

**Request for Additional Information, Set 1
License Renewal Application
GE-Hitachi Vallecitos Nuclear Center
Submittal Dated April 8, 2011
Docket No. 70-754**

Requests for Additional Information (RAIs) on Radiation Protection

RP-1

Provide a complete description of interlock operation and how the interlocks prevent both doors from opening simultaneously during normal operation and cleanout.

Explain if both doors are opened simultaneously during normal operation, what kind of alarm system is in place to prevent someone from entering the cells during operation. Where are the gamma sources located inside cells 1 through 5 during operation and cleanout?

This information is needed for the staff to determine compliance with the regulatory requirements of 10 CFR 20.1101.

RP-2

Provide the hot cells drawing details and the purpose of water supply to the hot cells.

It is stated in the submittal that "Water is supplied to the hot cells by an independent, 23-gallon pressurized storage tank located in the mezzanine. This tank is filled by a back-flow-prevented (air gap) water line. The system pressure is limited to approximately 60 psi." This description is provided without explaining the purpose of water supply.

This information is needed for the staff to determine compliance with the regulatory requirements of 10 CFR 20.1101, 20.1501, and 20.1701.

RP-3

Provide dose rates at the face of each cell during operation and cleanout. Is there any immediate alarm in the case of high radiation outside the cells or in the case of contamination spreading outside the cells? Provide also the dose rate in the interlock access corridor.

This information is needed for the staff to determine compliance with the regulatory requirements of 10 CFR 20.1501 and 20.1701.

RP-4

Explain why the occupational dose limit action level is set at 4 rem.

The action level in Section 4.10 increased from the previous application. This level is set too high, considering uncertainty in the measurements and calibration of the instruments. Also the action levels for total effective dose equivalent, lens of eyes, and shallow dose equivalent are set too high. Most of nuclear facilities have the administrative level set at level of 1.8 to 2 rem.

This information is needed for the staff to determine compliance with the regulatory requirements of 10 CFR 20.1101, Subparts b and d.

RP-5

Provide in detail your radiation protection (RP) procedure and training.

The description of RP procedures and training contains insufficient detail to allow understanding of the content and implementation of the radiation program.

This information is needed for the staff to determine compliance with the regulatory requirements of 10 CFR 19.12.

RP-6

Explain if the bioassay and urinalysis are a part of your internal dose program.

In the part of the license renewal application describing the internal exposure program, it is stated that the quantities of radionuclides excreted from the body serves as a method of internal dose measurement. It is also stated that the vivo program is a way of measuring internal exposure without explaining what kind of measurements are involved in the vivo program.

This information is needed for the staff to determine compliance with the regulatory requirements of 10 CFR 20.1101, 20.1501, and 20.1701.

RAIS on Chemical Safety

CHM-1

Clarify how and where special nuclear materials (SNM) will be stored prior to use in the Radioactive Materials Laboratory and the Metallurgy, Chemistry and Ceramics Laboratory.

10 CFR 70.22(a)(7) requires that "Each application for a license shall contain a description of the equipment and facilities which will be used by the applicant to protect health and minimize danger to life or property."

The license renewal application mentions that the Hillside storage facility is used for the initial de-packaging of irradiated fuel samples, but it is not specified where this material will be stored prior to sampling.

CHM-2

Describe the activities involving special nuclear material that will be conducted in the Radioactive Materials Laboratory. Explain the equipment that will be used along with any special procedures that must be considered.

10 CFR 70.22(a)(2) requires that "Each application for a license shall contain the activity for which the SNM is requested ..., the place at which the activity is to be performed and the general plan for carrying out the activity."

Chapter 1 of the license renewal application mentions the activities that will be conducted in the Radioactive Materials Laboratory. However, there is no description of the equipment or procedures applied during equipment preparation.

CHM-3

Explain any procedures that must be performed on equipment after experiments have concluded in the Radioactive Materials Laboratory and how wastes generated are handled.

10 CFR 70.22(a)(8) requires that “Each application for a license shall contain proposed procedures to protect health and minimize danger.”

Chapter 11 of the license renewal application mentions the different categories of procedures, but does not describe or reference the actual procedures that must be carried out after conclusion of an experiment. In addition, there is no detail on how the radioactive wastes will be stabilized to be disposed of.

CHM-4

Describe the activities involving SNM that will be conducted in the Metallurgy, Chemistry and Ceramics Laboratory. Explain the equipment that will be used along with any special procedures that must be considered.

