

NUCLEAR REGULATORY COMMISSION

[Docket No. 50-271; NRC-2016-0017]

Entergy Nuclear Operations, Inc.

Vermont Yankee Nuclear Power Station

AGENCY: Nuclear Regulatory Commission

ACTION: Exemption; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is issuing an exemption in response to a letter from Entergy Nuclear Operations, Inc. (ENO), dated April 17, 2014, requesting an exemption from the NRC's regulations regarding the required level of primary financial protection. An exemption from these regulations would permit Vermont Yankee Nuclear Power Station (VY) to reduce the required level of primary financial protection from \$375,000,000 to \$100,000,000, and to withdraw from participation in the secondary layer of financial protection, no earlier than April 15, 2016.

DATE: April 25, 2016

ADDRESSES: Please refer to Docket ID **NRC-2016-0017** when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this document using any of the following methods:

- **Federal Rulemaking Web Site:** Go to <http://www.regulations.gov> and search for Docket ID **NRC-2016-0017**. Address questions about NRC dockets to Carol Gallagher;

telephone: 301-415-3463; e-mail: Carol.Gallagher@nrc.gov. For technical questions, contact the individual listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- **NRC's Agencywide Documents Access and Management System (ADAMS):**

You may obtain publicly-available documents online in the ADAMS Public Documents collection at <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "[ADAMS Public Documents](#)" and then select "[Begin Web-based ADAMS Search](#)." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdr.resource@nrc.gov. The ADAMS Accession number for each document referenced (if it is available in ADAMS) is provided the first time that a document is referenced.

- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

FOR FURTHER INFORMATION CONTACT: Jack D. Parrott, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-6634, e-mail: Jack.Parrott@nrc.gov.

I. Background

The VY site is a single unit facility located near the town of Vernon, Vermont. The site is situated in Windham County on the western shore of the Connecticut River, immediately upstream of the Vernon Hydroelectric Station. The VY facility employs a General Electric boiling water reactor nuclear steam supply system licensed to generate 1,912 megawatts-thermal. The boiling water reactor and supporting facilities are owned and operated by Entergy

Vermont Yankee, a subsidiary of ENO. The licensee, ENO, is the holder of the Vermont Yankee Renewed Facility Operating License No. DPR-28. The license provides, among other things, that the facility is subject to all rules, regulations, and orders of the NRC now or hereafter in effect.

By letter dated September 23, 2013 (ADAMS Accession No. ML13273A204), ENO submitted a notification to the NRC indicating that it would permanently shut down Vermont Yankee in the fourth calendar quarter of 2014. On December 29, 2014, ENO permanently ceased power operations at VY. On January 12, 2015, ENO certified that it had permanently defueled the Vermont Yankee reactor vessel and placed the fuel in the Spent Fuel Pool (SFP) (ADAMS Accession No. ML15013A426). Accordingly, pursuant to § 50.82(a)(2) of title 10 of the *Code of Federal Regulations* (10 CFR), the VY renewed facility operating license no longer authorizes operation of the reactor or emplacement or retention of fuel in the reactor vessel. However, the licensee is still authorized to possess and store irradiated nuclear fuel. Irradiated fuel is currently being stored onsite in a SFP and in independent spent fuel storage installation dry casks.

II. Request/Action

Pursuant to 10 CFR 140.8, "Specific exemptions," ENO has requested an exemption from 10 CFR 140.11(a)(4), by letter dated April 17, 2014 (ADAMS Accession No. ML14111A400). The exemption from 10 CFR 140.11(a)(4) would permit the licensee to reduce the required level of primary financial protection from \$375,000,000 to \$100,000,000, and to withdraw from participation in the secondary layer of financial protection (also known as the secondary retrospective rating pool for deferred premium charges), no earlier than April 15, 2016.

The regulation in 10 CFR 140.11(a)(4) requires each licensee to have and maintain financial protection. For a single unit reactor site, which has a rated capacity of 100,000 kilowatts electric or more, 10 CFR 140.11(a)(4) requires the licensee to maintain \$375 million in primary financial protection. In addition, the licensee is required to participate in a secondary retrospective rating pool (secondary financial protection) that commits each licensee to additional indemnification for damages that may exceed primary insurance coverage. Participation in the secondary retrospective rating pool could potentially subject ENO to deferred premium charges up to a maximum total deferred premium of \$121,255,000 with respect to any nuclear incident at any operating nuclear power plant, and up to a maximum annual deferred premium of \$18,963,000 per incident.

