

Enclosure 3. Safety Evaluation (Non-Proprietary)

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

DIRECT TRANSFER FROM THE GENERAL ELECTRIC COMPANY (GE) TO

GE-HITACHI NUCLEAR ENERGY AMERICAS, LLC

OF THE FOLLOWING LICENSES:

DPR-1 VALLECITOS BOILING WATER REACTOR: DOCKET NO. 50-18

DR-10 ESADA VALLECITOS EXPERIMENTAL SUPERHEAT REACTOR: DOCKET NO. 50-183

TR-1 GENERAL ELECTRIC TEST REACTOR: DOCKET NO. 50-70

R-33 NUCLEAR TEST REACTOR: DOCKET NO. 50-73

1.0 INTRODUCTION

By application dated January 19, 2007, and supplemented on January 25, 2007, February 23, 2007, March 2, 2007, March 26, 2007, May 16, 2007, May 18, 2007, June 4, 2007, July 6, 2007, and August 9, 2007, (hereinafter the application) General Electric Company (GE) requested approval of the U.S. Nuclear Regulatory Commission (NRC), pursuant to Section 184 of the Atomic Energy Act of 1954, as amended, and 10 CFR 50.80, to the proposed direct transfer of the operating license for the Nuclear Test Reactor (NTR) 100 Kw Research Reactor. In addition, GE requested the transfer of three possession-only licenses, Vallecitos Boiling Water Reactor (VBWR), ESADA Vallecitos Experimental Superheat Reactor (EVESR), and the General Electric Test Reactor (GETR). All four licenses shall be referenced as "the licenses," and are for the facilities at the Vallecitos Nuclear Center in Alameda County, California, licensed by the NRC pursuant to 10 CFR Part 50. The application proposes to transfer the licenses from GE to GE-Hitachi Nuclear Energy Americas, LLC. GE also requested approval of conforming amendments pursuant to 10 CFR 50.90 for the licenses to reflect the license transfers. The supplements to the initial application did not expand the scope of the application as originally noticed in the *Federal Register*.

2.0 BACKGROUND

GE proposes to transfer certain of its nuclear businesses and operations in the United States to GE-Hitachi Nuclear Energy Americas, LLC, a newly formed entity formed as a result of a joint venture between GE and Hitachi Ltd. GE, through various subsidiaries, will retain a 60 percent ownership of GE-Hitachi Nuclear Energy Americas, LLC, while Hitachi Ltd., a Japanese company, will retain the remaining 40 percent through various United States subsidiaries. There will be a direct transfer of control of GE's existing licenses to GE-Hitachi Nuclear Energy Americas, LLC, when GE transfers assets and the GE licenses to this entity, which will be controlled at that time by its intermediate parent company, GE-Hitachi Nuclear Energy Holdings, LLC.

The application seeks the NRC's consent to the transfer by GE to GE-Hitachi Nuclear Energy Americas, LLC, of GE's 100 percent interest in the licenses. The application indicates that GE will contribute certain parts of its nuclear businesses and operations in the United States to a newly formed Delaware limited liability company, GE-Hitachi Nuclear Energy Americas, LLC. In addition, various other United States GE subsidiaries will also contribute businesses to GE-Hitachi Nuclear Energy Americas, LLC. These include GE Infrastructure Technologies, LLC; GE Ionics, Inc.; and GE Infrastructure International. GE and its various United States subsidiaries will form and contribute their membership interests in GE-Hitachi Nuclear Energy Americas, LLC, to a separate Delaware limited liability company, GE-Hitachi Nuclear Energy Holdings, LLC, which will be the parent company of GE-Hitachi Nuclear Energy Americas, LLC. GE and its various United States subsidiaries will then form and contribute their membership interests in GE-Hitachi Nuclear Energy Holdings, LLC, to GENE Holding, LLC, a Delaware limited liability company, that at that time will be a wholly-owned subsidiary of GE. Finally, GENE Holding, LLC, will sell a 40% equity interest in GE-Hitachi Nuclear Energy Holdings, LLC, to a United States subsidiary owned by Hitachi Ltd. The staff was informed by the applicant that on June 4, 2007, GE's nuclear business was contributed as described above, excluding the NRC licensed activities for Vallecitos and Morris and employees and assets associated with activities under those licenses, and that these excluded assets and employees will be transferred to the new company when NRC consent to transfer the licenses is received. The State of California has already authorized the transfer of the state license to the new company. The applicant has written the State a letter stating they will transfer the State license concurrent with the NRC licenses.