10 CFR 70.22(a)(2) requires that “Each application shall contain the activity for which the SNM is requested ..., the place at which the activity is to be performed and the general plan for carrying out the activity.”

Chapter 1 of the license renewal application mentions the activities that will be conducted in the Metallurgy, Chemistry and Ceramics Laboratory. However, there is no description of the equipment or procedures applied during equipment preparation.

CHM-5

Will there be any fumes generated from the sampling of licensed materials? If so, how does GE-Hitachi Vallecitos Nuclear Center (GE Vallecitos) plan to address these fumes?

10 CFR 70.22(a)(7) requires that “Each application for a license shall contain a description of the equipment and facilities which will be used by the applicant to protect health and minimize danger to life or property.

There is no mention of the risks associated with carrying out experiments with the chemicals mentioned in Chapter 6 of the license renewal application.

CHM-6

Describe any procedures that must be performed on equipment after experiments have concluded in the Metallurgy, Chemistry, and Ceramics Laboratory; and how wastes generated are handled.

10 CFR 70.22(a)(8) requires that “Each application for a license shall contain proposed procedures to protect health and minimize danger.”

Chapters 6 and 11 of the license renewal application mention the different categories of procedures and what topics each procedure covers. However, there is no summary of the actual procedure or a reference to a document containing the procedures.

CHM-7

Describe the process of: 1) evaporation, 2) concentration, and 3) solidification employed at the Waste Evaporator Plant (WEP). The description should contain enough detail for the reviewer to understand the process chemistry, equipment used and the measures taken to ensure safety during these processes.

10 CFR 70.22(a)(2) requires that “Each application shall contain the activity for which the SNM is requested..., the place at which the activity is to be performed and the general plan for carrying out the activity.”

The first paragraph of Section 1.1.1.4 states: “The WEP is used to evaporate, concentrate and solidify liquid radioactive wastes generated at VNC prior to transfer to authorized waste disposal firms or waste burial sites.”

CHM-8

Describe how the decontamination materials produced in the Decontamination Room are transported to the Waste Handling Area or to the Waste Evaporation Area.

10 CFR 70.22(a)(8) requires that “Each application for a license shall contain proposed procedures to protect health and minimize danger.”

The license renewal application mentions the activities that occur in the Waste Handling Area and the Waste Evaporation Area but does not specify how the waste gets to these areas from the laboratory buildings.

CHM-9

The information on the Chemical Safety Program provided in the license renewal application is limited. Expand the discussion of the Chemical Safety Program and how the management measures address chemical safety.

10 CFR 70.22(a)(7) requires that “Each application for a license shall contain a description of the equipment and facilities which will be used by the applicant to protect health and minimize danger to life or property.”

The information provided in Chapter 6 about the Chemical Safety Program mostly references Chapter 11, but Chapter 11 does not contain any information related specifically to the Chemical Safety Program.

CHM-10

Describe the purpose and components of the environmental health and safety function and the chemical and fire safety function.

10 CFR 70.22(a)(8) requires that “Each application for a license shall contain proposed procedures to protect health and minimize danger.

As it is mentioned in the background of the previous RAI, the information provided in Chapter 6 of the Chemical Safety Program is very limited. There is only a general description of the environmental health and safety function and the chemical and fire safety function.

CHM-11

Provide the analysis or reasoning performed to determine what procedures and equipment are necessary to provide a safety margin that ensures safe chemical operations.

10 CFR 70.22(a)(7) requires that “Each application for a license shall contain a description of the equipment and facilities which will be used by the applicant to protect health and minimize danger to life or property.”

Chapter 6 mentions that a hazards evaluation was performed on nuclear and non-nuclear operations. There is no further explanation or description about the hazards evaluation and how the hazards were evaluated.

RAIs on Nuclear Criticality Safety

NCS-1

Justify the qualification and education requirements for the nuclear criticality safety (NCS) function manager and the NCS safety function. This information is required to determine if the applicant has a staff of managers, supervisors, and engineers qualified to develop, implement, and maintain its NCS program.

The applicant is required, per 10 CFR 70.22(a)(6) and 10 CFR 72.23(a)(2), to have sufficient, qualified personnel—including training and experience—to engage in the proposed activities.

