

September 15, 2009

EGM-09-006

MEMORANDUM TO: Samuel J. Collins, Regional Administrator, Region I
Luis A. Reyes, Regional Administrator, Region II
Mark A. Satorius, Regional Administrator, Region III
Elmo E. Collins, Regional Administrator, Region IV
Eric J. Leeds, Director, Office of Nuclear Reactor Regulation
Roy P. Zimmerman, Director, Office of Nuclear Security
and Incident Response
Michael F. Weber, Director, Office of Nuclear Material Safety
and Safeguards
Charles L. Miller, Director, Office of Federal and State Materials
and Environmental Management Programs

FROM: Cynthia A. Carpenter, Director /RA/
Office of Enforcement

SUBJECT: ENFORCEMENT GUIDANCE MEMORANDUM 09-006—
ENFORCEMENT DISCRETION FOR VIOLATIONS OF
10 CFR PART 72, SUBPART K, REGARDING IMPLEMENTATION OF
CERTIFICATE OF COMPLIANCE AMENDMENTS TO PREVIOUSLY
LOADED SPENT FUEL STORAGE CASKS

Purpose:

The purpose of this enforcement guidance memorandum (EGM) is to provide interim guidance for the disposition of apparent violations of U.S. Nuclear Regulatory Commission (NRC) regulations which require that 10 CFR Part 72 general licensees, for any cask¹ loaded with spent nuclear fuel (SNF), comply with the terms, conditions, and specifications (TCSs) of the certificate of compliance (CoC) under which that cask was loaded. This EGM will remain in effect until a final rule for the current proposed rulemaking, "License and Certificate of Compliance Terms," RIN 3150-AI09, is published in the Federal Register.

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¹ The term "cask" means "all the components and systems associated with the container in which spent fuel or other radioactive materials associated with spent fuel are stored in an ISFSI" (10 CFR 72.3). Thus, use of the word "cask" in this EGM should be read as applying to the entire cask system. As an example, the HI-STORM 100 Cask System (the cask) consists of the following components: (1) interchangeable multi-purpose canisters (MPCs), which contain the fuel; (2) a storage over pack (HI-STORM), which contains the MPC during storage; and (3) a transfer cask (HI-TRAC), which contains the MPC during loading, unloading and transfer operations.

Background:

CoC amendments are routinely requested by the cask manufacturer or vendor (also referred to as the certificate holder) to account for advances in cask design and technology. Upon NRC approval of a CoC amendment (listed in 10 CFR 72.214), general licensees can load SNF into empty casks of that design that are fabricated to the specifications of that CoC amendment. Once loaded, however, the cask is bound by the terms and conditions (including the technical specifications) of the CoC under which that cask was loaded (10 CFR 72.212(b)(7)). The NRC staff has determined that, under the current regulations, a change described by a later CoC amendment cannot be applied to a cask loaded under the original CoC or an earlier amendment thereto (“a previously loaded cask”), without prior NRC approval, if such change results in a change to the TCSs of the CoC under which the cask was loaded (10 CFR 72.48(c)). Therefore, under the current regulations, general licensees that want to apply any changes from a later CoC amendment to a previously loaded cask must request an exemption from the NRC, pursuant to 10 CFR 72.7.

On September 15, 2009, the NRC issued a proposed rule for public comment entitled “License and Certificate of Compliance Terms,” RIN 3150-AI09. The proposed rule will affect all Part 72 general licensees. The proposed rule allows general licensees to implement, without prior NRC approval, changes described by a CoC amendment listed in 10 CFR 72.214 to a previously loaded cask, provided that the cask, after the changes have been applied, conforms to the TCSs of the CoC amendment. Partial or selective application of some of the authorized changes, but not others, would continue to require prior NRC approval through an exemption request.

The NRC developed the proposed rule and this EGM because it became aware that some general licensees interpreted 10 CFR 72.48(c) as allowing application of all or some of the changes described by a CoC amendment to a previously loaded cask, without obtaining prior NRC approval. This interpretation, in effect, allows an “upgrade” of the cask. As stated above, the NRC has determined that the changes described by a CoC amendment cannot be applied to a previously loaded cask without prior NRC approval. This EGM pertains to those general licensees who may be identified as having implemented all or some of the changes described by a CoC amendment to a previously loaded cask without prior NRC approval, prior to issuance of the proposed rule. The NRC has determined that enforcement discretion, within the parameters described below, is appropriate given the lack of clarity in the current regulations.

