," shows the yard fire hydrants as out of scope (i.e., not colored in purple). Verify whether the yard fire hydrants are in scope of license renewal in accordance with Title 10 *Code of Federal Regulations* Part 54.4(a) (10 CFR 54.4(a)) and subject to an aging management review (AMR) in accordance with 10 CFR 54.21(a)(1). If they are excluded from the scope of license renewal and not subject to an AMR, please provide justification for the exclusion.

RAI 2.3.3.8-1 Response

LRA drawing LRA-G-191163-SH-02-0, "Fire Protection System Outer Loop" shows that the yard fire hydrants are not subject to aging management review since they are not highlighted.

As described in Section 2.3.3.8 of the LRA,

The FP–water system has no intended functions for 10 CFR 54.4(a)(1).

The FP–water system has the following intended function for 10 CFR 54.4(a)(2).

- Maintain integrity of nonsafety-related components such that no physical interaction with safety-related components could prevent satisfactory accomplishment of a safety function.

The FP–water system has the following intended functions for 10 CFR 54.4(a)(3).

- Provide the capability to extinguish fires in vital areas of the plant (10 CFR 50.48).

Therefore, the fire protection system is in scope for license renewal.

The piping in the outer loop performs a component pressure boundary intended function that supports the ability of the fire protection system to extinguish fires in vital areas of the plant serviced by the inner loop. If the outer loop failed, piping that provides water to fire systems in vital areas of the plant may not perform its intended function. The yard fire hydrants are isolable from the outer loop such that their failure would not impact the support of vital areas. Yard fire hydrants are not required to extinguish fires in vital areas of the plant and their failure cannot impact safety-related components. Therefore, the yard fire hydrants perform no intended function in support of the system intended functions and are not subject to aging management review.

RAI 2.3.3.8-2

LRA drawing LRA-G-191163-SH-02-0, "Fire Protection System Outer Loop," shows the recirculation pump motor generator set foam system colored in purple (i.e., in scope). This drawing does not show the 150 gallon foam concentrate tank and its components (piping and valves). Verify whether the 150 gallon foam concentrate tank and its components are in scope of license renewal in accordance with 10 CFR 54.4(a) and subject to an AMR in accordance with 10 CFR 54.21(a)(1). If they are excluded from the scope of license renewal and not subject to an AMR, please provide justification for the exclusion.

RAI 2.3.3.8-2 Response

LRA drawing LRA-G-191163-SH-01-0, "Fire Protection System Inner Loop" shows the recirculation pump motor generator set foam system colored in purple (i.e., subject to aging management review) at coordinates I/J-2. The associated 150 gallon foam concentrate tank (TK76-1B) and its components are in scope and subject to aging management review as shown on the same drawing at coordinates B-8. LRA Table 3.3.2.8 includes line items for the tank and associated piping, valves, and flow nozzles with fire protection foam as the internal environment.

RAI 2.3.3.8-3

Section 3.2.2 of the January 17, 1978, U.S. Nuclear Regulatory Commission safety evaluation (the SE), approving the Vermont Yankee Nuclear Power Station fire protection program, discusses the use of flame retardant coating to protect electrical cables in trays and risers in the switchgear room to meet the requirements of 10 CFR 50.48. The LRA does not list flame retardant coating for cables. Verify whether the flame retardant coating is in scope of license renewal in accordance with 10 CFR 54.4(a) and subject to an AMR in accordance with 10 CFR 54.21(a)(1). If flame retardant coating is excluded from the scope of license renewal and not subject to an AMR, please provide justification for the exclusion.

RAI 2.3.3.8-3 Response

Flame retardant (flamemastic) coatings are in scope and subject to aging management review and are included in the line item "Fire wrap" in LRA Tables 2.4-6 and 3.5.2-6. Flamemastic was inadvertently omitted from the list of materials for the line item "Fire wrap" in LRA Table 3.5.2-6.

RAI 2.3.3.8-4

Section 4.3.1(f) of the SE discusses a manually-operated foam maker with a permanent storage tank with fire suppression functions in the event of a fire affecting the 75,000 gallon outdoor fuel oil storage tank, the diesel generator day tanks, or the diesel generator room located on the ground floor of the turbine building. The LRA does not list this foam maker and its associated storage tank systems and components. Verify whether the foam maker and storage tank system and components (piping and valves) are in scope of license renewal in accordance with 10 CFR 54.4(a) and subject to an AMR in accordance with 10 CFR 54.21(a)(1). If they are excluded from the scope of license renewal and not subject to an AMR, please provide justification for the exclusion.

RAI 2.3.3.8-4 Response

As discussed in LRA Section 2.3.3.8, in the turbine building, in addition to hose stations and deluge systems, a foam fire protection agent is available that can be used to combat fires at the fuel oil storage tank, turbine lube oil storage tank, main and auxiliary transformers, house heating boilers, and the emergency diesel generators.

The turbine building foam tank (TK76-1A) and associated piping and valves are in scope and subject to aging management review as shown on LRA drawing LRA-G-191163-SH-01-0, "Fire Protection System Inner Loop" at coordinates E-8. This manual foam system is used by attaching a fire hose to the outlet and opening valves to enable water from the fire protection

header to mix with the foam concentrate from the storage tank and flow through the hose. LRA Table 3.3.2.8 includes line items for the tank and associated piping and valves with fire protection foam as the internal environment.

Fire hoses are periodically replaced and managed by the existing fire protection program, and therefore are not subject to aging management review.

RAI 2.3.3.8-5

Section 4.5 of the SE discusses floor drains provided in all plant areas protected with fixed water fire suppression. Are they in the scope of license renewal in accordance with 10 CFR 54.4(a) and subject to an AMR in accordance with 10 CFR 54.21(a)(1)? If they are excluded from the scope of license renewal and not subject to an AMR, please provide justification for the exclusion.