3.0 REGULATORY BASIS

Pursuant to 10 CFR 50.80, the application requests the approval of the direct transfer of the licenses for the VBWR, the GETR, the NTR and the EVESR discussed in this Safety Evaluation. Section 50.80(a) of 10 CFR states "[n]o license for a production or utilization facility, or any right thereunder, shall be transferred, assigned, or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of the license to any person, unless the Commission shall give its consent in writing."

In addition, the requirements of 10 CFR 50.80(b) & (c) apply. Section 50.80(b) states that an application for a license transfer shall include as much information described in 10 CFR 50.33 and 10 CFR 50.34 "with respect to the identity and technical and financial qualifications of the proposed transferee as would be required by those sections if the application were for an initial license. . ." Section 50.80(c) states that "the Commission will approve the application for the transfer of a license, if the Commission determines: (1) that the proposed transferee is qualified to be the holder of the license; and (2) that transfer of the license is otherwise consistent with applicable provisions of law, regulations, and orders issued by the Commission pursuant thereto."

4.0 FINANCIAL QUALIFICATIONS

As stated in 10 CFR 50.33(f), "[e]xcept for an electric utility applicant for a license to operate a utilization facility of the type described in 10 CFR 50.21(b) or 10 CFR 50.22, [an application shall state] information sufficient to demonstrate to the Commission the financial qualifications of the applicant to carry out, in accordance with the regulations of this chapter, the activities for which the permit or license is sought."

Furthermore, 10 CFR 50.2, "Definitions," states that an electric utility is "any entity that generates or distributes electricity and which recovers the cost of this electricity, either directly or indirectly, through rates established by the entity itself or by a separate regulatory authority."

The NRC staff finds that GE-Hitachi Nuclear Energy Americas, LLC, does not qualify as an "electric utility" as defined in 10 CFR 50.2 because none of its revenues used to recover costs will be pursuant to cost of service rates set by a separate regulatory authority or by the entity itself. Thus, the NRC staff has determined that GE-Hitachi Nuclear Energy Americas, LLC, must meet the financial qualifications requirements for a non-electric utility pursuant to 10 CFR 50.33(f). GE-Hitachi Nuclear Energy Americas, LLC, as a non-electric utility, is subject to a full financial qualification review by the NRC, and must provide information that demonstrates GE-Hitachi Nuclear Energy Americas, LLC, possesses or has reasonable assurance of obtaining the necessary funds to cover estimated operating costs for the period of the licenses. Under 10 CFR 50.33(f)(2), the applicant shall submit estimates for total annual operating costs for each of the first five years of facility operations (following the proposed license transfers) and indicate the source(s) of funds to cover these costs.

In addition, because GE-Hitachi Nuclear Energy Americas, LLC, is a newly formed entity it must provide, pursuant to 10 CFR 50.33(f)(3), information that shows: a) the legal and financial relationships GE-Hitachi Nuclear Energy Americas, LLC, has, or proposes to have, with its stockholders or owners; b) their financial ability to meet any contractual obligations to GE-Hitachi Nuclear Energy Americas, LLC, which they have incurred or propose to incur; and c) any other information considered necessary by the NRC to enable it to determine the applicant's financial qualification.

To meet the financial qualification requirements of 10 CFR 50.33(f), GE-Hitachi Nuclear Energy Americas, LLC, submitted projected income statements for the five year period from 2007 to 2011 summarized in the following table.

