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January 4, 2008

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

Subject: USNRC Docket Nos. 72-1008 and 72-1014
HI-STAR 100 Certificate of Compliance 1008
HI-STORM 100 Certificate of Compliance 1014
HI-STAR 100 System 10 CFR 72.48(d)(2) Biennial Report
HI-STORM 100 System 10 CFR 72.48(d)(2) Biennial Report

References: 1. Holtec Project 5014
2. Holtec Letter 5014585

Dear Sir:

In accordance with 10 CFR 72.48(d)(2), Holtec International herewith submits the biennial report of changes, tests, and experiments implemented for the HI-STAR 100 and HI-STORM 100 Systems under the provisions of 10 CFR 72.48. The attached report summarizes all changes tests, and experiments implemented by Holtec under the provisions of 10 CFR 72.48 for the HI-STAR 100 and HI-STORM 100 Systems between January 1, 2006 and December 31, 2007.

It is noted that the last such biennial report (Reference 2) was submitted on January 6, 2006, and that the period between these filings is consistent with the 10 CFR 72.48(d)(2) reporting requirement.

Sincerely,

Tammy S. Morin
Acting Licensing Manager

Attachment: Biennial Summary of Changes, Tests, and Experiments Pertaining to the HI-STAR 100 and HI-STORM 100 Dry Cask Storage Systems

Document ID: 5014640

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Attachment 1- Biennial Summary of Changes, Tests, and Experiments Pertaining to the HI-STAR 100 and HI-STORM 100 Dry Cask Storage Systems

NRC Docket Nos. 72-1008 and 72-1014

10 CFR 72.48(d)(2) Report

Notes on the 10 CFR 72.48(d)(2) Report:

1. The first two columns of the report are the Holtec 72.48 number assigned (sequentially) to the change, test or experiment and the corresponding latest revision.
2. The third column of the report is the dry cask certificate number impacted by the change, test or experiment.
3. The fourth column of the report is the Holtec Project Number for the component(s) impacted by the change, test or experiment. These are:
   a. 1020 – HI-STAR Overpack
   b. 1021 – MPC-68/68F/68FF
   c. 1022 – MPC-24/24E/24EF
   d. 1023 – MPC-32/32F
   e. 1024 – HI-STORM 100/100S/100S Version B Overpack
   f. 1025 – HI-TRAC 125/125D Transfer Cask
   g. 1026 – HI-TRAC 100/100D Transfer Cask
   h. 1027 – Ancillary Equipment
   i. 5014 – Generic
4. The fifth column of the report lists if the change, test or experiment was initiated by an engineering change order (ECO) or a manufacturing deviation (SMDR).
5. The sixth column of the report lists if the change, test or experiment required a full evaluation (an adverse change) or only a screening (not an adverse change).
6. The seventh column of the report lists the affected component/s of the change, test or experiment.
7. The eighth and ninth columns of the report are the description of the change, test, or experiment and the summary of the evaluation (required for full evaluations only).

72.48 #	72.48 Rev.	CoC #s	Holtec Project	ECO or SMDR	7248 Type	Affected Component	Description of Change, Test or Experiment	Summary of Evaluation (Full Evaluations Only)
717	1	1014	1021	ECO	Screening Only	MPC-68F lid	DWG 3923, SHEET 4 (NOTE 2): Revise the note to state that the MPC-68F Lid OD is 65.8" (Min.). The 65.8" (Min.) is a change from 66-1/32". This change is to correct a discrepancy between design DWG 1402, Sheet 9 and licensing DWG 3923, Sheet 4. ECO-1021-14 (72.48 #28) originally made this change to DWG 1402 in order to facilitate and improve the lid to shell fit in the shop and later in the field. Revision 1 changes Equipment Certificate No to 1014 only and deletes HI-STAR FSAR from Affected Document.	N/A
718	1	1014	1023	ECO	Full Evaluation	MPC-32 basket neutron absorber MPC-24/24A basket neutron absorber MPC-68 basket neutron absorber	[1] Drawings 3925 and 3927 - Change the nominal thickness of Metamic neutron absorber panels from 0.101" to 0.106". [2] Drawing 3926 - Change the nominal thickness of Metamic neutron absorber panels from 0.075" to 0.077". [3] Drawing 3928 - Change the nominal thickness of Metamic neutron absorber panels from 0.101" to 0.106". Revision 1 changes Equipment Certificate No to 1014 only. Also, removed any wording related to HI-STAR FSAR in the entire 72.48.	There are no malfunctions associated with the HI-STORM system, so no malfunction frequency can be increased nor can any malfunction results be changed. The proposed activity does not result in a change to the structural integrity of the MPC, so it will not therefore increase the consequences of any previously evaluated accident. The proposed change will not require changes in any methods of operation or operating procedures, therefore no new accidents can be created. The proposed change has no effect on the MPC enclosure vessel therefore no fission product boundary limit is exceeded. The full evaluation has determined that the change may be implemented without prior NRC approval.
724	1	1008 & 1014	5014	ECO	Screening Only	MPC confinement and HI-STAR helium retention boundary	****HI-STORM FSAR HI-2002444 REV. 2**** Section 9.1.1 fabrication and non-destructive examination (NDE): Change ITEM 5 which reads "machined surfaces of the metal components of the HI-STORM 100 system shall be visually examined in accordance with ASME section V, article 9, to verify they are free of cracks and pin holes." to read "the MPC confinement boundary shall be examined and tested by a combination of methods (including helium leak test, pressure test, UT, MT and/or PT, as applicable) to verify that it is free of cracks, pinholes, uncontrolled voids or other defects that could significantly reduce its confinement effectiveness." ****HI-STAR FSAR HI-2012610 REV. 1**** Section 9.1.1 fabrication and non-destructive examination (NDE): Change ITEM 5 which reads "machined surfaces of the metal components of the HI-STAR 100 system shall be visually examined in accordance with ASME section V, article 9, to verify they are free of cracks and pin holes." to read "the MPC confinement boundary and the HI-STAR overpack helium retention boundary shall be examined and tested by a combination of methods (including helium leak test, pressure test, UT, MT and/or PT, as applicable) to verify that it is free of cracks, pinholes, uncontrolled voids or other defects that could significantly reduce its confinement effectiveness." Revision 1: Section II, 72.48 Screening, check list of the 72.48 Screening Evaluation Form has been revised. The screening conclusion remains the same. More specifically, the proposed activity may be implemented without further evaluation.	N/A

