

May 28, 2010

MEMORANDUM TO: Peter Habighorst, Chief
Fuel Manufacturing Branch
Fuel Facility Licensing Directorate
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear Material Safety
and Safeguards

FROM: Christopher Ryder, Project Manager **/RA/**
Fuel Manufacturing Branch
Fuel Facility Licensing Directorate
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear Material Safety
and Safeguards

SUBJECT: SUMMARY OF MAY 19, 2010, PRE-LICENSING MEETING WITH GE
HITACHI NUCLEAR ENERGY: VALLECITOS NUCLEAR CENTER

On May 19, 2010, the U.S. Nuclear Regulatory Commission (NRC) held a public meeting with General Electric Hitachi (GEH) Nuclear Energy to discuss the intentions of the Licensee to submit an application for a renewal of special nuclear materials license SNM-960 at the Vallecitos Nuclear Center. The following is a summary of the meeting.

LOCATION

The meeting was held at the NRC Headquarters, Executive Office Building, at 6003 Executive Boulevard, Rockville, Maryland, Room 1B15. A bridge line allowed people outside of NRC Headquarters to participate.

CONTACT: Christopher Ryder, FCSS/NMSS
(301) 492-3189

PARTICIPATION

NRC

Daniel Dorman, Director, Fuel Cycle Safety and Safeguards (FCSS), Office of Nuclear Material Safety and Safeguards (NMSS)

Peter Habighorst, Chief, Fuel Manufacturing Branch, Fuel Facility Licensing Directorate (FFLD), FCSS, NMSS

Christopher Ryder, Licensing Project Manager, FFLD, FCSS, NMSS

Alexander Murray, Senior Chemical Procurement Engineer, Advanced Fuel Cycle, Enrichment, and Uranium Conversion Branch (AFCB), Special Projects and Technical Support Directorate (SPTSD), FCSS, NMSS

Yawar Faraz, Senior Project Manager, AFCB, SPTSD, FCSS, NMSS

Kristina Jamgochian, Security Specialist, Fuel Cycle and Transportation Security Branch, Division of Security Policy, Office of Nuclear Security and Incident Response

Licensee

Christopher Monetta, Senior Vice President, Advanced Programs, GEH

Patricia Campbell, Vice President, Regulatory Affairs, GEH

Scott Murray, Manager, Licensing and Liabilities Center of Excellence Nuclear, GEH

David Turner, Site Manager, GEH Vallecitos Nuclear Center

Donald Krause, Manager, Regulatory Compliance and Environmental Health and Safety, GEH Vallecitos Nuclear Center

SUMMARY

NRC Presentation

The staff stated the milestones leading to the subject meeting. A pre-licensing meeting was held in April 2009. The Licensee submitted a renewal application on September 30, 2009 (ADAMS Accession Number ML092740523). The staff held a conference call on November 18, 2009, (ML093490168) to discuss deficiencies in that application. Per the discussion and a summary of the concerns (ML093270123), the Licensee revised the application on December 7, 2009 (ML093440225, ML093440227). A non-acceptance letter was issued on

January 6, 2010, (ML093510791). Another pre-licensing meeting was held on February 18, 2010 (ML100570319). Another application was submitted on February 24, 2010 (ML100560508), followed by another non-acceptance letter dated April 16, 2010 (ML100970657).

The staff discussed the regulatory requirements for information in an application. Title 10 of the *Code of Federal Regulations* (10 CFR) 70.22(a)(7) requires a description of equipment and facilities that will be used by the applicant to protect health and minimize danger to life or property. Examples given in the regulation were listed—handling devices, working areas, shields, devices for the disposal of radioactive effluents and wastes, measuring and monitoring instruments, storage facilities, and criticality accident alarm systems. The staff emphasized that the list ranges from the facility to the component level. The Licensee took exception to the use of the word “component,” stating that the word is not in the regulation and asked the staff to clarify the meaning of component. For example, a fuel manipulator in a hot cell consists of many components. Does the staff expect the Licensee to describe the parts of a fuel manipulator? The staff clarified that the Licensee is not expected to provide detailed engineering drawings with their application. The Licensee is to describe the “components” in sufficient detail to demonstrate safety. A component can be simple, for example, a waste drum or fan.

The staff continued discussing the requirements of information. For approval of an application, 10 CFR 70.23(a)(3) and (4) requires the staff to determine that the equipment, facilities, and procedures are adequate to protect health and to minimize danger to life or property. The staff emphasized the words “application,” “equipment,” “facilities,” “procedures,” and “adequate.”