GE-Hitachi Nuclear Energy Americas, LLC
Summary of
PROJECTED INCOME STATEMENT
(In \$ millions)

	FY2007	FY2008	FY2009	FY2010	FY2011
TOTAL REVENUE:	\$ [XXX.X]	\$ [XXX.X]	\$ [XXX.X]	\$ [XXX.X]	\$ [XXX.X]
Total Operating Expense:	\$ [XXX.X]	\$ [XXX.X]	\$ [XXX.X]	\$ [XXX.X]	\$ [XXX.X]
Operating Income:	\$ [XXX.X]	\$ [XXX.X]	\$ [XXX.X]	\$ [XXX.X]	\$ [XXX.X]
Other Income/Expense Tax	(\$ [XXX.X])	(\$ [XXX.X])	(\$ [XXX.X])	(\$ [XXX.X])	(\$ [XXX.X])
NET INCOME AFTER TAX	\$ [XXX.X]	\$ [XXX.X]	\$ [XXX.X]	\$ [XXX.X]	\$ [XXX.X]

The application indicates that GE-Hitachi Nuclear Energy Americas, LLC, will derive revenue from sales. The cost for the three shutdown reactors is based on maintaining those reactors in a safe storage condition. The NRC staff finds that the Projected Income Statement shows that the anticipated company revenues provide reasonable assurance of an adequate source of funds to meet the facilities' anticipated expenses during the five year period covered by the projections, since net income will be [] for the company as a whole. The application also included an estimated balance sheet, which uses conservative (i.e., liabilities are projected in the high range of expectations) projections of anticipated liabilities (e.g., long term debt) for GE-Hitachi Nuclear Energy Americas, LLC. The estimated balance sheet shows that GE-Hitachi Nuclear Energy Americas, LLC, will have substantially more total assets than liabilities.

Based on its review, the NRC staff has determined that GE-Hitachi Nuclear Energy Americas, LLC, is financially qualified to hold the licenses.

5.0 DECOMMISSIONING

The NRC has determined that the requirements to provide reasonable assurance of decommissioning funding are necessary to ensure the adequate protection of public health and safety. The regulation at 10 CFR 50.33(k)(1) requires that GE-Hitachi Nuclear Energy Americas, LLC, provide information in the form of a report, as described in 10 CFR 50.75, indicating how reasonable assurance will be provided that funds will be available to decommission the facilities. The acceptable methods for providing financial assurance for decommissioning are in 10 CFR 50.75(e)(1).

The NTR license is for an operating research reactor. The VBWR, the GETR and the EVESR licenses have been modified to possession-only status. Those three reactors are presently in safe storage and will be decommissioned when all other active licensed operations at the Vallecitos Nuclear Center cease.

By letter dated May 18, 2007, GE provided a parent company guarantee for decommissioning financial assurance for all of the licenses. GE's guarantees for the licenses reflect current cost estimates of \$8,016,000 for the VBWR, \$14,077,000 for the GETR, \$3,411,000 for the NTR, and \$10,516,000 for the EVESR. Based on the NRC staff review of this and other information in the May 18, 2007, submittal, which includes GE's financial statements and an independent accountant's report, GE satisfies the "Criteria Relating to Use of Financial Tests and Parent Company Guarantees for Providing Reasonable Assurance of Funds for Decommissioning," 10 CFR Part 30, Appendix A, and thus is financially qualified to provide adequate decommissioning funding assurance for the subject facilities. GE had previously provided a self-guarantee in accordance with 10 CFR Part 30, Appendix C for all four of the licenses, and will retain liability for decommissioning costs as a parent company.

In the Order and conforming amendments, the staff requires that, prior to completion of the transfer of the licenses, GE-Hitachi Nuclear Energy Americas, LLC, shall provide the Nuclear Regulatory Commission staff satisfactory documentary evidence of a parent company guarantee or other method authorized by 10 CFR 50.75 for decommissioning funding assurance for the licenses in an amount no less than \$8,016,000 for the VBWR, \$14,077,000 for the GETR, \$3,411,000 for the NTR, and \$10,516,000 for the EVESR. GE's May 18, 2007, letter provides acceptable documentary evidence in support of the transfer of the licenses to

GE-Hitachi Nuclear Energy Americas, LLC, such that this Order and license conditions are satisfied.