72.48 #	72.48 Rev.	CoC #s	Holtec Project	ECO or SMDR	7248 Type	Affected Component	Description of Change, Test or Experiment	Summary of Evaluation (Full Evaluations Only)
732	1	1014	1021	ECO	Full Evaluation	MPC-68 Basket Supports	DWG 3928 REV 5 [1] Sheet 2, plan view: Replace v-channel angled supports with parallel flat plate supports. [2] Sheet 4: Change "cross sectional view of mpc-68 basket support structure (new design)" to "cross sectional view of mpc-68 basket support structure (standard construction)". [3] Sheet 4, detail c: Revise to show plate basket support that consists of two parallel plates welded onto the MPC inner shell. Fillet welds shall be intermittent (1-8), 1/8 dimension, and are located between MPC inner shell and outside edge of plates. Shim assembly and block support are positioned in between plates and welded in place. Fillet welds shell be full length, 5/32 dimension, and are located between inside edge of shim assembly and outside edge of flat plates. Show that VT is required for the fillet welds. Tack weld is located between inside edge of plates and block support to read "optional quantity and weld location for support block to be determined by fabricator". [4] Sheet 4: Move angle basket support and detail c to right side of vertical dividing line. Change "detail c (TYP of 8)" to "detail c (TYP of 8) (optional design)". [5] Sheet 4: Change "cross sectional view of mpc-68 basket support structure (old design)" to "cross sectional view of mpc-68 basket support structure (optional construction)". [6] Sheet 4, note 4: Change "basket support-to-basket support dimensions are common to the new and old designs" to "basket support-to-basket support dimensions are common to the standard construction and optional construction". Revision 1 changes Equipment Certificate No to 1014 only and deletes HI-STAR FSAR from Affected Document. Also, removed any wording related to HI-STAR FSAR in the entire 72.48.	There are no malfunctions associated with the HI-STORM system, so no malfunction frequency can be increased nor can any malfunction results be changed. The proposed activity does not result in a change to the structural integrity of the MPC, it will not, therefore, increase the consequences of any previously evaluated accident. The proposed change will not require changes in any methods of operation or operating procedures, therefore no new accidents can be created. The proposed change has no effect on the MPC enclosure vessel therefore no fission product boundary limit is exceeded. The full evaluation has determined that the change may be implemented without prior NRC approval.
735	1	1014	1023	ECO	Full Evaluation	MPC-32, -32F Basket Supports	DWG 3927 REV 6: [1] Sheet 1: Add sheet 5 and change title on sheet 4 under package contents. [2] Sheet 2, cross sectional view of mpc-32: Replace v-channel angled supports with basket support plates. [3] Sheet 4: Label page "standard construction". [4] Sheet 4, detail D,E: Revise to show basket supports that consist of two parallel plates welded onto the MPC inner shell. Fillet welds connecting the plates to the MPC shell shall be full length and have 1/8" dimension. Shim and support block are positioned in between plates and welded in place. Fillet welds shall be full length, 5/32" dimension, and are located between inside edge of shim and outside edge of plates. Show that VT is required for fillet welds. Tack weld is located between inside edge of plates and block support to read "optional quantity, size, and weld location for support block to be determined by fabricator". Show item details for basket plate support (a), (b), (c). Move v-channel angled supports to sheet 5 and label "optional construction." Change label of detail e to detail g and 5/32 weld location to be between c-channel and shim. Move angle support (b), angle support (a), and shim assembly to sheet 5. [5] Sheet 4: Change inner shell to basket support plate(a) shim dimension from 5.2" to 5.4". Change inner shell to basket support plate(c) shim from 3.6" to 3.9". ***Rev. 1*** Clarified the 72.48 Screening/Evaluation Form Section II a. to state that an increase of free volume within the MPC has an insignificant effect on the calculated internal pressure. The clarification made in this revision does not affect any of the FSAR chapters and so the preparer is signing off for the chapter authors.	There are no malfunctions associated with the HI-STORM system, so no malfunction frequency can be increased nor can any malfunction results be changed. The proposed activity does not result in a change to the structural integrity of the MPC, it will not, therefore, increase the consequences of any previously evaluated accident. The proposed change will not require changes in any methods of operation or operating procedures, therefore no new accidents can be created. The proposed change has no effect on the MPC enclosure vessel therefore no fission product boundary limit is exceeded. The full evaluation has determined that the change may be implemented without prior NRC approval.

