

From: [White, Bernard](#)
To: [Macdougall, Robert](#)
Cc: [Gallagher, Carol](#); [Henderson, Garrett](#)
Subject: RE: Draft DFR FRN for NAC CoC Amendment 6
Date: Monday, July 02, 2018 9:55:06 AM

Rob,

The amendment doesn't affect the ability to move spent fuel, one way or another, since it doesn't add or revise any items related to the spent fuel. The same fuel that can be loaded now, will still be able to be loaded after the amendment. The amendment doesn't add any new fuel to be loaded, meaning if we don't approve amendment 6, the same spent fuel will still be able to be loaded into storage casks.

It deals with reducing unnecessary burden after transfer to the storage pad and requiring that the dose rate measurements be performed prior to storage (the time when they are the highest), rather than some point during storage.

If we don't approve amendment 6, the only way that spent fuel would not be able to be loaded into a NAC-UMS cask is if the general licensee doesn't want to abide by the terms of the CoC/Tech Specs for performing the surveillance requirements.

Having said this, I am good with the language you propose since it does reduce the burden of licensees during storage.

Thanks
Bernie White
Senior Project Manager
Division of Spent Fuel Management
Office of Nuclear Material Safety and Safeguards
(301) 415-6577

From: Macdougall, Robert
Sent: Monday, July 02, 2018 9:42 AM
To: White, Bernard <Bernard.White@nrc.gov>
Cc: Gallagher, Carol <Carol.Gallagher@nrc.gov>; Henderson, Garrett <Garrett.Henderson@nrc.gov>
Subject: RE: Draft DFR FRN for NAC CoC Amendment 6

Thanks, Bernie. I hadn't thought that my statement would be interpreted in quite the way you have. When I wrote, "[t]he Amendment facilitates the dry cask storage of spent fuel that would otherwise have to be stored in the affected power reactors' spent fuel storage pools," I wasn't thinking just of the loading of the affected fuel into NAC-UMS casks under Amendment 6. I was trying to suggest that without NRC approval of the Amendment, the affected spent fuel would have to continue to be stored in the affected reactors' storage pools. We could rephrase the thought this latter way, but it might give the misimpression that we think there's a safety-related need to store SNF in dry casks rather than pools.

We could also say that the affected licensees need the Amendment to enable them to move the affected SNF from their spent fuel storage pools into the same NAC-UMS dry casks they have been using, which they would continue to use, only under clarified

operating conditions. But that sentence seems a bit ungainly. It might also unnecessarily announce that the licensees' needs are our needs for NEPA purposes. Then again, just from reading the rest of the paragraph in the "Need for the Action" section, it's clear that that's the truth of the matter; NAC requested the amendment, and to approve it under NEPA, we have to find the need for it justifiable.

On balance, I'm inclined toward the simpler original formulation, because I think most lay people would associate "dry cask storage" not just with the actual loading of SNF into casks, but with all the activities that support an end-state of having loaded SNF sitting safely in casks on pads at reactor sites for years.

Anybody have another opinion?

Thanks again, Bernie, for your take that prompted me to think a bit more about the meaning of what I think is a worthwhile clarification of our "Need for the Action" statement.

Best,
Rob

From: White, Bernard
Sent: Monday, July 02, 2018 8:08 AM
To: Macdougall, Robert <Robert.MacDougall@nrc.gov>
Cc: Gallagher, Carol <Carol.Gallagher@nrc.gov>; Henderson, Garrett <Garrett.Henderson@nrc.gov>
Subject: RE: Draft DFR FRN for NAC CoC Amendment 6

By saying it "The Amendment facilitates the dry cask storage of spent fuel..." you mean that there is less burdensome on the license once the spent fuel is loaded into the cask, then I agree with the statement, but it doesn't facilitate actual loading of spent fuel into storage casks.

Yes the Commission has said that both types of storage are safe and one is not preferred over another.

Thanks
Bernie White
Senior Project Manager
Division of Spent Fuel Management
Office of Nuclear Material Safety and Safeguards
(301) 415-6577

From: Macdougall, Robert
Sent: Friday, June 29, 2018 5:08 PM
To: Henderson, Garrett <Garrett.Henderson@nrc.gov>
Cc: White, Bernard <Bernard.White@nrc.gov>; Gallagher, Carol <Carol.Gallagher@nrc.gov>
Subject: RE: Draft DFR FRN for NAC CoC Amendment 6

Thanks, Garrett.

I agree with you that the increased paperwork/administrative burden argument is pretty weak, but at the margin, comparing the two alternatives, it seems to have been enough to enable us to justify choosing the preferred alternative.

I also agree with you that we really should be comparing the impact of approving the amendment versus the impacts of the status quo, by which I take you to mean the continued storage of the subject SNF in the affected licensees' storage pools. Unfortunately, as I understand it – and anybody reading this, please correct me if I'm wrong – the Commission continues to hold the view that there is no significant difference in safety or environmental impacts between wet storage and dry, so we can't make that comparison of environmental impacts to justify our choice of preferred action here.