The applicant did not explain why the proposed downgrading of the training and education requirements of the NCS function and function manager are adequate to ensure an effective NCS program. The NCS manager for GE Vallecitos is currently required to meet the following requirements: a BS or BA in science or engineering, several years of nuclear experience in an engineering field, and 3 years of experience in NCS. The proposed requirements in the license renewal application still require a science or engineering degree, but do not require any experience in engineering and only 1 year of experience in the “understanding, application and direction of NCS programs.” Additionally, the current requirements for the NCS function are: a BS or BA in science or engineering, 3 years of experience in nuclear engineering, and one year of NCS experience. The proposed requirements in the license renewal application for the NCS function still requires a science or engineering degree, but only requires “one year of relevant criticality safety experience.” Industry-standard guidance for NCS administrative practices, including qualification and education, is provided in the American National Standards Institute/American Nuclear Society (ANSI/ANS)-8.1, ANSI/ANS-8.19, and ANSI/ANS-8.26.

NCS-2

Provide information on NCS training for NCS managers and personnel. Clarify whether the applicant has committed to following ANSI/ANS-8.19 and ANSI/ANS-8.26 for NCS engineer training and qualification.

The applicant is required, per 10 CFR 70.22(a)(6) and 10 CFR 72.23(a)(2), to have sufficient, qualified personnel—including training and experience—to engage in the proposed activities.

NCS-3

Provide additional information to justify an exemption from the requirements of 10 CFR 70.24 for the Dry Storage Pit in Building 102.

10 CFR 70.24 requires a criticality accident alarm system (CAAS) if an applicant handles, stores, or uses SNM at or above the mass limits provided in 10 CFR 70.24. Since the licensee handles and stores SNM above the mass limits in 10 CFR 70.24, a CAAS is required unless the applicant adequately demonstrates that the exemption will not endanger life or property or the common defense and security; and are otherwise in the public's interest.

NCS-4

Revise the statement made in Section 1.1.3.2.5 of the application which states that Building 103 is “below the threshold requiring coverage by a CAAS established by NRC regulation.”

In accordance with the requirements of 10 CFR 70.24, since the site is authorized to have more than 700 grams uranium-235 (U-235) onsite, it is required to have a CAAS in all areas where SNM is handled, used, or stored.

The applicant may request an exemption for Building 103 by providing the information required by 10 CFR Part 70.

NCS-5

Describe the compensatory measures taken if CAAS coverage is lost, and how these are documented and implemented. This is required to determine if the requirements of 10 CFR 70.24 are met.

NCS-6

Describe how the quantity of U-235 that is in the form of irradiated SNM is determined. For example, is the amount based upon the amount of U-235 when the SNM is unirradiated, or is depletion of the initial amount of U-235 calculated? If the amount of SNM in irradiated material is calculated based upon depletion calculations, then describe the validation techniques used.

Information regarding how the applicant establishes and maintains the NCS safety practices and procedures for the activities described in the application is required by 10 CFR 70.22(a)(8) and 70.23(a)(4). It is not clear in the application how the amount of U-235 in irradiated materials is determined, and whether it is determined using industry-accepted and peer-reviewed methods.

NCS-7

Describe how the reactivity is determined for irradiated SNM. In some light water reactor fuel, burnable absorbers are present and reactivity may increase with irradiation. Additionally, reactivity may decrease due to the change in the U-235 content due to irradiation.

Information regarding how the applicant establishes and maintains the NCS safety practices and procedures for the activities described in the application is required by 10 CFR 70.22(a)(8) and 70.23(a)(4).

NCS-8

Define an NCS function “delegate.”

This term is used in Section 5.1.2.1 and inferred in Section 5.3.2.1. Since changes to NCS parameters and evaluation of NCS programs require personnel who have training and experience in NCS, it is not clear how this responsibility can be delegated to someone who is not a qualified NCS engineer.

The applicant is required, per 10 CFR 70.22(a)(6) and 10 CFR 72.23(a)(2) to have sufficient, qualified personnel—including training and experience—to engage in the proposed activities.

NCS-9

Provide the references or calculations used to determine the safe mass limits given in Table 5.1. Also justify the need for hemispherical safe mass limits and how those hemispherical shapes are maintained.

The applicant did not provide any references or technical justification for the mass limits in Table 5.1.

Information regarding how the applicant establishes and maintains the NCS safety practices and procedures for the activities described in the application is required by 10CFR 70.22(a)(8) and 70.23(a)(4).

NCS-10

Provide the safe batch values, and clarify how a safe batch is determined.

This information is required by 10 CFR 70.22(a)(8) and 70.23(a)(4).

The applicant states that the safe batch may be used to establish mass limits in lieu of the safe mass and that it is established considering enrichment, full water reflection, and optimum water moderation consistent with the form of the material. However, it is not clear whether the safe batch limit is based upon handbook data or uses the calculated mass limits given in Table 5.1.