Discussion:

The regulation in 10 CFR 72.210 issues a general license for the storage of SNF in an independent spent fuel storage installation (ISFSI) at power reactor sites to persons authorized to possess or operate nuclear power reactors under 10 CFR Part 50 or 52. The regulation in 10 CFR 72.212 describes the conditions of the general license, including the condition that such SNF must be stored in the casks, the design of which is approved under the provisions of 10 CFR Part 72. The NRC issues a CoC for each approved cask design. Each CoC amendment is considered to have its own design basis; a later amendment does not encompass earlier amendments to that CoC unless the later CoC amendment expressly provides otherwise. Upon NRC approval of a CoC amendment (listed in 10 CFR 72.214), general licensees can load SNF into empty casks of that design that are fabricated to the specifications of that CoC amendment.

According to 10 CFR 72.212, changes to the written evaluations required under 10 CFR 72.212(b)(2) must be performed according to the requirements of 10 CFR 72.48(c). Subsection 72.48(c) permits a general licensee to make changes to a cask design, without obtaining NRC approval, if such a change does not require a change to the TCSs of the CoC under which the cask was loaded. If the application of a CoC amendment change to a previously loaded cask would change any of the TCSs of CoC under which the cask was loaded, then the general licensee must obtain prior NRC approval (through a 10 CFR 72.7 exemption request). A change to the TCSs of the CoC under which the cask was loaded, without prior NRC approval, would place the licensee into noncompliance with the regulations in 10 CFR Part 72, Subpart K.

Disposition of Violations:

The NRC will exercise enforcement discretion for the following cases:

- A licensee has implemented some of the changes of a CoC amendment to a previously loaded cask before issuance of the proposed rule and the licensee commits to any of the following:
 - Undo the changes to restore compliance and conform the previously loaded cask to the CoC amendment, listed in 10 CFR 72.214, under which the cask was loaded, within 4 months² after issuance of the proposed rule;
 - Conform the previously loaded cask to another CoC amendment listed in 10 CFR 72.214 (other than the one under which the cask was loaded), within 4 months² after issuance of the proposed rule by implementing additional changes necessary to conform to the other CoC amendment (ensure that the licensee performs a 10 CFR 72.212 evaluation prior to implementation of the changes³);
 - Apply for an exemption to the NRC, through the Office of Nuclear Material Safety and Safeguards (NMSS), within 4 months² after issuance of the proposed rule.

² This allows licensees a reasonable amount of time to complete any necessary actions to conform to this EGM.

³ If the CoC amendment changes, amongst other things, the TCSs for *loading*, general licensees may have difficulty demonstrating that the previously loaded cask complies with the new *loading* requirements. For example, the CoC amendment under which the cask was *loaded* may require a liquid dye-penetrant non-destructive test to be performed on certain welds after *loading* to determine if the welds are acceptable; the later CoC amendment in which a licensee has selected to upgrade its previously loaded cask now requires a 5x visual inspection on these same welds, which may be inaccessible and can not easily be performed as a result of assembly of the cask for storage. If the evaluation establishes that the *loading* conditions of the CoC amendment under which the cask was loaded would not affect the ability of the previously loaded cask to meet the *storage*, *unloading* or *other* requirements of the later CoC amendment, general licensees would be considered as conforming with the TCSs of the later CoC amendment, without having to meet the 5x visual inspection test.

- A licensee has implemented all of the changes of a CoC amendment to a previously loaded cask such that the cask conforms to a CoC listed in 10 CFR 72.214, before issuance of the proposed rule, and the licensee commits to the performance of a 10 CFR 72.212 evaluation, if not already performed, within 4 months⁴ after issuance of the proposed rule.⁵ The evaluation will apply to all the changes implemented.

When exercising enforcement discretion in accordance with this EGM, the appropriate regional office should obtain an enforcement action (EA) number, which would allow such cases to be identified and tracked as needed, but a formal enforcement panel does not need to be convened. When considering exercising enforcement discretion for violations of any requirements other than those described within this EGM, the appropriate regional office should obtain an EA number, and a formal enforcement panel may be necessary to determine if any discretion is appropriate.

If an NRC inspection determines that a licensee, before issuance of the proposed rule, has implemented all or some of the changes associated with a CoC amendment to a previously loaded cask, without obtaining NRC approval for the changes, then the inspection report should document the following:

- Cask name/model number/CoC number;
- Cask identification number;
- CoC Amendment number and the date under which the cask was originally loaded;
- A general description of the changes made, including the CoC amendment number(s) listed in 10 CFR 72.214, which served as the basis for any changes, the dates any changes were implemented, and whether a 10 CFR 72.212 evaluation was performed before implementation of any changes (the inspection report must specify whether the licensee implemented some or all of the changes of a CoC amendment to a previously loaded cask);
- For a licensee that has implemented only some of the changes described by a CoC amendment to a previously loaded cask, whether the licensee will commit to either undoing all the changes, conforming to a CoC amendment other than the CoC under which the cask was loaded (including the preparation of a 10 CFR 72.212 evaluation), or applying for an exemption, all completed within 4 months after issuance of the proposed rule; and

⁴ This allows licensees a reasonable amount of time to complete any necessary actions to conform to this EGM.

