

Ms. Beate Kallenbach
Oko-Institut e.V.
Elisabethenstr. 55-57
D-64283 Darmstadt
Germany

September 10, 2001

SUBJECT: RESPONSE TO QUESTIONS ON DRY INTERIM STORAGE IN THE U.S.

Dear Ms. Kallenbach:

I am replying to your August 7, 2001, letter requesting information on dry interim storage in the United States. You requested information on the location in NUREG-1536, "Standard Review Plan for Dry Cask Storage Systems," NUREG-1567, "Standard Review Plan for Spent Fuel Storage Facilities," or other documented sources of various information related to dry interim storage. This requested information is provided in the enclosure to this letter.

You have also asked whether the United States currently has any interim storage of spent fuel in metallic casks that are set up in a storage hall, similar to storage in Switzerland, or if U.S. facilities are "open air" facilities like those at Surry. The United States currently does not have any dry interim storage of spent fuel in storage halls. Dry interim storage in the United States consists of facilities similar to those at Surry. Further information on the types of facilities in the U.S. is available at <http://www.nrc.gov/OPA/drycask/> and <http://www.nrc.gov/OPA/reports/cask.htm>.

In May 2001, I participated in an advisory group to the International Atomic Energy Agency (IAEA) on the subject of selection criteria for away-from-reactor spent fuel storage facilities (AFRs). IAEA is currently preparing a document on the subject of selection criteria. The IAEA advisory group considers an AFR to be any storage facility which is either physically away-from a power reactor or co-located with the reactor, but separately licensed or regulated. Ms. Viola Hoffman represented Germany at the advisory group meeting. Ms. Hoffman's e-mail address is: viola_hoffman@gns-gnb.de. She may also be able to provide you with some information on the subjects of interest to you.

If you have any questions regarding this matter, please contact me at (301)415-8518 or Rebecca Karas at (301)415-3711.

Sincerely,

/s/ /RA/

Mark S. Delligatti, Acting Section Chief
Licensing Section
Spent Fuel Project Office
Office of Nuclear Material Safety
and Safeguards

Enclosure: Requested Information

Ticket No. S-2001-023

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Requested Information and Locations of U.S. Documentation

Information Requested	Reference Document	Internet Reference
Type of casks/type of storage building	NRC Website	http://www.nrc.gov/OPA/drycask/ & http://www.nrc.gov/OPA/reports/cask.htm
Period of validity of licenses for facilities/casks	10 CFR 72.42 & 10 CFR 72.212	http://www.nrc.gov/NRC/CFR/PART072/index.html
Criteria for radiation doses at the surface of casks/outside the building	10 CFR 72.104(a), 72.106(b) & Interim Staff Guidance No. 13. There is no dry storage limit for cask surface dose.	http://www.nrc.gov/NRC/CFR/PART072/index.html & http://www.nrc.gov/OPA/reports/isg13r0.htm
Criteria for leak tightness at loading of cask/under normal storage conditions/in accident conditions	NUREG-1536, Section 7.0 & NUREG-1567, Section 9.0	http://www.nrc.gov/NRC/NUREGS/SR1536/index.html & http://www.nrc.gov/NRC/NUREGS/SR1567/index.html
Criteria for spent fuel temperature and cask temperature	NUREG-1536, Section 4.0 & NUREG-1567, Section 6.0	http://www.nrc.gov/NRC/NUREGS/SR1536/index.html & http://www.nrc.gov/NRC/NUREGS/SR1567/index.html
Criticality (calculations only with fresh fuel or credit of burn-up?)	Interim Staff Guidance No. 8, Revision 1	http://www.nrc.gov/OPA/reports/isg8r1.htm
Maximum allowed burn-up/minimum cooling time before loading	Interim Staff Guidance No. 11, Revision 1 & 10 CFR 72.3, "Spent Nuclear Fuel" definition	http://www.nrc.gov/OPA/reports/isg11.r1.pdf & http://www.nrc.gov/NRC/CFR/PART072/index.html
Storage of defective fuel elements, if existent	Interim Staff Guidance No. 1	http://www.nrc.gov/OPA/reports/isg1.htm
System of surveillance of the loaded casks	NUREG-1536, Section 9.0	http://www.nrc.gov/NRC/NUREGS/SR1536/index.html
System of controls whilst loading	NUREG-1536, Section 8.0	http://www.nrc.gov/NRC/NUREGS/SR1536/index.html
Experiences with loading	Various NRC Inspection Reports	http://www.nrc.gov/OPA/reports/cask.htm#recent
Experiences with storage	Various NRC Inspection Reports	http://www.nrc.gov/OPA/reports/cask.htm#recent
Are there any criteria related to the retrievability after the storage time?	Interim Staff Guidance No. 2	http://www.nrc.gov/OPA/reports/isg2.htm
Which is the concept for repairs or unloading of the cask, should this be necessary?	Interim Staff Guidance No. 3	http://www.nrc.gov/OPA/reports/isg3.htm
Are inside inspections planned during the storage period?	Inspections inside the cask confinement boundary are not required during the storage period.	