



CONVERSATION RECORD

NAME OF PERSON(S)/TITLE CONTACTED OR IN CONTACT WITH YOU Tracy Weaver, Justin Both, et. al. (see below)	DATE OF CONTACT 12/2/2021	TYPE OF CONVERSATION <input type="checkbox"/> E-MAIL <input checked="" type="checkbox"/> TELEPHONE <input type="checkbox"/> INCOMING <input checked="" type="checkbox"/> OUTGOING
E-MAIL ADDRESS MS Teams Call Link Sent by NRC	TELEPHONE NUMBER Teams Call	
ORGANIZATION NextEra Energy Duane Arnold	DOCKET NUMBER(S) 07200032	
LICENSE NAME AND NUMBER(S) Duane Arnold Energy Center (DAEC) Independent Spent Fuel Storage Installation (ISFSI)	MAIL CONTROL NUMBER(S)	
SUBJECT Early clarification call with Duane Arnold ISFSI regarding its 10/21/2021 exemption request (ADAMS Accession No. ML21294A280)		
SUMMARY AND ACTION REQUIRED (IF ANY) SUBJECT Exemption Request for Failed Fuel Can Weight in a Certificate of Compliance 1004 Renewed Amendment 17 Standardized NUHOMS® System 61BTH Type 2 Dry Shielded Canister SUMMARY As part of the acceptance review process, on December 2, 2021, the NRC staff held a call with DAEC to seek clarifications pertaining to the content of DAEC's October 21, 2021 exemption request. No NRC staff decision, neither technical nor regulatory in nature, was made at the call. As a result of the call, DAEC indicated that it will provide supplemental information to its October 21, 2021 exemption request. PARTICIPANTS NRC/NMSS: Patrick Koch, Tom Boyce, Tilda Liu DAEC: Tracy Weaver, Justin Both TN/ORANO (contractors to DAEC): Caroline Adolf, Don Shaw, Doug Yates, Jake Stefanick, Marlin Stoltz, Prakash Naranayan, Raheel Haroon, Si-Hwan Park, Venigalla Venkata EPID No: L-2021-LLE-0050		
NAME OF PERSON DOCUMENTING CONVERSATION Tilda Liu, NMSS/DFM/STLB		
SIGNATURE AND DATE		
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CONVERSATION RECORD (continued)

LICENSE NAME AND NUMBER(S)

Duane Arnold Energy Center (DAEC) Independent
Spent Fuel Storage Installation (ISFSI)

MAIL CONTROL NUMBER(S)

SUMMARY AND ACTION REQUIRED (IF ANY) (Continued)

NRC Staff Notes/Talking Points
Clarification Call with Duane Arnold Regarding the Content of Exemption Request
12/2/2021

Incoming exemption request dated 10/21/2021

ADAMS Accession No. ML21294A280

1. It would be helpful to describe what compromises the 800 lb that's being requested and the 705 lb that's currently required in the TS and was originally evaluated in the FSAR. My understanding is that the 705 lb is the heaviest fuel assembly (which bounds the current FFC) and the 800 lb is from the specific 676 lb fuel assembly, the roughly 70 lb modified FFC, and additional margin for the finalized modified FFC design.
2. The exemption request should discuss the additional supports for the modified FFC like the Hold Down Ring that was mentioned on the call. The current exemption request claims that "only the weight of the FFC liner impacts the basket structural evaluation." Additional information should be provided to justify this statement and describe how the components like the Hold Down Ring support the additional weight of the modified FFC. It would be helpful if this discussion was as detailed as possible in describing the additional support components and justifying the assumptions of how much weight will be supported by those components and how much weight will be supported by the basket panels. This discussion should tie into the pressure calculation presented in the exemption request and justify the use of 711 lb in that calculation.
3. Additional discussion of the pressure calculation presented in the exemption request is needed.

The exemption request suggests that the value for this pressure in this specific case would be 0.6970 psi. From the call, my understanding is that this value for the pressure is coming from 711 lb. This 711 lb is comprised of the specific 676 lb fuel assembly and 35 lb, which is some portion of weight of the modified FFC that is supported by the basket panel and not another support like the hold down ring.

The calculated pressure from the 711 lb is not accounting for 89 lb of the 800 lb in the exemption request. My understanding from the call is that the additional 89 lb is supported by additional supports like the Hold Down Ring. As I stated above, the details of these supports should be discussed in the exemption request, and further justification should be provided for the assumption that the additional 89 lb will not increase stresses in the basket panels.

The exemption request should discuss the significance of this pressure and how it was used in the FSAR evaluation of the basket panels. My understanding from the call was that this pressure served as the input to all of the evaluated load conditions for the basket panels.

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CONVERSATION RECORD (continued)

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SUMMARY AND ACTION REQUIRED (IF ANY) (Continued)

4. Additional discussion of the maximum stresses presented in Table 1 of the exemption request is needed.

It should be noted which revision of the FSAR these stresses are taken from. That revision should probably be the revision that accompanies the amendment to the CoC that will govern the storage of the modified FFC.

As discussed in the exemption request, the critical cell of the basket panel (i.e., the cell that experiences the maximum stresses) is not the cell that the modified FFC will be loaded into, nor will the critical cell be affected by the modified FFC. Given this and as discussed on the call, the exemption request should note that the values in the first, third, and fifth rows of the table present stresses that are not affected by the modified FFC and its increased weight.

Additionally, the exemption request should discuss the stresses and the margin against the allowable stresses experienced in the specific cell that is proposed to contain the modified FFC. As I asked about in the call, I think it is important to note if the design criteria for the basket panels will continue to be met in the specific cell containing the modified FFC.