⁵ If the CoC amendment changes, amongst other things, the TCSs for *loading*, general licensees may have difficulty demonstrating that the previously loaded cask complies with the new *loading* requirements. For example, the CoC amendment under which the cask was *loaded* may require a liquid dye-penetrant non-destructive test to be performed on certain welds after *loading* to determine if the welds are acceptable; the later CoC amendment in which a licensee has selected to upgrade its previously loaded cask now requires a 5x visual inspection on these same welds, which may be inaccessible and can not easily be performed as a result of assembly of the cask for storage. If the evaluation establishes that the *loading* conditions of the CoC amendment under which the cask was loaded would not affect the ability of the previously loaded cask to meet the *storage*, *unloading* or *other* requirements of the later CoC amendment, general licensees would be considered as conforming with the TCSs of the later CoC amendment, without having to meet the 5x visual inspection test.

- For a licensee that has implemented all of the changes described by a CoC amendment to a previously loaded cask, whether the licensee will commit to preparing a 10 CFR 72.212 evaluation, if not already performed, within 4 months after issuance of the proposed rule.

Additionally, the inspection report shall include the following statement, if applicable:

“A potential violation of 10 CFR Part 72, Subpart K, was identified regarding **[licensee name]** (“Licensee”), which holds a general license pursuant to 10 CFR 72.210. The Licensee has applied **[select “some” or “all”]** of the changes described by a CoC amendment listed in 10 CFR 72.214 to a previously loaded cask prior to issuance of the proposed rule entitled “License and Certificate of Compliance Terms,” RIN 3150-AI09, and without obtaining NRC approval. Because the Licensee has committed to **[insert appropriate bullet/action]”**

- “undo the changes it applied to the previously loaded cask, in order to restore compliance with and conform to [identify the applicable CoC number and the CoC amendment number listed in 10 CFR 72.214], which is the CoC under which the cask was loaded;”
- “apply the remainder of the changes to conform the cask to [identify the applicable CoC number and the applicable CoC amendment number listed in 10 CFR 72.214] to the previously loaded cask, and perform a 10 CFR 72.212 evaluation for the application of these changes;”
- “file an exemption for its application of the changes described by [identify the applicable CoC number and the applicable CoC amendment number(s) listed in 10 CFR 72.214] to the previously loaded cask through the Office of Nuclear Material Safety and Safeguards;”
- “perform a 10 CFR 72.212 evaluation for its application of all of the changes described by [identify the applicable CoC number and the applicable CoC amendment number listed in 10 CFR 72.214] to the previously loaded cask;”

by **[insert date]**, which is 4 months after the issuance of the proposed rule RIN 3150-AI09,” the NRC is exercising enforcement discretion in accordance with Section VII.B.6 of the NRC Enforcement Policy and, therefore, is not issuing any enforcement action for this potential violation.”

Disposition of Violations Outside the Scope of This EGM:

The NRC will not grant enforcement discretion to licensees that applied some or all of the changes described by a CoC amendment to a previously loaded cask, other than as described above, after issuance of the proposed rule, or if the licensee has failed to meet any commitments outlined above for granting enforcement discretion. Potential performance deficiencies that are determined to be non-willful violations should typically be assigned a Severity Level IV and processed in accordance with the normal NRC enforcement process.

For potential violations that are determined to be willful, the appropriate regional office shall obtain and assign an EA number for the case, and process the potential violations in accordance with the NRC enforcement process.

cc: R. W. Borchardt, EDO
B. Mallett, DEDR
M. Virgilio, DEDMRT
V. Ordaz, OEDO
SECY

Disposition of Violations Outside the Scope of This EGM:

The NRC will not grant enforcement discretion to licensees that applied some or all of the changes described by a CoC amendment to a previously loaded cask after issuance of the proposed rule, or if the licensee has failed to meet any commitments outlined above for granting enforcement discretion. Potential performance deficiencies that are determined to be non-willful violations should typically be assigned a Severity Level IV and processed in accordance with the normal NRC enforcement process.

For potential violations that are determined to be willful, the appropriate regional office shall obtain and assign an EA number for the case, and process the potential violations in accordance with the NRC enforcement process.

cc: R. W. Borchardt, EDO
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** Nader Mamish concurred for Bill Brach while he was acting for Mr. Brach and while he was out of the office.

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