GE-Hitachi Nuclear Energy Americas, LLC, as stated in the application, will abide by all commitments and representations previously made by GE with respect to the licenses. These include, but are not limited to, maintaining decommissioning records, implementing decontamination activities, and eventually decommissioning of the facilities. The staff has imposed this as a condition of the Order and licenses.

Based on the above, the transfer of the licenses to GE-Hitachi Nuclear Energy Americas, LLC, meets the applicable requirements of 10 CFR 50.75.

6.0 ANTITRUST REVIEW

The Atomic Energy Act of 1954 as amended (the Act) does not require or authorize antitrust reviews of post-operating license transfer applications. *Kansas Gas and Electric Co., et al.* (Wolf Creek Generating Station, Unit 1), CLI-99-19, 49 NRC 441 (1999). The application here postdates the issuance of the operating licenses for units under consideration, and therefore no antitrust review is required or authorized. Moreover, the licenses at issue were all issued under Section 104 of the Act, and are outside the scope of the Act's antitrust review requirements. Consistent with this, the NRC staff notes that there are no existing antitrust license conditions in the subject licenses. Accordingly, there are no antitrust-related issues to resolve with respect to proposed conforming license amendments.

7.0 FOREIGN OWNERSHIP, CONTROL, OR DOMINATION

Sections 103d and 104d of the Act prohibit the NRC from issuing a license for a nuclear reactor to "any corporation or other entity if the Commission knows or has reason to believe it is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government." The NRC's regulation, 10 CFR 50.38, contains language to implement this prohibition.

Upon completion of the transaction, GE (through its subsidiaries) will hold a majority 60 percent indirect ownership interest in GE-Hitachi Nuclear Energy Holdings, LLC, the intermediate parent company of GE-Hitachi Nuclear Energy Americas, LLC. Through one or more United States subsidiaries, Hitachi Ltd. will hold a 40 percent indirect ownership interest in GE-Hitachi Nuclear Energy Holdings, LLC. According to the application, Hitachi's minority ownership share in GE-Hitachi Nuclear Energy Holdings, LLC, will not allow Hitachi to exercise control or domination over the licensed activities of its subsidiary, in general, or over the maintenance, possession or use of the reactors, in particular.

As originally stated in the January 19, 2007, letter, Hitachi's minority interest in GE-Hitachi Nuclear Energy Holdings, LLC's Board of Managers will not allow for foreign control or domination. GE-Hitachi Nuclear Energy Holdings, LLC's Board of Managers will have seven representatives, five of whom will have voting rights. Three voting members will be appointed by GE and will be United States citizens, while two voting members will be appointed by Hitachi Ltd. The other two Board of Managers members will have no voting rights. Most decisions of the Board of Managers will be made on the basis of a majority vote. While certain decisions of the Board of Managers may not be made without the prior approval of the Board Managers designated by Hitachi Ltd., none of those decisions relate to the safety of operations or safe

shutdown of the licensed facilities. The January 19, 2007, letter represented that potential influence over NRC-licensed activities will be further mitigated by delegating decision making authority to a subcommittee of the Board of Managers controlled by United States citizens.

In the February 23, 2007, supplemental information, matters associated with potential foreign ownership, control, or domination of GE-Hitachi Nuclear Energy Americas, LLC, including clarification on the position of its president and CEO, along with additional information about the previously proposed Nuclear Oversight Committee of the GE-Hitachi Nuclear Energy Holdings, LLC's Board of Managers, were updated and revised from the January 19, 2007, letter.

First, the Manager of the Vallecitos Nuclear Center will report directly to the Vice-President, Reactor Facility Safety and Security of GE-Hitachi Nuclear Energy Americas, LLC, with respect to any matters involving nuclear safety or NRC compliance associated with the reactors at Vallecitos. The Vice-President, Reactor Facility Safety and Security of GE-Hitachi Nuclear Energy Americas, LLC, will report to the Manager of GE-Hitachi Nuclear Energy Americas, LLC. (The Manager of GE-Hitachi Nuclear Energy Americas, LLC, is Mr. Thomas Saddlemire, a United States citizen.) The CEO of GE-Hitachi Nuclear Energy Americas, LLC, will have no authority over the Vice-President, Reactor Facility Safety and Security of GE-Hitachi Nuclear Energy Americas, LLC, in matters dealing with safety and security of the Vallecitos reactors. (Mr. Andy White, a citizen of the United Kingdom and a permanent resident of the United States, is the designated CEO of GE-Hitachi Nuclear Energy Americas, LLC.)