The licensee states that the risk of an offsite radiological release is significantly lower at a nuclear power reactor that has permanently shut down and defueled, when compared to an operating power reactor. Similarly, it states that the associated risk of offsite liability damages that require insurance indemnification is commensurately lower for permanently shut down and defueled plants. The licensee has therefore requested an exemption from 10 CFR 140.11(a)(4) to allow a reduction in offsite liability insurance coverage commensurate with the significantly reduced risks associated with a permanently defueled reactor.

III. Discussion

Pursuant to 10 CFR 140.8, the Commission may, upon application of any interested person or upon its own initiative, grant such exemptions from the requirements of the regulations in 10 CFR part 140, when the exemptions are authorized by law and are otherwise in the public interest. The NRC staff has reviewed ENO's request for an exemption from

10 CFR 140.11(a)(4) and has concluded that the requested exemption is authorized by law and is otherwise in the public interest.

The Price Anderson Act of 1957 (PAA) requires that nuclear power reactor licensees have insurance to compensate the public for damages arising from a nuclear incident. Specifically, the PAA requires licensees of facilities with a “rated capacity of 100,000 electrical kilowatts or more” to maintain the maximum amount of primary offsite liability insurance commercially available (currently, \$375,000,000) and a specified amount of secondary insurance coverage (currently, up to \$121,255,000 per reactor). In the event of an accident causing offsite damages in excess of \$375,000,000, each licensee would be assessed a prorated share of the excess damages, up to \$121,255,000 per reactor, for a total of approximately \$13 billion per nuclear incident. The NRC’s regulations at 10 CFR 140.11(a)(4) implement these PAA insurance requirements and set forth the amount of primary and secondary insurance each power reactor licensee must have.

As noted above, the PAA requirements with respect to primary and secondary insurance, and the implementing regulations at 10 CFR 140.11(a)(4), apply to licensees of facilities with a “rated capacity of 100,000 electrical kilowatts or more.” When the NRC issues a license amendment to a decommissioning licensee to reflect the defueled status of the facility, the license amendment includes removal of the rated capacity of the reactor from the license. Accordingly, a reactor that is undergoing decommissioning has no “rated capacity.” Removal of the rated capacity from the facility of a decommissioning licensee, thus, allows the NRC to take the reactor licensee out of the category of reactor licensees that are required to maintain the maximum available insurance and to participate in the secondary retrospective insurance pool under the PAA, subject to a technical finding that lesser potential hazards exist at the facility after termination of operations.

The financial protection limits of 10 CFR 140.11(a)(4) were established to require a licensee to maintain sufficient insurance, as specified under the PAA, to satisfy liability claims by members of the public for personal injury, property damage, and the legal cost associated with lawsuits, as the result of a nuclear accident at an operating reactor with a rated capacity of 100,000 kilowatts electric (or greater). Thus, the insurance levels established by this regulation, as required by the PAA, were associated with the risks and potential consequences of an accident at an operating reactor with a rated capacity of 100,000 kilowatts electric (or greater). The legal and associated technical basis for granting exemptions from 10 CFR part 140 is set forth in SECY-93-127. The legal analysis underlying SECY-93-127 concluded that, upon a technical finding that lesser potential hazards exist after termination of operations (and removal of the rated capacity), the Commission has the discretion under the PAA to reduce the amount of insurance required of a licensee undergoing decommissioning.

As a technical matter, the fact that a reactor has permanently ceased operation is not itself determinative as to whether a licensee may cease providing the offsite liability coverage required by the PAA and 10 CFR 140.11(a)(4). In light of the presence of freshly discharged irradiated fuel in the spent fuel pool at a recently shutdown reactor, the primary consideration is the risk of offsite radiological release from a zirconium fire. That risk generally remains for about 15 to 18 months of decay time for the fuel used in the last cycle of power operation. After that time, the offsite consequences of an offsite radiological release from a zirconium fire are negligible for shutdown reactors, but the spent fuel pool is still operational and an inventory of radioactive materials still exists onsite. Therefore, an evaluation of the potential for offsite damage is necessary to determine the appropriate level of offsite insurance post shutdown, in accordance with the Commission's discretionary authority under the PAA to establish an appropriate level of required financial protection for such shutdown facilities.