NCS-11

Provide more detail on how concentration is controlled when it is the only controlled parameter, especially for transfers to unfavorable geometry containers such as transfers to the WEP. It is not clear that an engineered control (versus an administrative control) must be used as one of the two independent controls relied upon for criticality safety in this case. Also describe the sampling process that is used for concentration control.

The description of how concentration is controlled when it is the only controlled parameter is not clear. In Section 1.1.3.4, the operational description of waste stream transfers to WEP that contain SNM appear to only require sampling; and the sampling process is not described. This information is required to determine if the applicant established sufficient means to meet the double contingency principle to which it has committed as a part of its NCS program.

This information is required to determine whether the applicant's NCS safety practices and procedures for the activities described in the application, as required by 10 CFR 70.22(a)(8) and 70.23(a)(4), are adequate.

NCS-12

Provide examples of where neutron absorbers are used, how much credit is taken for the different absorber materials, and whether ANSI/ANS-8.21 is followed. The neutron absorber density and distribution can affect its overall effectiveness.

This information is required to determine whether the applicant's NCS safety practices and procedures for the activities described in the application, as required by 10 CFR 70.22(a)(8) and 70.23(a)(4), are adequate.

NCS-13

Define what is meant by "area enrichment."

This information is required by 10 CFR 70.22

This term is used in Section 5.4.4.9 when discussing enrichment control but is not defined.

RAIs on Chapter 7.0, Fire Safety

FS-1, Section 7.2

Describe any fire safety management measures used in the Fire Protection Program. How are fire safety considerations incorporated into the control of facility and process modifications? How is combustible material controlled at the facility? Have ignition sources other than hot work been considered? What is done to ensure safe handling and storage of flammable/combustible liquids? Provide reference to any pre-fire planning documents that identify specific response strategies.

The regulation in 10 CFR 70.22(a)(8) requires that the applicant to provide proposed procedures to protect health and minimize danger to life and property.

The discussion of the Fire Protection Program in Section 7 of the application provides only limited information on fire safety management measures. Guidance in Section 7.4.3.1 of NUREG-1520 states that an adequate application documents the fire safety management measures in sufficient detail to identify their relationship to—and functions in—normal operations, anticipated (off-normal) events, and accident safety.

FS-2, Section 7.4

Describe the structural construction of each building, noting any fire resistance ratings and combustible construction elements. Provide a construction type for each building in accordance with a specified edition of the National Fire Protection Association (NFPA) 220, "Standard on Types of Building Construction," or the specific edition of the applicable local building code.

Provide information on the electrical system of each building. Is the design and installation in accordance with a specific edition of NFPA 70, "National Electric Code?" Are there any lightning protection systems in any of the buildings?

The regulation in 10 CFR 70.22(a)(7) requires that the applicant to provide a description of equipment and facilities which will be used by the applicant to protect health and minimize danger to life or property.

The discussion of facility design in Section 7 of the application does not provide information on various elements of building construction. Guidance in Section 7.4.3.3 of NUREG-1520 states that an adequate application documents the fire safety considerations used in the general design of the facility.

FS-3, Section 7.4

Describe the individual processes performed at the facility, the associated fire safety hazards, and the protection strategies implemented. Does the facility comply with a specific edition of NFPA 801, "Standard for Fire Protection for Facilities Handling Radioactive Materials," or NFPA 45, "Standard on Fire Protection for Laboratories Using Chemicals?"

The regulation in 10 CFR 70.22(a)(7) requires that the applicant to provide a description of equipment and facilities which will be used by the applicant to protect health and minimize danger to life or property.

The discussion of fire safety in Section 7 of the application does not provide details on process fire safety. Guidance in Section 7.4.3.4 of NUREG-1520 states that an adequate application documents the fire safety considerations used in the design and performance of facility processes.

FS-4, Sections 7.2 and 7.4

Describe which buildings are protected by sprinkler systems. Confirm if each building is fully, or only partially, protected by the sprinkler system. Provide detailed information on the design and installation of the sprinkler systems. A referenced commitment to the specific edition(s) of NFPA 13, "Standard for the Installation of Sprinkler Systems," would be sufficient.

Provide detailed information on the frequency, scope, and data collected during inspections of water-based fire protection systems. A referenced commitment to a specific edition of NFPA 25, "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," would be sufficient.