RAI 2.3.3.8-5 Response

Water-filled components in the radioactive waste system (which includes the floor drain system) that could affect safety-related equipment are in scope and require aging management review per 10 CFR 54.4(a)(2) due to potential spatial interaction. These components are subject to aging management review and are addressed in LRA Table 3.3.2-13-32.

RAI 2.3.3.8-6

Section 3.3 of the SE supplement dated February 20, 1980, discusses the fire protection features for the primary containment (e.g., fixed suppression systems, standpipe and hose stations, and oil collection system). Determine whether fire protection systems and features for primary containment should be included as systems and components in scope for license renewal and subject to an AMR. If not, please explain the basis.

RAI 2.3.3.8-6 Response

Section 3.3 of the SE supplement dated February 20, 1980, discusses potential fire protection features for the primary containment in the event the containment is not inerted. As noted in LRA Section 3.3.2.2.7, VYNPS is a BWR with an inert containment atmosphere. Therefore, the primary containment does not have a fixed suppression system or a reactor recirculation pump oil collection system.

As shown on LRA drawing LRA-G-191163-SH-01-0, "Fire Protection System Inner Loop," hose stations in the reactor building, that may be used for fire suppression in primary containment during non-inerted outage periods are in scope and subject to aging management review.

RAI 2.3.3.8-7

Section 3.3 of the SE supplement dated October 24, 1980, discusses the deluge system to protect the turbine building lay-down area. Determine whether the turbine building lay-down deluge system and its components should be included as systems and components in scope for license renewal and subject to an AMR. If not, please explain the basis.

RAI 2.3.3.8-7 Response

The turbine building loading bay is the area referred to in the SE supplement as the turbine building lay-down area. The sprinkler system for this area is in scope and subject to aging management review as shown on LRA drawing LRA-G-191163-SH-01-0, "Fire Protection System Inner Loop" at coordinate G-9.

RAI 2.3.3.8-8

Section 4.3.1(e) of the SE discusses the automatic sprinkler systems for various areas including the outdoor transformer. The LRA does not list the sprinkler systems or associated components to protect the outdoor transformer. Verify whether the sprinkler system and associated components are in scope of license renewal in accordance with 10 CFR 54.4(a) and subject to an AMR in accordance with 10 CFR 54.21(a)(1). If they are excluded from the scope of license renewal and not subject to an AMR, please provide justification for the exclusion.

RAI 2.3.3.8-8 Response

As described in LRA Section 2.3.3.8, the fire protection system is in the scope of license renewal for 10 CFR 54.4(a)(3) because it is credited in the Appendix R safe shutdown analysis (10CFR50.48).

The main transformer and auxiliary transformer sprinkler fire protection subsystems do not mitigate fires in areas containing equipment important to safe operation of the plant, nor are they credited with achieving safe shutdown in the event of a fire. These subsystems are only required to meet state, municipal, or insurance requirements. Therefore, these subsystems have no intended function and are not included in the aging management review summarized in LRA Table 3.3.2-8.

Since they are outdoors away from safety-related equipment, the main transformer and auxiliary transformer sprinkler subsystems cannot affect safety-related equipment by spatial interaction and therefore, have no intended function associated with 10 CFR 54.4(a)(2). Therefore, these subsystems are not included in the aging management review summarized in LRA Table 3.3.2-13-15.

RAI 2.3.3.8-9

Section 5.12.6 of the SE discusses the use of a three-hour rated fire protection coating to protect the structural steel supporting the wall and ceiling of diesel generator rooms. The LRA does not list three-hour rated fire protection coating for structural steel. Verify whether the fire protection coating for structural steel is in scope of license renewal in accordance with 10 CFR 54.4(a) and subject to an AMR in accordance with 10 CFR 54.21(a)(1). If fire protection coating is excluded from the scope of license renewal and not subject to an AMR, please provide justification for the exclusion.

RAI 2.3.3.8-9 Response

Subsequent to the January 17, 1978, NRC Safety Evaluation (the SE), VYNPS notified the NRC (in letter WVY 78-85) that a protective coating with a "fire resistant rating of approximately 1-hour", would be utilized for the structural steel supporting the roof and ceiling. This is based on

the conclusion that a fire in one diesel generator room will not result in structural damage that could result in fire spread to the other room. The fire retardant coatings are in scope and subject to aging management review and are included in the line item "Fire proofing" in LRA Tables 2.4-6 and 3.5.2-6.

RAI 2.3.3.8-10

LRA Table 2.3.3-8 excludes several types of fire protection components that appears in the SE and its supplements and/or updated final safety analysis report (UFSAR), and which appear in the LRA drawings colored in purple. These components are listed below.

- hose stations
- hose connections
- hose racks
- pipe fittings
- pipe supports
- couplings
- threaded connections
- flexible hoses
- restricting orifices
- interface flanges
- chamber housings
- heat-actuated devices
- gauge snubbers
- tank heaters
- thermowells
- water motor alarms
- fire hydrants (casing)
- sprinkler heads
- dikes (contain oil spill)
- flame retardant coating for cables
- fire barrier penetration seals
- fire barrier walls, ceilings, floors, and slabs
- fire doors
- fire rated enclosures
- fire retardant coating for structural steel supporting walls and ceilings

For each, determine whether the component should be included in Table 2.3.3.8, and if not, please justify the exclusion.

RAI 2.3.3.8-10 Response

- hose stations – Since they support criterion (a)(3) equipment, hose stations are included in the structural aging management review. They are included in the "Fire hose reels" line item in LRA Table 2.4-6.

- hose connections – Hose connections are included in the "Piping" line item in LRA Table 2.3.3-8.

- hose racks – Since they support criterion (a)(3) equipment, hose racks are included in the structural aging management review. They are included in the "Fire hose reels" line item in LRA Table 2.4-6.

- pipe fittings – As stated in LRA section 2.0, the term "piping" in component lists may include pipe, pipe fittings (such as elbows and reducers), flow elements, orifices, and thermowells. Pipe fittings are included in the "Piping" line item in LRA Table 2.3.3-8.