The NRC staff has conducted an evaluation and concluded that, aside from the handling, storage, and transportation of spent fuel and radioactive materials for a permanently shut down and defueled reactor, no reasonably conceivable potential accident exists that could cause significant offsite damage. During normal power reactor operations, the forced flow of water through the Reactor Coolant System (RCS) removes heat generated by the reactor. The RCS transfers this heat away from the reactor core by converting reactor feedwater to steam, which then flows to the main turbine generator to produce electricity. Most of the accident scenarios postulated for operating power reactors involve failures or malfunctions of systems that could affect the fuel in the reactor core, which in the most severe postulated accidents, would involve the release of large quantities of fission products. With the permanent cessation of reactor operations at VY and the permanent removal of the fuel from the reactor core, such accidents are no longer possible. The reactor, RCS, and supporting systems no longer operate and have no function related to the storage of the irradiated fuel. Therefore, postulated accidents involving failure or malfunction of the reactor, RCS, or supporting systems are no longer applicable.

During reactor decommissioning, the principal radiological risks are associated with the storage of spent fuel onsite. On a case-by-case basis, licensees undergoing decommissioning have been granted permission to reduce the required amount of primary offsite liability insurance coverage from \$375,000,000 to \$100,000,000 and to withdraw from the secondary insurance pool.¹ One of the technical criteria for granting the exemption is that the possibility of a design-basis event that could cause significant offsite damage has been eliminated. In its April 17, 2014, exemption request, ENO describes both design-basis and beyond-design-basis events involving irradiated fuel stored in the SFP. The staff independently evaluated the offsite

¹ See Memorandum from William D. Travers, Executive Director for Operations, to the Commission (August 16, 2002) (ADAMS Accession No. ML030550706).

consequences associated with various decommissioning activities, design basis accidents, and beyond design basis accidents at VY, in consideration of its permanently shut down and defueled status. The possible design-basis and beyond design basis accident scenarios at VY show that the radiological consequences of these accidents are greatly reduced at a permanently shut down and defueled reactor, in comparison to a fueled reactor. Further, the staff has used the offsite radiological release limits established by the U.S. Environmental Protection Agency (EPA) early-phase Protective Action Guidelines (PAGs) of one roentgen equivalent man (rem) at the exclusion area boundary in determining that any possible radiological releases would be minimal and would not require precautionary protective actions (e.g., sheltering in place or evacuation), which could result in offsite liability.

The only design-basis accident that could potentially result in an offsite radiological release at VY, following its permanent shutdown and defueling, is a Fuel Handling Accident (FHA). However, ENO performed an analysis demonstrating that 17 days after shutdown, the radiological consequences of a FHA would not exceed the limits established by the EPA PAGs at the exclusion area boundary. Accordingly, based on the time that VY has been permanently shutdown (approximately 15 months), the staff has determined that the possibility of an offsite radiological release from a design-basis accident that could exceed the EPA PAGs has been eliminated. Therefore, any offsite consequence from a design basis radiological release is unlikely, and a significant amount of offsite liability insurance coverage is not required.

The only beyond design-basis event that has the potential to lead to a significant radiological release at a permanently shut down and defueled (decommissioning) reactor is a zirconium fire. The zirconium fire scenario is a postulated, but highly unlikely, accident scenario that involves the loss of water inventory from the SFP, resulting in a significant heat-up of the spent fuel and culminating in substantial zirconium cladding oxidation and fuel damage. The probability of a zirconium fire scenario is related to the decay heat of the irradiated fuel stored in

