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June 23, 2016

Michael Layton, Director
Division of Spent Fuel Management
Office of Nuclear Material Safety and Safeguards

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Docket No. 72-1014, Certificate of Compliance (CoC) No. 1014

Subject: Correction Request for HI-STORM 100 Amd 9R1 and Amd 10

Reference(s): [1] Amendment No. 9R1 to Certificate of Compliance No. 1014 for the HI-STORM 100 Multipurpose Canister Storage System Issued March 21, 2016
[2] Amendment No. 10 to Certificate of Compliance No. 1014 for the HI-STORM 100 Multipurpose Canister Storage System Issued May 31, 2016

Dear Mr. Layton:

Holtec International has identified a typographical error that should be corrected in the HI-STORM 100 Certificate of Compliance (CoC) Amendments 9 Revision 1 and 10 ([1] and [2]).

Appendix A, Table 3-2 refers to Table 3-3 and 3-4 for per cell heat load limits for the "MPC-68/68F/68FF/68M." However, when looking at Tables 3-3 and 3-4, those tables have rows for "MPC-68/68F/68FF," and do not specifically include the MPC-68M. It is evident that this is just a typographical error in Tables 3-3 and 3-4, as the heat loads are the same. Although this error is considered editorial, and has no impact on the loading of MPCs, it is still appropriate to correct the error. Additionally, Holtec has corrected this error in more recent amendment request submittals, such as Amendment 11 and Amendment 12.

Attachment 1 to this letter contains a marked-up page of HI-STORM 100 Amendment 9 Revision 1 to show the changes in context. Attachment 2 has a similar mark-up for Amendment 10.

If you have any questions please contact me at 856-797-0900 ext. 3951.

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Sincerely,

Kimberly Manzione
Licensing Manager,
Holtec International

cc: (via email)
Yen Chen (USNRC)
John McKirgan (USNRC)
Jose Cuadrado

Attachments:

- Attachment 1: Corrected Markup Pages for HI-STORM 100 Amendment 9 Revision 1
- Attachment 2: Corrected Markup Pages for HI-STORM 100 Amendment 10

Table 3-2
MPC Helium Backfill Limits¹

MPC MODEL	LIMIT
MPC-24/24E/24EF	
i. Cask Heat Load ≤ 27.77 kW (MPC-24) or ≤ 28.17 kW (MPC-24E/EF) - uniformly distributed per Table 3-4 or regionalized loading per Table 3-3	0.1212 +/-10% g-moles/l <u>OR</u> ≥ 29.3 psig and ≤ 48.5 psig
ii. Cask Heat Load >27.77 kW (MPC-24) or > 28.17 kW (MPC-24E/EF) - uniformly distributed or greater than regionalized heat load limits per Table 3-3	≥ 45.5 psig and ≤ 48.5 psig
MPC-68/68F/68FF/68M	
i. Cask Heat Load ≤ 28.19 kW - uniformly distributed per Table 3-4 or regionalized loading per Table 3-3	0.1218 +/-10% g-moles/l <u>OR</u> ≥ 29.3 psig and ≤ 48.5 psig
ii. Cask Heat Load > 28.19 kW - uniformly distributed or greater than regionalized heat load limits per Table 3-3	≥ 45.5 psig and ≤ 48.5 psig
MPC-32/32F	
i. Cask Heat Load ≤ 28.74 kW - uniformly distributed per Table 3-4 or regionalized loading per Table 3-3	≥ 29.3 psig and ≤ 48.5 psig
ii. Cask Heat Load >28.74 kW - uniformly distributed or greater than regionalized heat load limits per Table 3-3	≥ 45.5 psig and ≤ 48.5 psig

¹ Helium used for backfill of MPC shall have a purity of $\geq 99.995\%$. Pressure range is at a reference temperature of 70°F.

MPC Helium Backfill Heat Load Limits
Table 3-3

Table 3-3: Regionalized Storage^{Note 2} Cell Heat Load Limits

MPC Type	Number of Cells in Inner Region ^{Note 1}	Storage Cell Heat Load (Inner Region) (kW)	Number of Cells in Outer Region ^{Note 1}	Storage Cell Heat Load (Outer Region) (kW)
MPC-24	4	1.470	20	0.900
MPC-24E/EF	4	1.540	20	0.900
MPC-32/32F	12	1.131	20	0.600
MPC-68/68F/68FF/68M	32	0.500	36	0.275

Note 1: The location of MPC-32 and MPC-68 inner and outer region cells are defined in Appendix B Figures 2.1-3 and 2.1-4 respectively.
The MPC-24 and MPC-24E/EF cell locations are defined below:
Inner Region Cell numbers 9, 10, 15, 16 in Appendix B Figures 2.1-1 and 2.1-2 respectively.
Outer Region Cell numbers 1-8, 11-14, 17-24 in Appendix B Figures 2.1-1 and 2.1-2 respectively.

Note 2: The storage cell regionalization is defined in Note 1 in accordance with safety analyses under the heat load limits of this Table.

Table 3-4: Uniform Storage Cell Heat Load Limits

MPC Type	Heat Load (kW)
MPC-24	1.157
MPC-24E/EF	1.173
MPC-68/68F/68FF/68M	0.414
MPC-32	0.898

MPC Helium Backfill Limits
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MPC Helium Backfill Limits¹

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MPC-68/68F/68FF/68M	
i. Cask Heat Load ≤ 28.19 kW - uniformly distributed per Table 3-4 or regionalized loading per Table 3-3	0.1218 +/-10% g-moles/l <u>OR</u> ≥ 29.3 psig and ≤ 48.5 psig
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