Second, GE withdrew the proposal to form a Nuclear Oversight Committee of the GE-Hitachi Nuclear Energy Holdings, LLC's Board of Managers. GE-Hitachi Nuclear Energy Americas, LLC, will exercise full control over all nuclear safety and NRC compliance matters. In addition, the GE-Hitachi Nuclear Energy Holdings, LLC's Board of Managers' rules of governance will preclude Hitachi Ltd. from exercising any control over such matters.

The applicant further states that the Formation Agreement between GE and Hitachi, Ltd. will contain provisions ensuring that Hitachi members of the GE-Hitachi Nuclear Energy Holdings, LLC's Board of Managers cannot exercise control over GE-Hitachi Nuclear Energy Holdings, LLC's actions related to NRC licensed activities. In particular: (1) the presence of GE-Hitachi Nuclear Energy Holdings, LLC's Board of Managers members representing greater than 50 percent of the total ownership interests will be required to constitute a quorum; and (2) for most decisions, the affirmative vote of the (GE-Hitachi Nuclear Energy Holdings, LLC's Board of Managers) members representing greater than 50 percent of the total ownership interests is required for the Board to act. In addition, a single member present at a Board meeting may control all of the voting power of that entity. Since Hitachi Ltd. will hold only a 40 percent interest in GE-Hitachi Nuclear Energy Holdings, Hitachi Ltd. cannot exercise control.

Given the substantial ownership interest in the proposed licensee's intermediate parent company to be held indirectly by a foreign company, the NRC staff will require as conditions of the Order and the licenses, the following:

1. The Manager of the Vallecitos Nuclear Center, the Vice-President, Reactor Facility Safety and Security of GE-Hitachi Nuclear Energy Americas, LLC, and the Manager of GE-Hitachi Nuclear Energy Americas, LLC, shall be US citizens. These individuals shall have the responsibility and exclusive authority to ensure and shall ensure, that the business and activities of GE-Hitachi Nuclear Energy Americas, LLC, with respect to the

licenses for the subject facilities are at all times conducted in a manner consistent with the protection of the public health and safety and the common defense and security.

2. The commitments/representations made in the application regarding reporting relationships and authority over safety and security issues and compliance with NRC requirements shall be adhered to and may not be modified without the prior written consent from the Director, Office of Nuclear Reactor Regulation, the Director, Office of Federal and State Materials and Environmental Management Programs, or their designee(s).
3. GE-Hitachi Nuclear Energy Americas, LLC, shall cause to be transmitted to the Director, Office of Nuclear Reactor Regulation and the Director, Office of Federal and State Materials and Environmental Management Programs within 30 days of filing with the U.S. Securities Exchange Commission (SEC), any schedule 13D or 13G filed pursuant to the Securities Exchange Act of 1934 that discloses beneficial ownership of a registered class of General Electric stock.

In light of the above, the NRC staff does not know or have reason to believe that GE-Hitachi Nuclear Energy Americas, LLC, will be owned, controlled or dominated by an alien, a foreign corporation, or a foreign government within the meaning of the Act.

8.0 NUCLEAR INSURANCE AND INDEMNITY

The provisions of the Price-Anderson Act (Section 170 of the Atomic Energy Act) and the Commission's regulations at 10 CFR Part 140 require that the current indemnity agreement be modified to reflect GE-Hitachi Nuclear Energy Americas, LLC, as the licensee of VBWR, GETR, NTR, and EVESR.