Your thought did remind me, however, that we can remind interested stakeholders that this rulemaking, like other CoC amendments, supports dry storage as an alternative to the continued storage of the affected SNF in pools. I've inserted that thought into the "Need for the Action" section of the EA discussions in past CoC rulemakings because pointing out the wet storage alternative more clearly explains the need in practical terms that a lay reader can understand. So, in the attached *n*th revision of the draft FRN, I've added this sentence at the end of that Need section on p. 11: "The Amendment facilitates the dry cask storage of spent fuel that would otherwise have to be stored in the affected power reactors' spent fuel storage pools." Do you all think that this clarification would be helpful?

In any case, I hope everybody can put this aside and this end of the day and have a good weekend.

Rob

From: Henderson, Garrett
Sent: Friday, June 29, 2018 2:13 PM
To: Macdougall, Robert <Robert.MacDougall@nrc.gov>
Subject: RE: Draft DFR FRN for NAC CoC Amendment 6

While I still think that "increased paperwork" is a really flimsy argument for arguing that denying the amendment would create a greater environmental impact, and that we should be weighing the impacts of approving the amendment versus the impacts of the status quo, rather than versus potential exemptions requests, I realize that I am splitting hairs a bit. If you would like to keep the template language, I'm not going to object.

From: Macdougall, Robert
Sent: Friday, June 29, 2018 1:37 PM
To: Henderson, Garrett <Garrett.Henderson@nrc.gov>; White, Bernard <Bernard.White@nrc.gov>; Gallagher, Carol <Carol.Gallagher@nrc.gov>
Subject: RE: Draft DFR FRN for NAC CoC Amendment 6

Thanks, Garrett. FYI, the file you last sent me didn't have the benefit of Bernie's additional comments on the draft I sent out earlier this a.m. responding to his earlier comments. His and your

second sets of comments are now consolidated in the attached, along with my response. To obviate your having to go look for my latest response in the attached, I'm elaborating on it here:

On your last comment, Garrett, I would say that the "administrative burden" argument has been in the EA section of every CoC DFR template I've seen since I started working on these rulemakings in 2015, and each revision of the template was specifically approved by OGC. I've done 6 CoC rulemakings now, and the EA section of each DFR FRN has had the same basic language on the no-action alternative:

"Under this alternative, interested licensees would have to prepare, and the NRC would have to review, each separate exemption request, thereby increasing the administrative burden on the NRC and the costs to each licensee. The environmental impacts of this no-action alternative would therefore be the same as or more than those for the action itself."

To confirm this for yourself, you can click on the links for the FRNs for a more-than-representative sample of the most recent five: the 3/19/15 [Holtec 100 FW Amndt 1 Rv 1 DFR](#); the 1/6/16 [Holtec HISTORM 100 Amndt 9 Rv 1 DFR](#); the 3/14/16 [Holtec HISTORM 100 Amndt 10 DFR](#); the 7/7/17 [VSC-24 renewal DFR](#) (slightly different); and the 9/27/17 [NUHOMS renewal DFR](#) (like the VSC-24 renewal, also slightly different, but with essentially the same import). Each of my several OGC working group members on these rulemakings approved the EA language. Given this ample precedent, I don't think we should be straying from this basic formulation without a compelling reason, and I don't see one here.

Hope this gives you my more historical perspective.

Rob

From: Henderson, Garrett
Sent: Friday, June 29, 2018 11:18 AM
To: Macdougall, Robert <Robert.MacDougall@nrc.gov>; White, Bernard <Bernard.White@nrc.gov>; Gallagher, Carol <Carol.Gallagher@nrc.gov>
Subject: RE: Draft DFR FRN for NAC CoC Amendment 6

Rob,

I finished looking over your comments and have attached my reply comments in a draft. There are some minor quibbles, but the only thing I think may require some discussion is the "alternative actions" bit.

Let me know what you think.

-Garrett

From: Macdougall, Robert
Sent: Friday, June 29, 2018 9:38 AM
To: White, Bernard <Bernard.White@nrc.gov>; Gallagher, Carol <Carol.Gallagher@nrc.gov>

Henderson, Garrett <Garrett.Henderson@nrc.gov>

Subject: RE: Draft DFR FRN for NAC CoC Amendment 6

Thanks for the quick turnaround, Bernie. As you'll see in the attached, I need your clarification of your comment about the EA, but have made no further changes other than to substitute Margaret Doane's name for Mr. McCree's as EDO.

Best,
Rob

From: White, Bernard

Sent: Friday, June 29, 2018 8:18 AM

To: Macdougall, Robert <Robert.MacDougall@nrc.gov>; Gallagher, Carol <Carol.Gallagher@nrc.gov>; Henderson, Garrett <Garrett.Henderson@nrc.gov>

Subject: RE: Draft DFR FRN for NAC CoC Amendment 6

Here are my thoughts the some of the comments. Please don't hesitate to contact me if you have any questions.