- pipe supports – Since they support criterion (a)(3) equipment, piping supports are included in the structural aging management review. They are included in the "Component and piping supports" line item in LRA Table 2.4-6.

- couplings – As stated in LRA section 2.0, the term "piping" in component lists may include pipe, pipe fittings (such as elbows and reducers), flow elements, orifices, and thermowells. Couplings are pipe fittings included in the "Piping" line item in LRA Table 2.3.3-8.

- threaded connections – As stated in LRA section 2.0, the term "piping" in component lists may include pipe, pipe fittings (such as elbows and reducers), flow elements, orifices, and thermowells. Threaded connections are pipe fittings included in the "Piping" line item in LRA Table 2.3.3-8.

- flexible hoses – Hoses are replaced on a specified periodicity and therefore, are not subject to aging management review per 10CFR54.21(a)(1)(ii).

- restricting orifices – As stated in LRA section 2.0, the term "piping" in component lists may include pipe, pipe fittings (such as elbows and reducers), flow elements, orifices, and thermowells. Restricting orifices are included in the "Piping" line item in LRA Table 2.3.3-8.

- interface flanges – As stated in LRA section 2.0, the term "piping" in component lists may include pipe, pipe fittings (such as elbows and reducers), flow elements, orifices, and thermowells. Interface flanges are pipe fittings included in the "Piping" line item in LRA Table 2.3.3-8.

- chamber housings – As shown on LRA drawing LRA-G-191163-SH-01-0, the turbine building lube oil room sprinkler system includes a retard chamber, piping, and valves whose purpose is to prevent false alarms due to system pressure surges and to provide a flow path to the water gong alarm during system actuation. Since failure of these components downstream of valve DV-76-200D would not prevent fire suppression capability for the lube oil room sprinkler system, they are not subject to aging management review.

- heat-actuated devices – As stated in Section 10.11.3 of the UFSAR, the pre-action fire protection subsystems for the hydrogen seal oil area and the turbine building condenser and heater bay area have heat-actuated devices to initiate opening of the deluge valves. Heat-actuated devices are active components; not subject to aging management review.

- gauge snubbers – Gauge snubbers are integral parts of tubing runs that protect instrumentation from pressure surges. Gauge snubbers in tubing runs to instruments are included in the "tubing" line item in LRA Table 2.3.3-8.

- tank heaters – Neither the SE and its supplements nor the UFSAR discuss tank heaters. Tank heaters do not appear on the LRA drawings colored in purple. VYNPS does not have fire water storage tanks and the foam concentrate tanks do not have heaters. Therefore, the fire protection – water system does not have tank heaters.

- thermowells – As stated in LRA section 2.0, the term "piping" in component lists may include pipe, pipe fittings (such as elbows and reducers), flow elements, orifices, and thermowells. Thermowells are included in the "Piping" line item in LRA Table 2.3.3-8.

- water motor alarms – This response assumes that reviewer means water flow alarms which are provided in critical locations and annunciate in the control room to provide positive indication of fire water system operation. Water flow alarms are active components; not subject to aging management review.

- fire hydrants (casing) – As described in response to RAI 2.3.3.8-1, the yard fire hydrants are not subject to aging management review.

- sprinkler heads – Sprinkler heads are included in the "Flow nozzle" line item in LRA Table 2.3.3-8.

- dikes (contain oil spill) – Dikes are included in the structural aging management review. They are included in the "Flood curb" line items in LRA Table 2.4-6.

- flame retardant coating for cables – As described in response to RAI 2.3.3.8-3, flame retardant (flamemastic) coatings are subject to aging management review and are included in the line item "Fire wrap" in LRA Table 2.4-6. Flamemastic was inadvertently omitted from the list of materials for the line item "Fire wrap" in LRA Table 3.5.2-6.

- fire barrier penetration seals – Fire barrier penetration seals are included in the structural aging management review. They are included in the "Penetration sealant (fire, flood, radiation)" line item in Table 2.4-6.

- fire barrier walls, ceilings, floor, and slabs – Fire barrier walls, ceilings, floor, and slabs are included in the structural aging management review. They are included in the concrete line items in Tables 2.4-2 through 2.4-4.

- fire doors – Fire doors are included in the structural aging management review. They are included in the "Fire doors" line item in Table 2.4-6.

- fire rated enclosures – As stated in section 5.17.1 of the SE, the diesel day tank for the fire pump is located in a separate three-hour fire rated enclosure. This enclosure consists of concrete block walls in the intake structure and is included in the structural aging management review. It is included in the "Masonry walls" line item in Table 2.4-3.

- fire retardant coating for structural steel supporting wall and ceiling – As described in response to RAI 2.3.3.8-9, fire retardant (flamemastic) coatings are subject to aging management review and are included in the line item "Fire wrap" in LRA Table 2.4-6. Flamemastic was inadvertently omitted from the list of materials for the line item "Fire wrap" in LRA Table 3.5.2-6.

RAI 2.3.3.8-11

LRA Table 2.3.3-8 listed flow nozzles (flow control) as within scope and subject to an AMR, but does not list spray nozzles (water). Please explain why the water spray nozzles are not subject to an AMR.

RAI 2.3.3.8-11 Response

Water spray nozzles are in scope and subject to aging management review. They are included in the line item "Flow nozzles" in LRA Table 2.3.3-8.

RAI 2.3.3.9-1

Sections 3.1.5 and 4.3.2 of the SE discusses a total flooding carbon dioxide (CO_2) system for the cable spreading area, battery room, and diesel driven fire water pump tank room. The LRA does not list the CO_2 system for the cable spreading area, battery room, and diesel driven fire water pump tank room. Verify whether the CO_2 system and its components are in scope of license renewal in accordance with 10 CFR 54.4(a) and subject to an AMR in accordance with 10 CFR 54.21(a)(1). If they are excluded from the scope of license renewal and not subject to an AMR, please provide justification for the exclusion.