The regulation in 10 CFR 70.22(a)(8) requires that the applicant to provide proposed procedures to protect health and minimize danger to life and property. The discussion of fire safety in Section 7 of the application does not discuss a commitment to an industry standard on the design, installation, and inspection of fire suppression systems. Guidance in Section 7.4.3.3 of NUREG-1520 states that an applicant should provide an overall description of automatic fire

suppression systems; the applicable design standard; and identification of standards for surveillance, testing, and maintenance.

FS-5, Section 7.4

Describe the protection for environmental concerns given the runoff potential for fire water after being contaminated with nuclear material during a fire event. Are diked areas and drainage of process facilities provided? The NFPA 801 provides guidance on how to calculate the potential amount of runoff to properly size drainage and containment systems.

The regulation in 10 CFR 70.22(a)(7) requires that the applicant to provide a description of equipment and facilities that will be used by the applicant to protect health and minimize danger to life or property.

The discussion of the fire safety in Section 7 of the application does not address control of fire suppression runoff. Guidance in Section 7.4.3.3 of NUREG-1520 states that an adequate application documents any measures used to control fire water runoff.

FS-6, Sections 7.2 and 7.5

Provide additional information on the fire alarm and detection system. Are all portions of the fire alarm system designed and installed in accordance with a specific edition(s) of NFPA 72, "National Fire Alarm Code"?

Provide detailed information on the frequency, scope, and data collected during inspections of the fire alarm and detection system. A referenced commitment to a specific edition of NFPA 72 would be sufficient.

The regulation 10 CFR 70.22(a)(7) requires that the applicant to provide a description of equipment and facilities that will be used by the applicant to protect health and minimize danger to life or property.

The discussion of fire safety in Section 7 of the application does not discuss a commitment to an industry standard on the design, installation, and inspection of fire protection systems. Guidance in Section 7.4.3.3 of NUREG-1520 states that an applicant should provide an overall description of the fire alarm and detection system; the applicable design standard; and identification of standards for surveillance, testing, and maintenance.

FS-7, Section 7.6

Describe the equipment available for fire suppression and how it was selected given the criteria specified in Section 7.6 of the application. Provide any codes, standards, or industry guidance used to design, install, and maintain the equipment (for example, a commitment to a specific edition of NFPA 10, "Standard for Portable Fire Extinguishers," would be sufficient for handheld fire extinguishers).

The regulation 10 CFR 70.22(a)(8) requires that the applicant to provide proposed procedures to protect health and minimize danger to life and property.

The discussion of fire safety in Section 7 of the application does not discuss the specific types of fire suppression equipment selected at the facility. Guidance in Section 7.4.3.5 of NUREG-1520

states that an applicant should describe the fire protection for areas containing licensed material and the standards the fire protection systems and equipment meet.

FS-8, Section 7.7

Provide additional information on the fire protection water system. Provide the general location of any fire hydrants available onsite. Provide details on the fire pumps(s), any redundancy, and their power supplies. Are the fire pumps(s) designed and installed in accordance with a specific edition of NFPA 20, "Standard for the Installation of Stationary Pumps for Fire Protection"?

The regulation in 10 CFR 70.22(a)(7) requires that the applicant to provide a description of equipment and facilities that will be used by the applicant to protect health and minimize danger to life or property.

FS-9, Section 7.8

Provide more information on the local fire department(s) including the distance from the facility, any familiarity training the facility provides to the responders, and any agreements that are in place.

Provide a more detailed description of the number of people trained to participate in the facility's emergency response team. Are there a minimum number of trained personnel available for any given shift? What equipment does the emergency response team have access to? What training is provided for use of that equipment?

The regulation in 10 CFR 70.22(a)(7) requires that the applicant to provide a description of equipment and facilities that will be used by the applicant to protect health and minimize danger to life or property. In addition, 10 CFR 70.22(a)(8) requires that the applicant to provide proposed procedures to protect health and minimize danger to life and property.

RAIs on the Physical Security and Transportation Security Plans

SEC-1, Physical Security Plan (PSP)

The current license possession limits allow for 50 kilograms (kg) of U-235 enriched to 10 percent or less.

- License Condition SG-1.1 requires that a PSP be submitted and approved prior to possessing 10 kg or more of special nuclear material enriched less than 10 percent. Confirm that the license condition is still valid and if determined to be valid, explain why a PSP is not required in accordance with 10 CFR 70.22(k).
- Provide or identify a PSP for use in the SNM-960 LRA process.