the SFP. Therefore, the risks from a zirconium fire scenario continue to decrease as a function of the time that VY has been permanently shut down. The licensee's adiabatic heat-up analyses demonstrate that as of April 15, 2016, there would be at least 10 hours after the loss of all means of cooling (both air and/or water), before the spent fuel cladding would reach a temperature where the potential for a significant offsite radiological release could occur. The NRC staff has confirmed the reduced risks at VY by comparing the generic risk assumptions in the analyses in NUREG-1738, "Technical Study of Spent Fuel Pool Accident Risk at Decommissioning Nuclear Power Plants," dated February 28, 2001 (ADAMS Accession No. ML010430066) to site-specific conditions at VY; based on this assessment, the staff determined that the risk values in NUREG-1738 bound the risks presented by VY. As indicated by the results of research conducted for NUREG-1738 and more recently, for NUREG-2161, "Consequence Study of a Beyond-Design-Basis Earthquake Affecting the Spent Fuel Pool for a U.S. Mark I Boiling Water Reactor" (ADAMS Accession No. ML14255A365), ENO's analysis of a beyond-design-basis accident involving a complete loss of SFP water inventory, where adequate fuel handling building air exchange with the environment and air cooling of the stored fuel are available, the analyses show that within 15.4 months after shutdown, air cooling of the spent fuel assemblies was sufficient to keep the fuel within a safe temperature range, indefinitely, without fuel cladding damage or offsite radiological release.

In this regard, one technical criterion for relieving decommissioning reactor licensees from the insurance obligations applicable to an operating reactor is a finding that the heat generated by the SFP has decayed to the point where the possibility of a zirconium fire is highly unlikely. This was addressed in SECY-93-127, where the NRC staff concluded that there was a low likelihood and reduced short-term public health consequences of a zirconium fire once a decommissioning plant's spent fuel has sufficiently decayed. In its Staff Requirements Memorandum "Financial Protection Required of Licensees of Large Nuclear Power Plants

during Decommissioning,” dated July 13, 1993 (ADAMS Accession No. ML003760936), the Commission approved a policy that authorized, through the exemption process, withdrawal from participation in the secondary insurance layer and a reduction in commercial liability insurance coverage to \$100 million, when a licensee is able to demonstrate that the spent fuel could be air-cooled if the SFP was drained of water. The staff has used this technical criterion to grant similar exemptions to other decommissioning reactors (e.g., Maine Yankee Atomic Power Station, published in the Federal Register on January 19, 1999 (64 FR 2920); Zion Nuclear Power Station, published in the Federal Register on December 28, 1999 (64 FR 72700); Kewaunee Power Station, published in the *Federal Register* on March 24, 2015 (80 FR 15638); and Crystal River Unit 3 Nuclear Generation Plant, published in the *Federal Register* on May 6, 2015 (80 FR 26100)). Additional discussions of other decommissioning reactor licensees that have received exemptions to reduce their primary insurance level to \$100 million are provided in SECY-96-256, “Changes to the Financial Protection Requirements for Permanently Shutdown Nuclear Power Reactors, 10 CFR 50.54(w) and 10 CFR 140.11,” dated December 17, 1996 (ADAMS Accession No. ML15062A483). These prior exemptions were based on the licensee demonstrating that the SFP could be air-cooled, consistent with the technical criterion discussed above.

The NRC staff has determined that the fuel stored in the VY SFP will have decayed sufficiently by the requested effective exemption date of April 15, 2016, to support a reduction in the required insurance. The licensee determined that by April 15, 2016, the fuel removed from the reactor would have sufficiently decayed by 15.4 months after shutdown so as to significantly reduce the risk from SFP draining events (ADAMS Accession No. ML14080A141). The NRC staff has evaluated the issue of zirconium fires in SFPs and presented an independent evaluation of a SFP subject to a severe earthquake in NUREG-2161, “Consequence Study of a Beyond-Design-Basis Earthquake Affecting the Spent Fuel Pool for a U.S. Mark I Boiling Water

Reactor,” dated September 2014 (ADAMS Accession No. ML14255A365). This evaluation concluded that, for a representative Boiling-Water Reactor (BWR), fuel in a dispersed high-density configuration would be adequately cooled by natural circulation air flow within several months after discharge from a reactor if the pool was drained of water. By letter dated November 23, 2015 (ADAMS Accession No. ML15329A167), ENO confirmed that the plant design and fuel storage configuration considered in NUREG-2161 were consistent with the VY plant design and fuel storage configurations to be used in the decommissioning of VY. The staff independently confirmed that the VY fuel assembly decay levels are also consistent with the spent fuel considered in NUREG-2161. Thus, the staff has determined that after 15.4 months decay, which will be reached by the requested effective date of April 15, 2016, the fuel stored in the VY SFP will be able to adequately be cooled by air in the unlikely event of pool drainage.