RAI 2.3.3.9-1 Response

As described in Section 2.3.3.9 of the LRA, the cable vault and switchgear rooms are protected by fully automatic total flooding carbon dioxide suppression systems initiated by ionization detectors. Bottles located in the west switchgear room may also provide a backup or second shot to the cable vault if desired. The diesel fire pump fuel oil storage tank room is protected by a total flooding carbon dioxide suppression system initiated by heat detectors.

As further described in LRA Section 2.3.3.9, The FP–CO_2 system is within the scope of license renewal and has the following intended function for 10 CFR 54.4(a)(3).

- Provide the capability to extinguish fires in vital areas of the plant (10 CFR 50.48).

The cable vault is the area referred to in the SE as the cable spreading area and battery room. Therefore, the CO_2 systems for the cable spreading area, battery room, and diesel driven fire water pump tank room are in scope and subject to aging management review.

RAI 2.3.3.9-2

LRA Table 2.3.3-9 excludes several types of CO_2 fire suppression system components that appear in the SE and its supplements and/or UFSAR, and which also appear in the LRA drawings colored in purple. These components are listed below.

- strainer housings

- pipe fittings
- pipe supports
- couplings
- odorizer
- threaded connections
- flexible hose
- latch door pull box
- pneumatic actuators
- CO_2 bottles (CO_2 storage cylinders)

For each, determine whether the component should be included in Table 2.3.3.9, and if not, please justify the exclusion.

RAI 2.3.3.9-2 Response

- strainer housings – The CO_2 fire protection storage tank (TK-115-1) recirculation heater pump suction strainer (S-76-3) shown on LRA drawing LRA-G-191163-SH-03-0 has both filtration and pressure boundary functions. The strainer and its housing are both included in the "Strainer" line item in LRA Table 2.3.3-9.

- pipe fittings – As stated in LRA section 2.0, the term "piping" in component lists may include pipe, pipe fittings (such as elbows and reducers), flow elements, orifices, and thermowells. Pipe fittings are included in the "Piping" line item in LRA Table 2.3.3-9.

- pipe supports – Since they support criterion (a)(3) equipment, piping supports are included in the structural aging management review. They are included in the "Component and piping supports" line item in LRA Table 2.4-6.

- couplings – As stated in LRA section 2.0, the term "piping" in component lists may include pipe, pipe fittings (such as elbows and reducers), flow elements, orifices, and thermowells. Couplings are pipe fittings included in the "Piping" line item in LRA Table 2.3.3-9.

- odorizer – Odorizer cylinders (OC-700, 701, 702, and 703) on switchgear room discharge lines are shown on LRA drawing LRA-G-191163-SH-03-0. The odorizer cylinders are included in the "Tank" line item in LRA Table 2.3.3-9.

- threaded connections – As stated in LRA section 2.0, the term "piping" in component lists may include pipe, pipe fittings (such as elbows and reducers), flow elements, orifices, and thermowells. Threaded connections are pipe fittings included in the "Piping" line item in LRA Table 2.3.3-9.

- flexible hose – Hoses are replaced on a specified schedule and therefore, are not subject to aging management review per 10CFR54.21(a)(1)(ii).

- latch door pull box – This response assumes the reviewer means emergency manual release stations to initiate CO_2 flow. Manual release stations are active components; not subject to aging management review.

- pneumatic actuators – Pneumatic actuators (discharge delay timers) on deluge valves for the switchgear rooms are shown on LRA drawing LRA-G-191163-SH-03-0. Since the actuator subcomponents have a pressure boundary function, they are included in the line items for "Tank", "Valve body", and "Tubing" in Table 2.3.3-9.

- CO_2 bottles (CO_2 storage cylinders) – The CO_2 bottles, or storage cylinders, are included in the line item "Tank" in Table 2.3.3-9.

RAI 2.3.3.9-3

LRA Table 2.3.3-9 listed nozzles with an intended function of flow control as within scope and subject to an AMR. Nozzles with intended functions of total flood, vent, and S nozzles are not listed. Please explain why these nozzles are not subject to an AMR.

RAI 2.3.3.9-3 Response

The total flood nozzles in the CO_2 system are subject to aging management review, as indicated on drawings LRA-G-191163-SH-03-0 and LRA-G-191163-SH-04-0. They are included in the "Nozzle" line item in Table 2.3.3-9. As shown on the LRA drawings the CO_2 system does not have vent or S nozzles.

Attachment 2

Vermont Yankee Nuclear Power Station

License Renewal Application Supplement

Amendment 14

Section B.1.2, BWR CRD Return Line Nozzle
Section B.1.24, Reactor Vessel Surveillance

RAI Responses

RAI B.1.24-1
RAI B.1.24-2
RAI B.1.2-1
RAI B.1.2-2
RAI 4.2-1

RAI B.1.24-1

The applicant, in the updated final safety analysis report (UFSAR) supplement A.2.1.26, "Reactor Vessel Surveillance Program," and in the aging management program (AMP) B.1.24, "Reactor Vessel Surveillance," states that it will implement the Boiling Water Reactor Vessel and Internals Project (BWRVIP) Integrated Surveillance Program (ISP) at the Vermont Yankee Nuclear Power Station (VYNPS) as specified in the BWRVIP-116 report, "BWR Vessel and Internals Project Integrated Surveillance Program Implementation for License Renewal." By letter dated March 1, 2006, the staff issued the final safety evaluation (SE) for the BWRVIP-116 report and therefore, the staff requests that the applicant include the following commitment (shown in bold underlined font) in UFSAR supplement Section A.2.1.26 and in AMP B.1.24 of the license renewal application (LRA).

> **The BWRVIP-116 report which was approved by the staff will be implemented at VYNPS with the conditions documented in Sections 3 and 4 of the staff's final SE dated March 1, 2006, for the BWRVIP-116 report.**

RAI B.1.24-1 Response

VYNPS makes the following commitment with the expectation that the BWR Owners Group (BWROG) will implement the conditions documented in the Staff's SER for BWRVIP-116 into the BWRVIP Integrated Surveillance Program. This commitment will need to be re-evaluated should the BWROG take exception to the conditions documented in the Staff's SER for BWRVIP-116.