This information is required for the staff to determine compliance with the regulatory requirements in 10 CFR 70.22(k) and 70.33.

The current security plan is dated March 9, 2009, with changes dated February 2010. The March 9, 2009, security plan was submitted in accordance with 10 CFR 50.54. License SNM-960 requires a PSP in accordance with 10 CFR 70.22(k). The license renewal application did

not include a PSP or further identify an existing PSP to be used as part of the application process in accordance with Part 70.33.

SEC-2, Physical Security Plan

Provide a physical protection system in accordance with 10 CFR 73.20 that meets the performance objectives of Parts 73.45 and 73.46. If these provisions do not apply, provide a detailed explanation and justification of why they do not. Provide information pertaining to the quantity, type of materials on hand, and if they are considered to be self protecting (have total external radiation dose rates in excess of 100 rems per hour at a distance of 3 feet from any accessible surfaces without intervening shielding). Describe the type and amount of each material stored or in use at each location, the length of time at that location, and the specific security in use to protect that material at each location.

This information is needed for the staff to determine compliance with 10 CFR 73.20(a), (b), and (c).

Section 3 of the Security Plan identifies several areas where unspecified types and amounts of Significant Radioactive Materials are used or stored. The Security Plan for License SNM-960 is written to provide security in accordance with NRC Order EA-03-225, which provides acceptable security measures for Radionuclides of Concern as identified in Table 1 of the Order. The Security Plan does not address the security requirements when the total amount reaches the level of formula quantity of SNM as defined in 10 CFR 73.2.

SEC-3, Physical Security Plan

Provide a PSP, a Contingency Response Plan, and a Training and Qualification Plan that addresses the requirements of 10 CFR 73.45 or 73.50 as applicable. If these provisions do not apply, provide a detailed explanation and justification of why they do not. Provide information pertaining to the quantity and type of materials on hand. Describe the type and amount of each material stored or in use at this location, the length of time at that location, and the specific security in use to protect that material. Confirm that the spent fuel in the Hillside storage still meets the "self protecting" standard of 100 rems per hour at a distance of 3 feet from any accessible surfaces without intervening shielding and provide information on how that determination was made.

This information is needed for the staff to determine compliance with 10 CFR 73.50.

According to Section 3.3 of the Security Plan, the Hillside Bunker is used to store unspecified Significant Radioactive Material. The section does not include information identifying the amount and type of material or that the security protection is consistent with either 10 CFR 73.45 or 73.50 as appropriate.

SEC-4, Transportation Security Plan

There is no Transportation Security Plan (TSP) on file or referenced in the license renewal application. Provide a TSP in accordance with 10 CFR 70.22(g) or verify that License Condition T-1.1 is still valid and that a TSP is not required at this time.

This information is needed for the staff to determine compliance with 10 CFR 70.22(g)(1).

License Condition T-1.1 states that: “The licensee shall not import, export, transport in a single shipment, or take delivery of a single shipment free onboard at the point where it is delivered to an agent or carrier, quantities of SNM as specified in 10 CFR Part 73.1(b)(2) until a detailed plan as described in 10 CFR 70.22(g) has been submitted and approved by the NRC.”

RAI on Emergency Management

EM-1

The Basis for Eliminating the GE Vallecitos’s Radiological Contingency Plan (Appendix C to “Application for Renewal of License SNM-960,” dated March 27, 1989 ADAMS Accession No. 8905250490) is based on calculations provided by VNC and on a series of bounding events provided in the Accident Analysis Report Final Draft Version (dated October 31, 1978, ADAMS Accession No. ML993060067). These documents appear to address neither the Hillside Storage Facility nor the WEP, Buildings 304 and 349. They also appear to reference processes/activities that are no longer in use. Please provide technical justification for why the bounding scenarios of the Accident Analysis Report Final Draft Version are still valid and why the Basis for Eliminating the VNC Radiological Contingency Plan is still valid.

Per 10 CFR 70.22(i)(1)(i), applications to possess enriched uranium or plutonium for which a criticality accident alarm system is required, uranium hexafluoride in excess of 50 kg in a single container or 1000 kg total, or in excess of 2 curies of plutonium in unsealed form or on foils or plated sources, must contain . . . an evaluation showing that the maximum dose to a member of the public offsite due to a release of radioactive materials would not exceed 1 rem effective dose equivalent or an intake of 2 mg of soluble uranium. 10 CFR 70.22(i)(2), lists factors that may be used to support an evaluation submitted under paragraph (i)(1)(i) above.