In SECY-00-0145, “Integrated Rulemaking Plan for Nuclear Power Plant Decommissioning,” dated June 28, 2000, and SECY-01-0100, “Policy Issues Related to Safeguards, Insurance, and Emergency Preparedness Regulations at Decommissioning Nuclear Power Plants Storing Fuel in Spent Fuel Pools,” dated June 4, 2001 (ADAMS Accession Nos. ML003721626 and ML011450420, respectively), the staff discussed additional information concerning SFP zirconium fire risks at decommissioning reactors and associated implications for offsite insurance. Analyzing when the spent fuel stored in the SFP is capable of adequate air-cooling is one measure that demonstrates when the probability of a zirconium fire would be exceedingly low.

The licensee’s analyses referenced in its exemption request demonstrate that under conditions where the SFP water inventory has drained and only air-cooling of the stored irradiated fuel is available, there is reasonable assurance as of April 15, 2016, that the VY spent fuel will remain at temperatures far below those associated with a significant radiological release. In addition, the licensee performed adiabatic heat-up analyses, in which a complete

drainage of the SFP is combined with rearrangement of spent fuel rack geometry and/or the addition of rubble to the SFP; this type of analysis postulates that decay heat transfer from the spent fuel via conduction, convection, or radiation would be impeded. The licensee's adiabatic heat-up analyses demonstrate that as of April 15, 2016, there would be at least 10 hours after the loss of all means of cooling (both air and/or water), before the spent fuel cladding would reach a temperature where the potential for a significant offsite radiological release could occur. In ENO's letter dated March 14, 2014 (ADAMS Accession No. ML14080A141), the licensee furnished information concerning its SFP inventory makeup strategies. Several sources of makeup to the pool are available, such as the Service Water (SW) system, which has redundant pumping capability and power supplies to ensure alternative SFP makeup function. The SW system runs continuously, thus allowing for constant monitoring. Additionally, there are electric-driven and diesel-driven fire pumps that can supply makeup water to the SFP via the SW system or the fire water system. In its letter dated August 29, 2014 (ADAMS Accession No. ML14246A176), the licensee also stated that, considering the very low-probability of beyond design-basis accidents affecting the SFP, these diverse strategies provide defense-in-depth and time to mitigate and prevent a zirconium fire, using makeup or spray into the SFP before the onset of zirconium cladding rapid oxidation.

In the NRC staff's safety evaluation of the licensee's March 14, 2014 (as later supplemented) request for exemptions from certain emergency planning requirements dated December 10, 2015 (ADAMS Accession No. ML15180A054), the NRC staff assessed the ENO accident analyses associated with the radiological risks from a zirconium fire at the permanently shut down and defueled VY site. For the very unlikely beyond design-basis accident scenario where the SFP coolant inventory is lost in such a manner that all methods of heat removal from the spent fuel are no longer available, the staff found there will be a minimum of 10 hours from the initiation of the accident until the cladding reaches a

temperature where offsite radiological release might occur. The staff finds that 10 hours is sufficient time to support deployment of mitigation equipment, consistent with plant conditions, to prevent the zirconium cladding from reaching a point of rapid oxidation.

The staff has determined that the licensee's proposed reduction in primary offsite liability coverage to a level of \$100 million, and the licensee's proposed withdrawal from participation in the secondary insurance pool for offsite financial protection, are consistent with the policy established in SECY-93-127 and subsequent insurance considerations resulting from zirconium fire risks, as discussed in SECY-00-0145 and SECY-01-0100. The NRC has previously determined in SECY-00-0145 that the minimum offsite financial protection requirement may be reduced to \$100 million and that secondary insurance is not required, once it is determined that the spent fuel in the spent fuel pool is no longer thermal-hydraulically capable of sustaining a zirconium fire based on a plant-specific analysis. In addition, the NRC staff notes that there is a well-established precedent of granting a similar exemption from these insurance requirements, to other permanently shutdown and defueled power reactors, upon satisfactory demonstration that zirconium fire risk from the irradiated fuel stored in the SFP is of negligible concern.