The following statement is added to LRA Sections A.2.1.26, "Reactor Vessel Surveillance Program," and B.1.24, "Reactor Vessel Surveillance."

"The BWRVIP-116 report which was approved by the Staff will be implemented at VYNPS with the conditions documented in Sections 3 and 4 of the Staff's final SE dated March 1, 2006, for the BWRVIP-116 report."

RAI B.1.24-2

Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, Appendix H requires that an ISP used as a basis for a licensee implemented reactor vessel surveillance program be reviewed and approved by the U. S. Nuclear Regulatory Commission staff. The ISP to be used by the applicant is a program that was developed by the BWRVIP. The applicant will apply the BWRVIP ISP as the method by which the VYNPS will comply with the requirements of 10 CFR Part 50, Appendix H. The BWRVIP ISP identifies capsules that must be tested to monitor neutron radiation embrittlement for all licensees participating in the ISP and identifies capsules that need not be tested (standby capsules). Table 3-3 of the BWRVIP-116 report indicates that the standby capsule from the VYNPS unit is not to be tested. This untested capsule was originally part of the applicant's plant-specific surveillance program and has received significant amounts of neutron radiation.

The staff requests that the applicant include the following commitment (shown in bold underlined font) in the UFSAR supplement Section A.2.1.26 and in AMP B.1.24 of the LRA.

If the VYNPS standby capsule is removed from the RPV without the intent to test it, the capsule will be stored in a manner which maintains it in a condition which would permit its future use, including during the period of extended operation, if necessary.

RAI B.1.24-2 Response

The following statement is added to LRA Section A.2.1.26, "Reactor Vessel Surveillance Program."

"If the VYNPS standby capsule is removed from the reactor vessel without the intent to test it, the capsule will be stored in a manner which maintains it in a condition which would permit its future use, including during the period of extended operation, if necessary."

RAI B.1.2-1

The applicant states that the Control Rod Drive (CRD) return line nozzle has been capped at VYNPS. The staff requests that the applicant provide the following information regarding the cap and the weld.

(1) Describe the configuration, location and material of construction of the capped nozzle. This should include the existing base material for the nozzle, piping (if piping remnants exist) and cap material, and any welds.

(2) Describe how the aging effects for this weld and the cap are managed in accordance with the guidelines of BWRVIP-75, "BWR Vessel and Internals Project (BWRVIP), Technical Basis for Revisions to Generic Letter 88-01 Inspection Schedule."

(3) Discuss whether the event at Pilgrim (leaking weld at capped nozzle, September 30, 2003) is applicable to VYNPS. The staff issued Information Notice 2004-08, "Reactor Coolant Pressure Boundary Leakage Attributable to Propagation of Cracking in Reactor Vessel Nozzle Welds," dated April 22, 2004, which states that the cracking occurred in an Alloy 182 weld that was previously repaired extensively. Discuss experience with previous leakage at the VYNPS capped nozzle, if any. Include in your discussion the past inspection techniques applied, the results obtained, and mitigative strategies imposed. Provide information as to how the plant-specific experience related to this aging effect impacts the attributes specified in AMP B.1.2, "BWR CRD Return line Nozzles."

RAI B.1.2-1 Response

(1) VYNPS removed the piping and thermal sleeve; no portion of the piping remains. A cap made of SA182 Grade 316L (FSAR Table 4.2-1) was full penetration welded to the nozzle safe end. The weld filler material is ER 316L and the nozzle side buttering is ER 308L. The weld material used on the N9-SE nozzle weld is low carbon, non-IGSCC susceptible material. Also, the stainless steel cap with 308L ID weld buttering was solution heat treated after application of the buttering. The nozzle base material is low alloy steel (SA 508 Class 2).

(2) The aging effects for this weld and the cap are managed by the BWR CRD Return Line

Nozzle Program, comparable to NUREG-1801 Program XI.M6. As all piping has been removed from this nozzle, it is no longer governed by BWRVIP-75 and or Generic Letter 88-01, both of which pertain to stainless steel piping.

(3) Evaluation of the applicability to VYNPS of the event at Pilgrim (leaking weld at capped nozzle, September 30, 2003, Information Notice 2004-08) revealed that the likelihood of cracking initiating in Vermont Yankee's N9-SE, in the same manner as the cracking at Pilgrim Station, is negligible. This is due to the non-susceptible material, the mitigation techniques employed, and the absence of repair activity which would have allowed an incipient crack or crevice condition to remain in the weld after repair welding was performed.

The cap to nozzle safe end weld was examined (visual, surface, and volumetric) during and after installation in 1979, this included a 1/3 RT of the weld during installation and RT of the final weld. Inservice inspection has been performed on the line as follows: UT and VT in 1979, PT in 1989, UT and PT in 2002. None of the examinations found any flaws and no repairs were performed during or after installation.

Mitigative actions include the use of non-IGSCC susceptible material for the weld and solution heat treating of the cap as discussed in item (1) above. Other crack mitigation techniques employed at Vermont Yankee are noble metal chemical addition (NMCA) and hydrogen water chemistry (HWC).

Plant-specific experience has not impacted the attributes specified in AMP B.1.2, "BWR CRD Return line Nozzles." Plant-specific experience has not identified any aging effects that were not already identified and considered when NUREG-1801 Section XI.M6 was written.

RAI B.1.2-2

Section 4 of the Generic Aging Lessens Learned Report (GALL) AMP XI.M6, "BWR Control Rod Drive (CRD) Return Line Nozzle," recommends that the aging degradation in the CRD return line nozzles should be monitored per the inspection recommendations specified in NUREG-0619, "BWR Feedwater Nozzle and Control Rod Drive Return Line Nozzle Cracking." Section 8.2(2) of NUREG-0619 recommends that ultrasonic testing (UT) should be performed on the welded connection joining the rerouted CRD return line to the system which then returns the flow to the reactor vessel during each refueling outage.