The staff stated that, although the process and criteria for amending a license and reporting changes to a facility per 10 CFR 70.72 does not apply because Subpart H does not apply to the GEH Vallecitos site, the Commission must still be able to give adequate assurance of safety from the time the license is issued to when the license is renewed or terminated. The licensing basis has to remain on a current basis. Two ways to keep the license current with the description of the facility are to either bound the facility description as stated in the application or to incorporate a process similar to that in 10 CFR 70.72. Bounding or enveloping statements are made to encompass the types of changes that could be made without changing the descriptions in the application, and hence, amending the license. Examples of bounding statements include “up to,” “not to exceed,” “no less than,” “at least,” “limited to,” and “as a minimum.” By a 10 CFR 70.72 type process, thresholds would be set where certain changes or types of changes would be done by amendments. When asked, the staff had not developed the details of how a 10 CFR 70.72 type process would be implemented. Nevertheless, the objective is to limit amendments to significant changes.

Licensee Presentation

The Licensee stated that the current license is in old, two-part format. Appendix A of the 1999 application (ADAMS Legacy Accession Numbers 890525049, 09902040166, and 9909130054) contain license conditions and commitments; Appendix B contains supplemental

demonstration information. Detailed information in Appendix B regarding personnel resumes, flow rates, tank capacities, and throughput was not intended as conditions. The renewal application was made pursuant to 10 CFR 70.22. The regulation and guidance do not use a two-part format. The level of detail that had been provided is comparable to other similar renewal applications.

The Licensee reiterated many of the same milestones stated by the staff. A revised application was submitted on December 7, 2009, to address a request for additional information dated November 18, 2009. A revised application was submitted on February 24, 2010, to address the deficiencies described in the non-acceptance letter dated January 6, 2010. Currently, additional information is being provided in a revised application to address the deficiencies described in the non-acceptance letter dated April 16, 2010.

The Licensee listed revisions in the application leading to the February 24, 2010, submittal; then listed the changes leading to the next submittal. The changes would include information in Appendix B of the 1999 license application as follows:

- Added physiographic information to the site description section
- Provided additional licensed activity descriptions in the facility section
- Added receiving and storage sections to include more details on fuel pool storage locations
- Provided more information on the backup power supply
- Added Building 103 details (Chemistry and Metallurgy Labs) and a floor plan diagram
- Added Building 105 details and a floor plan diagram
- Added Building 107 details (hazardous waste and chemical storage)
- Added radioactive waste facility details—including the liquid waste evaporator plant, solid waste storage facility and waste disposal

Discussion

The Licensee asked what constituted the licensing basis and how this differs from the information in the license application, both in past and current applications. The previous license brought only the commitments, not the facility description, into the license through safety condition S-1.

The Licensee was concerned about having to amend their license when changes to the facility are made. The Vallecitos facility is old, and parts are sometimes difficult to find. When asked, the staff said that an amendment would not be needed to replace a component with a newer component, provided that the same function is performed. Following that train of thought, the Licensee asked if an amendment to the license would be needed when a new replacement component performs the same function as two older components. The staff responded that the Licensee would have to provide information to NRC to keep the license current with the facility description. The staff suggested describing “functions” instead of specific components; this would be similar to making bounding statements.

Regardless, the staff stated that the Licensee must provide the information that is required in 10 CFR 70.22. As stated in the April 16, 2010, non-acceptance letter, the information in Appendix B of the 1999 application has the detail to begin a technical review. The discussion led to an understanding that the Licensee would update the information in the 1999 version of Appendix B for use in the next application and provide supplemental information in an appendix. This would be similar to the two-part license application of 1999. If the staff makes a safety determination from the supplemental information, a request for additional information would state that the subject information in the appendix would be incorporated into the license application. Several revisions to the application would result.

The Licensee intends to notify NRC of their plans to resubmit an application by early June 2010. An application would be resubmitted shortly thereafter. The staff stated that they did not want to have an application requiring the staff to ask many requests for additional information. There is no need to make an overly restrictive, self-imposed submittal date. The Licensee is in timely renewal.

Enclosures:

1. List of Attendees
2. NRC Presentation
3. GEH Vallecitos Nuclear Center Presentation

Docket No.: 70-754

License No.: SNM-960

Regardless, the staff stated that the Licensee must provide the information that is required in 10 CFR 70.22. As stated in the April 16, 2010, non-acceptance letter, the information in Appendix B of the 1999 application has the detail to begin a technical review. The discussion led to an understanding that the Licensee would update the information in the 1999 version of Appendix B for use in the next application and provide supplemental information in an appendix. This would be similar to the two-part license application of 1999. If the staff makes a safety determination from the supplemental information, a request for additional information would state that the subject information in the appendix would be incorporated into the license application. Several revisions to the application would result.

The Licensee stated that an application would be resubmitted by mid-June 2010. The staff stated that they did not want to have an application requiring the staff to ask many requests for additional information. There is no need to make an overly restrictive, self-imposed submittal date. The Licensee is in timely renewal.

Enclosures:

1. List of Attendees
2. NRC Presentation
3. GEH Vallecitos Nuclear Center Presentation

Docket No.: 70-754

License No.: SNM-960

DISTIRBUTION:

FMB r/f

ML101410082

OFFICE	FMB	FMB	FMB
NAME	CRyder	LAllen	PHabighorst
DATE	05/25/10	05/27/10	05/28/10

OFFICIAL RECORD COPY