

DOCKET: 70-1113

LICENSEE: Global Nuclear Fuel – Americas, LLC
Wilmington, North Carolina

SUBJECT: GLOBAL NUCLEAR FUEL - AMERICAS – CHANGES TO MATERIALS
LICENSE SNM-1097 AND AMENDMENT 9 (COST ACTIVITY CODE L33325)

BACKGROUND

In a letter dated October 27, 2016, Global Nuclear Fuel – Americas (GNF-A) submitted a record of administrative changes made by the licensee to amend Materials License SNM-1097. GNF-A is authorized, under Section 1.3.1.2 of its License Application, to make changes without prior U.S. Nuclear Regulatory Commission (NRC) approval, in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) Paragraph 70.72(c).

DISCUSSION

The staff reviewed the following changes:

Chapter 2, - Figure 2.1, GNF-A Organizational Chart, Section 2.2.1.3, Integrated Safety Analysis and Configuration Management Functions, Section 2.2.1.9 Site Security and Emergency Preparedness Function. 'Manager' and 'function' has been pluralized to 'managers' and 'functions,' reflecting the current organizational structure and responsibilities.

Chapter 2. Section 2.2.1.6, Radiation Safety Function – Training requirements changed from 'BA degree in science or engineering,' to 'BA degree or equivalent.'

Chapter 2, Section 2.2.1.7, Environmental Protection Function - Training requirements changed from 'BA degree in science or engineering,' to 'BA degree or equivalent.'

Chapter 2, Section 2.2.1.9, Site Security and Emergency Preparedness Function - Training requirements changed from 'BA degree in science or engineering,' to 'BA degree or equivalent.'

Chapter 2, Section 2.2.1.10, Environmental Health and Safety Function - Training requirements changed from 'BA degree in science or engineering,' to 'BA degree or equivalent.'

Chapter 3, Integrated Safety Analysis, Section 3.3, Conducting the Process Hazard Analysis -- deleted "input to the GNF-A database and are" from the second sentence.

Chapter 3, Integrated Safety Analysis – Several administrative changes, which were clarifications and the same change, were made to sections describing the Integrated Safety Analysis process. A proprietary database was originally used to evaluate and document the result of a Process Hazards Analysis (PHA). Upon completion of each milestone of the Integrated Safety Analysis review project, begun in 2010 (ML100120356), word documents were generated of the PHA's using the database. The resulting report has been referred to as the Integrated Safety Analysis Reference Report. The documents became the official versions controlled by the Configuration Management Center (CMC). Subsequent changes to the PHA's are made directly to these controlled word documents instead of creating new documents from

the database so changes can be tracked. To be more accurate in description, these documents are called Integrated Safety Analysis Reference Reports. These changes were noted in the following sections:

Section 3.3.1, Selecting the Analysis Method – Changed last sentence of first paragraph from “provide the required output for input to the GNF-A ISA database” to “provide the required input to the ISA Reference Report.”

Section 3.3.5, Determine the Unmitigated Consequence Severity – First sentence changed from “GNF-A ISA database” to “ISA Reference Report.”

Section 3.3.6, Determine the Unmitigated Likelihood – Third sentence changed “GNF-A ISA database” to “ISA Reference Report.”

Section 3.3.7, Determine the Unmitigated Risk – Last sentence in paragraph changed from “GNF-A database” to “ISA Reference Report.”

Chapter 3, Section 3.5.1, ISA Change Management – An administrative change was made for consistency with the language of 10 CFR 70.72(c) and Section 1.3.1.2 of the application.

The last sentence of the third paragraph was changed from “Modifications to existing items relied on for safety (IROFS) are evaluated to ensure that capability, availability, and reliability of the IROFS are at least equal to the original IROFS approved by the NRC” to “Changes are evaluated to ensure they do not remove, without at least an equivalent replacement of safety function, an IROFS listed in the ISA summary that is necessary for compliance with performance requirements.”

The first sentence of the fourth paragraph of the section was changed from “A trained ISA facilitator is responsible for the development of modifications to the ISA documentation per written, approved procedures” to “Updates to the ISA are issued in accordance with approved procedures.”

Chapter 3, ISA, Section 3.5.2.2, Quantitative Risk Analyst – Two administrative changes were made to this section:

A clarification was made in the first sentence, changing “authors” to “approvers.”

The second sentence, which read “They are also assigned trained peer reviewers to assess their analysis as it is developed,” was deleted.

Chapter 4, Radiation Safety, Section 4.3.3, Exhaust System – Three administrative changes were made to this section:

Language was added to the first sentence to read “Potentially contaminated air is exhausted through high efficiency filter media which are at least 99.97 percent efficient for removal of 0.3 micron particles from the fuel manufacturing process.”

In the first sentence of the last paragraph, the word “filtration” was changed to “stack discharge.”

The last sentence of the section, "Such scrubbers are installed so that effectiveness of filters is maintained," was deleted.

ENVIRONMENTAL REVIEW

According to 10 CFR 51.22(c)(11), the issuance of amendments to licenses for fuel cycle plants which are administrative, organizational, or procedural in nature—or which result in a change in process operations or equipment—are eligible for categorical exclusion provided that:

- i. There is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite.
- ii. There is no significant increase in individual or cumulative occupational radiation exposure.
- iii. There is no significant construction impact.
- iv. There is no significant increase in the potential for or consequences from radiological accidents.

The changes in this amendment do not affect the scope or nature of the licensed activity and will not result in a significant change in the types or amounts of effluents released offsite. There will not be any significant increase in individual or cumulative occupational radiation exposure, and there will not be any significant increase in the potential or consequences from radiological accidents. There is no construction associated with these changes, so there will not be any impact from construction.

CONCLUSION AND RECOMMENDATION

Based on the review and evaluation of the licensee's submittal, the staff has determined that the proposed changes to the License Application are administrative in nature and the commitments continue to ensure effective programs at the GNF-A facility. Approval of the amendment is recommended.

PRINCIPAL CONTRIBUTOR

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