In a letter dated January 15, 1982, the applicant made a commitment to the staff indicating that it will perform UT examination of the CRD to the reactor water cleanup (RWCU) weld joint as discussed in NUREG-0619 for three consecutive refuel outages. The applicant further stated that upon the completion of these inspections, the inspection frequency will be reassessed based on the inspection results. In AMP B.1.2, "BWR CRD Return Line Nozzle," the applicant stated that it inspected the CRD return line to the RWCU weld joint using UT methods for three consecutive refuel outages and found no indications. Since no indications were found, the applicant intends to take exception to GALL AMP XI.M6, in which the applicant proposes not to inspect the aforementioned weld joint during the extended period of operation. The staff determined that the following information regarding the subject weld is required to complete its review.

(1) The applicant should provide technical justification for not performing the UT examination of the subject weld as recommended by the GALL AMP XI.M6 and NUREG-0619 during the extended period of operation.

(2) The applicant should confirm that the CRD return lines that are connected to RWCU piping system that fall under the jurisdiction of the ASME Code, Section XI boundary will be inspected per the ASME Section XI Code.

RAI B.1.2-2 Response

(1) The recommendations of NUREGs 0619 and 1801 are based on the assumption that this weld has an intended function. NUREG-1801, Section XI.M6.4 states "The intent and schedule of inspection, as delineated in NUREG 0619, assures detection of cracks before loss of intended function . . .".

Drawings LRA-G-191170 and LRA-G-191178 clearly show that neither the CRD return line from the CRD hydraulic system nor the portion of the RWCU piping to which the CRD return line connects are subject to aging management review. They are not subject to aging management review because they are not part of the reactor coolant system pressure boundary and have no license renewal intended function. Because they have no intended function, they do not require volumetric inspection to detect cracks that might cause loss of intended function.

(2) License renewal drawing LRA-G-191170 coordinate H21 shows that the CRD return line (line # 2 ½" CRD-9) is a non-safety related line (Class 0). Therefore, none of the CRD return line receives inspections per the ASME Code, Section XI ISI program.

License renewal drawing LRA-G-191178 shows the CRD return line (line # 2 ½" CRD-9) at coordinates A5-B5, with the connection to the RWCU piping at coordinate B5. This drawing also confirms the connection is Class 0. The connection is well outside the Class 1 piping boundary, which is shown at coordinate C3 of the same drawing. Therefore, consistent with requirements of the ASME Code, Section XI ISI program, the weld of the return line to the RWCU does not receive inspections.

RAI 4.2-1

In Section 4.2.1 of the VYNPS LRA it is stated that "...the reactor fluence ....has been projected to the end of the period of extended operation." In Sections 4.2.1 and 4.2.2 of the LRA there is no discussion of how this extrapolation was performed. Vermont Yankee has been approved for operation at an extended power uprate. In general, power uprates are based on revised axial power profiles with higher axial peaks at a lower axial location. Therefore, extrapolation of the existing axial profile may not provide an accurate projection.

In view of the above, please respond to the following:

(1) Compare the axial power profiles (at the peak power azimuthal location) and confirm that the extrapolation remains valid.

(2) Confirm that the projected operating plan will support the assumed axial power profile to the end of the period of extended operation.

RAI 4.2-1 Response

(1) VYNPS originally performed the fluence extrapolation using a 32 EFPY axial fluence profile provided in GE-NE-0000-2342-R1-NP dated July 2003. The results of this extrapolation were provided in response to RAI 3.1.1-17-P-01[1].

A 60-year (51.6 EFPY) axial fluence profile is available in GE-NE-0000-0014-0292-01 dated May 2003. Both of these profiles were produced by GE as part of the extended power uprate and both are based on the expected plant operating history including the power uprate. The 60-year curve does show the peak fluence lower in the core (75 inches above the bottom of the active fuel (BAF) versus 85 inches), and consequently the 60-year curve has slightly higher fluence below the active fuel in the area of the recirculation inlet nozzles. VYNPS repeated the extrapolation to 54 EFPY for the 32 EFPY curve and extrapolated the 60 year curve from 51.6 to 54 EFPY with the following results.

1/4 T fluence, n/cm^2 (E>1 Mev)

Location	Original Extrapolation from 32 EFPY curve	Revised Extrapolation from 32 curve	Extrapolation from 60-year curve
BAF	9.8E+16	9.8E+16	1.0E+17
BAF + 19%	1.2E+17	1.2E+17	1.2E+17
nozzle	6.7E+16	6.4E+16	7.5E+16
nozzle + 19%	7.9E+16	7.6E+16	9.0E+16

As indicated in this table, the projected fluence at the nozzle is still less than $1x10^{17}$ n/cm^2 (E>1 Mev). Even when 19% is added to the extrapolated value to account for possible error in the calculation as suggested by RAI 3.1.1-17-P-01, all values remain below $1x10^{17}$ n/cm^2

(2) The projected axial fluence profile was based on the projected operating plan, including the extended power uprate; therefore the projected operating plan supports the assumed power distribution to the end of the period of extended operation.

[1] Letter, Entergy to USNRC, "Vermont Yankee Nuclear Power Station, License No. DPR-28, License Renewal Application, Amendment 12," BVY 06-083, dated September 5, 2006.

Attachment 3

Vermont Yankee Nuclear Power Station

License Renewal Application Supplement

Amendment 14

License Renewal Commitment List

Revision 2

VERMONT YANKEE NUCLEAR POWER STATION
LICENSE RENEWAL COMMITMENT LIST
REVISION 2

During the development and review of the Vermont Yankee Nuclear Power Station License Renewal Application, Entergy made commitments to provide aging management programs to manage the effects of aging on structures and components during the extended period of operation. The following table lists these license renewal commitments, along with the implementation schedule and the source of the commitment.