A. Authorized By Law

The PAA, and its implementing regulations in 10 CFR 140.11(a)(4), require licensees of nuclear reactors that have a rated capacity of 100,000 kilowatts electric or more to have and maintain \$375 million in primary financial protection and to participate in a secondary retrospective insurance pool. In accordance with 10 CFR 140.8, the Commission may grant exemptions from the regulations in 10 CFR part 140, as the Commission determines are authorized by law. The legal and associated technical basis for granting exemptions from 10 CFR part 140 are set forth in SECY-93-127. The legal analysis underlying SECY-93-127 concluded that, upon a technical finding that lesser potential hazards exist after termination of

operations, the Commission has the discretion under the Price-Anderson Act to reduce the amount of insurance required of a licensee undergoing decommissioning.

Based on its review of ENO's exemption request, the staff concludes that the technical criteria for relieving ENO from its existing primary and secondary insurance obligations have been met. As explained above, the staff has concluded that no reasonably conceivable design-basis accident exists that could cause an offsite release greater than the EPA PAGs, and therefore, that any offsite consequence from a design basis radiological release is unlikely, and the need for a significant amount of offsite liability insurance coverage is unwarranted. Additionally, the Staff determined that, after 15.4 months decay, which will be reached by the requested effective date of April 15, 2016, the fuel stored in the VY SFP will be able to adequately be cooled by air in the unlikely event of pool drainage. Moreover, in the very unlikely beyond design-basis accident scenario where the SFP coolant inventory is lost in such a manner that all methods of heat removal from the spent fuel are no longer available, the staff has determined that 10 hours would be available and is sufficient time to support deployment of mitigation equipment, consistent with plant conditions, to prevent the zirconium cladding from reaching a point of rapid oxidation. Thus, the staff concludes that the fuel stored in the VY SFP will have decayed sufficiently by the requested effective exemption date of April 15, 2016, to support a reduction in the required insurance consistent with SECY-00-0145.

The NRC staff has determined that granting of the licensee's proposed exemption will not result in a violation of the Atomic Energy Act of 1954, Section 170, or other laws, as amended, which require licensees to maintain adequate financial protection. Accordingly, consistent with the legal standard presented in SECY-93-127, under which decommissioning reactor licensees may be relieved of the requirements to carry the maximum amount of insurance available and to participate in the secondary retrospective premium pool where there

is sufficient technical justification, the NRC staff concludes that the requested exemption is authorized by law.

B. Is Otherwise in the Public Interest

The financial protection limits of 10 CFR 140.11 were established to require licensees to maintain sufficient offsite liability insurance to ensure adequate funding for offsite liability claims, following an accident at an operating reactor. However, the regulation does not consider the reduced potential for and consequence of nuclear incidents at permanently shutdown and decommissioning reactors.

SECY-93-127, SECY-00-0145, and SECY-01-0100 provide a basis for allowing licensees of decommissioning plants to reduce their primary offsite liability insurance and to withdraw from participation in the retrospective rating pool for deferred premium charges. As discussed in these documents, once the zirconium fire concern is determined to be negligible, possible accident scenario risks at permanently shutdown and defueled reactors are greatly reduced, when compared to the risks at operating reactors, and the associated potential for offsite financial liabilities from an accident are commensurately less. The licensee has analyzed and the staff has confirmed that the risks of accidents that could result in an offsite radiological risk are minimal, thereby justifying the proposed reductions in offsite primary liability insurance and withdrawal from participation in the secondary retrospective rating pool for deferred premium charges.

Additionally, participation in the secondary retrospective rating pool could potentially have adverse consequences on the safe and timely completion of decommissioning. If a nuclear incident sufficient to trigger the secondary insurance layer occurred at another nuclear power plant, the licensee could incur financial liability of up to \$121,255,000. However, because VY is permanently shut down, it cannot produce revenue from electricity generation

sales to cover such a liability. Therefore, such liability if subsequently incurred, could significantly affect the ability of the facility to conduct and complete timely radiological decontamination and decommissioning activities. In addition, as SECY-93-127 concluded, the shared financial risk exposure to ENO is greatly disproportionate to the radiological risk posed by VY, when compared to operating reactors.