In accordance with the Price-Anderson Act, GE-Hitachi Nuclear Energy Americas, LLC, will be required to provide primary insurance. It will also be required to maintain property insurance as specified in 10 CFR 50.54(w). Information provided in the application demonstrates that GE-Hitachi Nuclear Energy Americas, LLC, will be able to satisfy applicable insurance requirements of the NRC and the Price-Anderson Act.

Consistent with NRC practice, the NRC staff is requiring GE-Hitachi Nuclear Energy Americas, LLC, to provide satisfactory documentary evidence that it has obtained the appropriate amount of insurance required of a licensee under 10 CFR Part 140 of the Commission's regulations, prior to the issuance of the amended licenses. Thus, as a condition of the Order, prior to completion of the transfers of the licenses, GE-Hitachi Nuclear Energy Americas, LLC, shall provide the Nuclear Regulatory Commission staff satisfactory documentary evidence that it has obtained the appropriate amount of insurance required of licensees under 10 CFR Part 140 of the Commission's regulations. Evidence was provided by GE in letter dated June 4, 2007, in support of the transfer of the licenses to GE-Hitachi Nuclear Energy Americas, LLC.

9.0 TECHNICAL QUALIFICATIONS

According to the application, the proposed transfer of GE's ownership interest will not result in any significant change to (1) the management and technical personnel at the Vallecitos site who are responsible for licensed activities including reactor safety and nuclear safety, and (2)

other personnel identified in the existing licenses or previous license applications as responsible for the use of licensed materials. Further, license and Technical Specification requirements for staffing and qualifications are not being amended by the transfer. By submittal dated August 9, 2007, GE confirmed that the current management and technical personnel responsible for license activities and materials will become employees of GE-Hitachi Nuclear Energy Americas, LLC, following approval of the license transfers. Thus, the NRC staff has concluded that GE-Hitachi Nuclear Energy Americas, LLC, is technically qualified to hold the subject licenses.

10.0 CONFORMING AMENDMENTS

As previously stated, GE requested approval of proposed conforming amendments to the licenses. Supplemental information received following the *Federal Register* notice of the application did not affect the applicability of the Commission's generic no significant hazards consideration determination set forth in 10 CFR 2.1315. No physical or operating changes to the facilities, or its adjacent lands, are requested. The changes to be made to the licenses are indicated in the conforming amendments in an enclosure to the letter transmitting this safety evaluation. The changes reflect the approved transfer action. The amendments involve no safety questions and are administrative in nature. The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) activities at the licensed facilities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security, or to the health and safety of the public. Accordingly, the amendments are acceptable.

11.0 STATE CONSULTATION

On May 18, 2007, the NRC staff contacted the representative from the State of California's Radiologic Health Branch, and the representative from California Energy Commission to inform them about the licensee's application, and the proposed issuance of the Order and conforming amendments. The representatives from the State of California's Radiologic Health Branch noted that GE had made a similar transfer request regarding GE's State Radioactive Materials License, and had no further comment. The NRC staff discussed with the California Energy Commission staff some of the conditions of the proposed transfer (e.g., no changes in the facilities or in applicable safety, quality assurance or environmental requirements are proposed). Based on these discussions the representative from the California Energy Commission did not have any comments.

12.0 ENVIRONMENTAL CONSIDERATIONS

The subject application is for approval of a transfer of the licenses issued by the NRC and approval of conforming amendments. Accordingly, the actions involved meet the eligibility criteria for a categorical exclusion set forth in 10 CFR 51.22(c)(21). Pursuant to 10 CFR 51.22(b), no environmental assessment or environmental impact statement needs to be prepared in connection with the approval of the application.

13.0 CONCLUSION

In view of the foregoing, the NRC staff finds that, subject to the conditions discussed herein, GE-Hitachi Nuclear Energy Americas, LLC, is qualified to be the holder of the license for the

NTR. Further, the NRC staff finds that GE-Hitachi Nuclear Energy Americas, LLC, is qualified to be the holder of the three possession-only licenses for the VBWR, the EVESR and the GETR to the extent proposed in the application. Finally, the direct transfer of the licenses is otherwise consistent with applicable provisions of law, regulations, and orders issued by the Commission pursuant thereto.

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