ITEM	COMMITMENT	IMPLEMENTATION SCHEDULE	SOURCE	Related LRA Section No./ Comments
1	Guidance for performing examinations of buried piping will be enhanced to specify that coating degradation and corrosion are attributes to be evaluated.	March 21, 2012	BVY 06-009	B.1.1/Audit Items 5 & 130
2	Fifteen (15) percent of the top guide locations will be inspected using enhanced visual inspection technique, EVT-1, within the first 18 years of the period of extended operation, with at least one-third of the inspections to be completed within the first 6 years and at least two-thirds within the first 12 years of the period of extended operation. Locations selected for examination will be areas that have exceeded the neutron fluence threshold.	As stated in the commitment	BVY 06-009	B.1.7/Audit Item 14
3	The Diesel Fuel Monitoring Program will be enhanced to ensure ultrasonic thickness measurement of the fuel oil storage tank bottom surface will be performed every 10 years during tank cleaning and inspection.	March 21, 2012	BVY 06-009	B.1.9
4	The Diesel Fuel Monitoring Program will be enhanced to specify UT measurements of the fuel oil storage tank bottom surface will have acceptance criterion ≥ 60% Tnom.	March 21, 2012	BVY 06-009	B.1.9
5	The Fatigue Monitoring Program will be modified to require periodic update of cumulative fatigue usage factors (CUFs), or to require update of CUFs if the number of accumulated cycles approaches the number assumed in the design calculation.	March 21, 2012	BVY 06-009	B.1.11
6	A computerized monitoring program (e.g., FatiguePro) will be used to directly determine cumulative fatigue usage factors (CUFs) for locations of interest.	March 21, 2012	BVY 06-009	B.1.11
7	The allowable number of effective transients will be established for monitored transients. This will allow quantitative projection of future margin.	March 21, 2012	BVY 06-009	B.1.11

VERMONT YANKEE NUCLEAR POWER STATION
LICENSE RENEWAL COMMITMENT LIST
REVISION 2

ITEM	COMMITMENT	IMPLEMENTATION SCHEDULE	SOURCE	Related LRA Section No./ Comments
8	Procedures will be enhanced to specify that fire damper frames in fire barriers will be inspected for corrosion. Acceptance criteria will be enhanced to verify no significant corrosion.	March 21, 2012	BVY 06-009	B.1.12.1/Audit Items 35, 151, 152, 153 and 159
9	Procedures will be enhanced to state that the diesel engine sub-systems (including the fuel supply line) will be observed while the pump is running. Acceptance criteria will be enhanced to verify that the diesel engine did not exhibit signs of degradation while it was running; such as fuel oil, lube oil, coolant, or exhaust gas leakage.	March 21, 2012	BVY 06-009	B.1.12.1/Audit Items 33, 150 & 155
10	Fire Water System Program procedures will be enhanced to specify that in accordance with NFPA 25 (2002 edition), Section 5.3.1.1.1, when sprinklers have been in place for 50 years a representative sample of sprinkler heads will be submitted to a recognized testing laboratory for field service testing. This sampling will be repeated every 10 years.	March 21, 2012	BVY 06-009	B.1.12.2
11	The Fire Water System Program will be enhanced to specify that wall thickness evaluations of fire protection piping will be performed on system components using non-intrusive techniques (e.g., volumetric testing) to identify evidence of loss of material due to corrosion. These inspections will be performed before the end of the current operating term and during the period of extended operation. Results of the initial evaluations will be used to determine the appropriate inspection interval to ensure aging effects are identified prior to loss of intended function.	March 21, 2012	BVY 06-009	B.1.12.2/Audit Items 37 & 41
12	Implement the Heat Exchanger Monitoring Program as described in LRA Section B.1.14.	March 21, 2012	BVY 06-009	B.1.14
13	Implement the Non-EQ Inaccessible Medium-Voltage Cable Program as described in LRA Section B.1.17.	March 21, 2012	BVY 06-009	B.1.17
14	Implement the Non-EQ Instrumentation Circuits Test Review Program as described in LRA Section B.1.18.	March 21, 2012	BVY 06-009	B.1.18
15	Implement the Non-EQ Insulated Cables and Connections Program as described in LRA Section B.1.19.	March 21, 2012	BVY 06-009	B.1.19

VERMONT YANKEE NUCLEAR POWER STATION
LICENSE RENEWAL COMMITMENT LIST
REVISION 2

ITEM	COMMITMENT	IMPLEMENTATION SCHEDULE	SOURCE	Related LRA Section No./ Comments
16	Implement the One-Time Inspection Program as described in LRA Section B.1.21. Include destructive or non-destructive examination of one (1) socket welded connection using techniques proven by past industry experience to be effective for the identification of cracking in small bore socket welds. Should an inspection opportunity not occur (e.g., socket weld failure or socket weld replacement), a susceptible small-bore socket weld will be examined either destructively or non-destructively prior to entering the period of extended operation.	March 21, 2012	BVY 06-009	B.1.21 Audit Items 239, 240, 330, 331
17	Enhance the Periodic Surveillance and Preventive Maintenance Program to assure that the effects of aging will be managed as described in LRA Section B.1.22.	March 21, 2012	BVY 06-009	B.1.22 Audit Item 377
18	Enhance the Reactor Vessel Surveillance Program to proceduralize the data analysis, acceptance criteria, and corrective actions described in the program description in LRA Section B.1.24.	March 21, 2012	BVY 06-009	B.1.24
19	Implement the Selective Leaching Program as described in LRA Section B.1.25.	March 21, 2012	BVY 06-009	B.1.25
20	Enhance the Structures Monitoring Program to specify that process facility crane rails and girders, condensate storage tank (CST) enclosure, CO_2 tank enclosure, N_2 tank enclosure and restraining wall, CST pipe trench, diesel generator cable trench, fuel oil pump house, service water pipe trench, man-way seals and gaskets, and hatch seals and gaskets are included in the program.	March 21, 2012	BVY 06-009	B.1.27.2 Audit Item 377
21	Guidance for performing structural examinations of wood to identify loss of material, cracking, and change in material properties will be added to the Structures Monitoring Program.	March 21, 2012	BVY 06-009	B.1.27.2
22	Guidance for performing structural examinations of elastomers (seals and gaskets) to identify cracking and change in material properties (cracking when manually flexed) will be enhanced in the Structures Monitoring Program procedure.	March 21, 2012	BVY 06-009	B.1.27.2
23	Guidance for performing structural examinations of PVC cooling tower fill to identify cracking and change in material properties will be added to the Structures Monitoring Program procedure.	March 21, 2012	BVY 06-009	B.1.27.2