The reduced overall risk to the public at decommissioning power plants does not warrant that ENO be required to carry full operating reactor insurance coverage, after the requisite spent fuel cooling period has elapsed following final reactor shutdown. The licensee's proposed financial protection limits will maintain a level of liability insurance coverage commensurate with the risk to the public. These changes are consistent with previous NRC policy as discussed in NUREG-00-0145, and exemptions approved for other decommissioning reactors. Thus, the underlying purpose of the regulations will not be adversely affected by the reductions in insurance coverage. Accordingly, an exemption from participation in the secondary insurance pool and a reduction in the primary insurance to \$100 million, a value more in line with the potential consequences of accidents, would be in the public interest in that this assures there will be adequate funds to address any of those consequences and helps to assure the safe and timely decommissioning of the reactor.

Therefore, the NRC staff has concluded that an exemption from 10 CFR 140.11(a)(4), which would permit ENO to lower the VY primary insurance levels and to withdraw from the secondary retrospective premium pool at the requested effective date of April 15, 2016, is in the public interest.

C. Environmental Considerations

NRC approval of an exemption from insurance or indemnity requirements belongs to a category of actions that the Commission, by rule or regulation, has declared to be a categorical

exclusion, after first finding that the category of actions does not individually or cumulatively have a significant effect on the human environment. Specifically, the exemption is categorically excluded from the requirement to prepare an environmental assessment or environmental impact statement, in accordance with 10 CFR 51.22(c)(25).

Under 10 CFR 51.22(c)(25), granting of an exemption from the requirements of any regulation of Chapter I to 10 CFR is a categorical exclusion provided that: i) there is no significant hazards consideration; ii) there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite; iii) there is no significant increase in individual or cumulative public or occupational radiation exposure; iv) there is no significant construction impact; v) there is no significant increase in the potential for or consequences from radiological accidents; and vi) the requirements from which an exemption is sought involve surety, insurance, or indemnity requirements.

The Director, Division of Decommissioning, Uranium Recovery and Waste Programs, Office of Nuclear Material Safety and Safeguards, has determined that approval of the exemption request involves no significant hazards consideration, as defined in 10 CFR 50.92, because reducing a licensee's offsite liability requirements at VY does not: 1) involve a significant increase in the probability or consequences of an accident previously evaluated; 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. The exempted financial protection regulation is unrelated to the operation of VY or site activities. Accordingly, there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite, and no significant increase in individual or cumulative public or occupational radiation exposure. The exempted regulation is not associated with construction, so there is no significant construction impact. The exempted regulation does not concern the source term (i.e., potential amount of radiation in an accident), nor any activities conducted at

the site. Therefore, there is no significant increase in the potential for, or consequences of, a radiological accident. In addition, there would be no significant impacts to biota, water resources, historic properties, cultural resources, or socioeconomic conditions in the region resulting from issuance of the requested exemption. The requirement for offsite liability insurance involves surety, insurance, or indemnity matters only.

Therefore, pursuant to 10 CFR 51.22(b) and 51.22(c)(25), no environmental impact statement or environmental assessment need be prepared in connection with the approval of this exemption request.

IV. Conclusions

Accordingly, the Commission has determined that, pursuant to 10 CFR 140.8, the exemption is authorized by law, and is otherwise in the public interest. Therefore, the Commission hereby grants ENO an exemption from the requirements of 10 CFR 140.11(a)(4) for VY. The exemption from 10 CFR 140.11(a)(4) permits VY to reduce the required level of primary financial protection, from \$375,000,000 to \$100,000,000, and to withdraw from participation in the secondary layer of financial protection no earlier than April 15, 2016.

The exemption is effective upon issuance.

Dated at Rockville, Maryland, this 15th day of April, 2016

For the Nuclear Regulatory Commission.

/RA/

John R. Tappert, Director,
Division of Decommissioning, Uranium Recovery
and Waste Programs,
Office of Nuclear Material Safety
and Safeguards.