Thanks
Bernie White
Senior Project Manager
Division of Spent Fuel Management
Office of Nuclear Material Safety and Safeguards
(301) 415-6577

From: Macdougall, Robert

Sent: Thursday, June 28, 2018 10:27 AM

To: White, Bernard <Bernard.White@nrc.gov>; Gallagher, Carol <Carol.Gallagher@nrc.gov>

Subject: FW: Draft DFR FRN for NAC CoC Amendment 6

My apologies; forgot to cc: you on this.

Rob

From: Macdougall, Robert

Sent: Monday, June 25, 2018 12:56 PM

To: Henderson, Garrett <Garrett.Henderson@nrc.gov>

Subject: RE: Draft DFR FRN for NAC CoC Amendment 6

Hi, Garrett,

Thanks for getting back to me with your comments and suggested edits – and no need to apologize; we're all busy.

Attached are my responses to your comments and edits. Although we might still need to call a working group meeting if you think it necessary, I think our differences are minor

enough to enable us to avoid one. I'm hoping that if my responses in the attached make sense to you – and to you, Bernie, and you, Carol -- I might be able to submit a clean draft, along with a draft proposed rule conforming to these changes, in a package for everybody's concurrence/NLO to proceed to the next step.

If anybody has any objections to my proposed path forward without a meeting, please let me know.

Thanks in advance,
Rob

From: Henderson, Garrett
Sent: Monday, June 25, 2018 9:38 AM
To: Macdougall, Robert <Robert.MacDougall@nrc.gov>
Subject: RE: Draft DFR FRN for NAC CoC Amendment 6

Good morning, Rob,

My apologies on not replying to your email sooner, I was out last Thursday and Friday. Also apologies are due for my failure to return my comments on the FRN in a timelier manner. It turns out that I have been assigned to two separate working groups on regulations pertaining to casks and was provided an FRN to review for each. I conflated the two.

I have now reviewed your FRN and identified a few minor issues that I don't think will be difficult to resolve (text tweaks, missing citations, etc.), and one more medium level issue that might need some discussion, namely that I don't believe the "alternative actions" section accurately reflects what would happen if this amendment was denied. I set forth my opinion on the issue in the comments to the attached draft. Give it a read and let me know your thoughts.

Thanks for your patience.

-Garrett

From: Macdougall, Robert
Sent: Wednesday, June 20, 2018 6:35 PM
To: Henderson, Garrett <Garrett.Henderson@nrc.gov>
Cc: White, Bernard <Bernard.White@nrc.gov>; Gallagher, Carol <Carol.Gallagher@nrc.gov>
Subject: RE: Draft DFR FRN for NAC CoC Amendment 6

Hi, Garrett,

Just got back yesterday from more than two weeks out of the office, and wanted to check in with you. Have you been able to make any progress on this bad boy, and if so, do you think we need to have a working group meeting to hash out anything?

Rob

From: Henderson, Garrett
Sent: Wednesday, May 30, 2018 4:45 PM
To: Macdougall, Robert <Robert.MacDougall@nrc.gov>
Subject: RE: Draft DFR FRN for NAC CoC Amendment 6

Hi Rob,

Pleased to be aboard. I will review and try and turn it around next week. Once I've given it a once over we can figure out if we need to convene the super team.

-Garrett

From: Macdougall, Robert
Sent: Wednesday, May 30, 2018 4:43 PM
To: Henderson, Garrett <Garrett.Henderson@nrc.gov>
Cc: White, Bernard <Bernard.White@nrc.gov>; Gallagher, Carol <Carol.Gallagher@nrc.gov>; Morgan-Butler, Kimyata <Kimyata.Morgan-Butler@nrc.gov>
Subject: Draft DFR FRN for NAC CoC Amendment 6

Hi, Garrett,

I understand that you've been assigned to our working group on this CoC rulemaking. Welcome aboard. We were hoping it would be you.

While Bernie and Carol and I were waiting for this moment, I asked them to review and revise my template-derived draft Federal Register Notice for the direct final rule for this rulemaking, figuring that you could start with a version they've approved. That version is attached. If you'd like for me to convene our working group to discuss it, I'll be happy to do that, but you can also review it first and then decide whether we need to meet. If you conclude that we don't, send us your markup, and if none of us think we need to discuss anything you've revised. I'll copy and paste from your markup to complete and circulate for everybody's review the FRN for the proposed rule. Once I have everybody's e-mailed approvals of the proposed rule FRN draft, I'll put the package together, get my BC Kim to approve, and send it electronically to Bernie and Carol for their concurrences and to OGC's RIDS address for your NLO review. Sound like a plan? Well, maybe at least in theory.

Let me know your 'druthers,
Rob

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