VERMONT YANKEE NUCLEAR POWER STATION
LICENSE RENEWAL COMMITMENT LIST
REVISION 2

ITEM	COMMITMENT	IMPLEMENTATION SCHEDULE	SOURCE	Related LRA Section No./ Comments
24	System walkdown guidance documents will be enhanced to perform periodic system engineer inspections of systems in scope and subject to aging management review for license renewal in accordance with 10 CFR 54.4 (a)(1) and (a)(3). Inspections shall include areas surrounding the subject systems to identify hazards to those systems. Inspections of nearby systems that could impact the subject system will include SSCs that are in scope and subject to aging management review for license renewal in accordance with 10 CFR 54.4 (a)(2).	March 21, 2012	BVY 06-009	B.1.28 Audit Items 187, 188 & 190
25	Implement the Thermal Aging and Neutron Irradiation Embrittlement of Cast Austenitic Stainless Steel (CASS) Program as described in LRA Section B.1.29.	March 21, 2012	BVY 06-009	B.1.29
26	Procedures will be enhanced to flush the John Deere Diesel Generator cooling water system and replace the coolant and coolant conditioner every three years.	March 21, 2012	BVY 06-009	B.1.30.1 Audit Items 84 & 164
27	For each location that may exceed a CUF of 1.0 when considering environmental effects, VYNPS will implement one or more of the following: (1) further refinement of the fatigue analyses to lower the predicted CUFs to less than 1.0; (2) management of fatigue at the affected locations by an inspection program that has been reviewed and approved by the NRC (e.g., periodic non-destructive examination of the affected locations at inspection intervals to be determined by a method acceptable to the NRC); (3) repair or replacement of the affected locations. Should VYNPS select the option to manage environmental-assisted fatigue during the period of extended operation, details of the aging management program such as scope, qualification, method, and frequency will be provided to the NRC two years prior to the period of extended operation for review and approval.	March 21, 2012 March 21, 2010 for performing a fatigue analysis that addresses the effects of reactor coolant environment on fatigue (in accordance with an NRC approved version of the ASME Code)	BVY-06-058	4.3.3 Audit Items 29, 107 & 318
28	Revise program procedures to indicate that the Instrument Air Program will maintain instrument air quality in accordance with ISA S7.3	March 21, 2012	BVY 06-009	B.1.16 Audit Item 47

VERMONT YANKEE NUCLEAR POWER STATION
LICENSE RENEWAL COMMITMENT LIST
REVISION 2

ITEM	COMMITMENT	IMPLEMENTATION SCHEDULE	SOURCE	Related LRA Section No./ Comments
29	VYNPS will perform one of the following: 1. Install core plate wedges, or, 2. Complete a plant-specific analysis to determine acceptance criteria for continued inspection of core plate hold down bolting in accordance with BWRVIP-25 and submit the inspection plan to the NRC two years prior to the period of extended operation for NRC review and approval.	March 21, 2012	BVY 06-009	B.1.7/ Audit Item 9
30	Revise System Walkdown Program to specify CO2 system inspections every 6 months.	March 21, 2012	BVY 06-009	B.1.28 Audit Items 30, 141, 146 & 298
31	Revise Fire Water System Program to specify annual fire hydrant gasket inspections and flow tests.	March 21, 2012	BVY 06-009	B.1.12.2 Audit Items 39 & 40
32	Implement the Metal Enclosed Bus Program. (Details to be provided in a LRA Amendment)	March 21, 2012	BVY 06-058	Audit Item 97
33	Include within the Structures Monitoring Program provisions that will ensure an engineering evaluation is made on a periodic basis of groundwater samples to assess aggressiveness of groundwater to concrete.	March 21, 2012	BVY 06-009	B.1.27 Audit Item 77
34	Implement the Bolting Integrity Program. Details to be provided in a LRA Amendment with specific locations in the LRA referenced.	March 21, 2012	BVY 06-058	Audit Items 198, 216, 218, 237, 331 & 333
35	Provide within the System Walkdown Training Program a process to document biennial refresher training of Engineers to demonstrate inclusion of the methodology for aging management of plant equipment as described in EPRI Aging Assessment Field Guide or comparable instructional guide.	March 21, 2012	BVY 06-058	Audit Item 384
36	If technology to inspect the hidden jet pump thermal sleeve and core spray thermal sleeve welds has not been developed and approved by the NRC at least two years prior to the period of extended operation, VYNPS will initiate plant-specific action to resolve this issue. That plant specific action may be justification that the welds do not require inspection.	March 21, 2010	BVY06-058	Audit Item 12

VERMONT YANKEE NUCLEAR POWER STATION
LICENSE RENEWAL COMMITMENT LIST
REVISION 2

ITEM	COMMITMENT	IMPLEMENTATION SCHEDULE	SOURCE	Related LRA Section No./ Comments
37	Continue inspections in accordance with the Steam Dryer Monitoring Program, Revision 3 in the event that the BWRVIP-139 is not approved prior to the period of extended operation.	March 21, 2010	BVY 06-079	Audit Item 204
38	The BWRVIP-116 report which was approved by the Staff will be implemented at VYNPS with the conditions documented in Sections 3 and 4 of the Staff's final SE dated March 1, 2006, for the BWRVIP-116 report."	March 21, 2012	BVY 06-088	Response to RAI B.1.24-1
39	"If the VYNPS standby capsule is removed from the reactor vessel without the intent to test it, the capsule will be stored in a manner which maintains it in a condition which would permit its future use, including during the period of extended operation, if necessary."	March 21, 2012	BVY 06-088	Response to RAI B.1.24-2