72.48 #	72.48 Rev.	CoC #s	Holtec Project	ECO or SMDR	7248 Type	Affected Component	Description of Change, Test or Experiment	Summary of Evaluation (Full Evaluations Only)
736	0	1014	1024	ECO	Screening Only	HI-STORM lid stud and lid closure bolt	Dwg. 4116 Rev. 10 Added the optional lid closure bolt assembly, consisting of a "t" handle (C/S) welded onto to a bolt (SA 193 B7 material). Details of the optional assembly are: 6 1/2" OD, 5" handle width, 10" handle height, 9" overall height of bolt, 7 1/2" distance from the bottom of the bolt to the underside of the head, 3/4" dp. cutout, and 3 1/4-UNC x 7" Lg. threads. The handle subcomponent consists of 3/4" Sch. 40 pipe material, welded with a 1/8" groove weld to form a "t". The stud is welded to the handle with a 1/8" seal weld.	N/A
739	2	1014	5014	ECO	Full Evaluation	MPC lids	DWG 3923, SHEET 4 (NOTE 2): Revise the note to state that the MPC-68 Lid OD is 66-3/4" (Min.). The 66-3/4" (Min.) is a change from 67-1/32". This change is made to DWG 3923 in order to facilitate and improve the lid to shell fit in the shop and later in the field. Revision 2 changes Equipment Certificate No to 1014 only and deletes HI-STAR FSAR from Affected Document. Also, removed any wording related to HI-STAR FSAR in the entire 72.48.	The proposed change does not adversely affect the fit, form, or function of the MPC Lid. The full evaluation has determined that the proposed change may be implemented without any adverse effect on the thermal, structural, shielding, and confinement function of the MPC.
751	1	1014	5014	ECO	Full Evaluation	N/A	Chapter 9: Table 9.1.2 - Eliminate five year shielding effectiveness test from maintenance and operations column of shielding integrity entry. Table 9.2.1 - Delete the words ", and every five years thereafter under the Maintenance Program" from the frequency column of the HI-STORM 100 shielding effectiveness test entry. Section 9.2.5 - Delete the second sentence of the first paragraph, requiring the five year effectiveness test. **********REVISION 1********** Since the proposed activity removes a test, it is concluded that a full evaluation is required. See QPV 539 for details.	The evaluation concluded that the deletion of the periodic shielding effectiveness tests does not have any impact in the structural, thermal, shielding and criticality performance of the cask system. No existing accidents are affected in terms of either frequency or consequences. No new accidents are created. The overpack remains completely passive, no malfunctions exist.

72.48 #	72.48 Rev.	CoC #s	Holtec Project	ECO or SMDR	7248 Type	Affected Component	Description of Change, Test or Experiment	Summary of Evaluation (Full Evaluations Only)
756	1	1008 & 1014	5014	ECO	Full Evaluation	MPC enclosure vessel	1. Calculate stresses and safety factors for the vent and drain port cover plate welds under a 200 PSI accident design pressure loading and update the corresponding results for these items and associated welds in section 3.4.4.3.1.8 and table 3.4.9 of the HI-STORM FSAR. Also in section 3.4.4.3.1.8, delete the following note from the miscellaneous stress results table: "Note: 0.967 reflects increase in MPC shell design temperature to 500 DEG. F". 2. In table 3.1.4, delete "(NOTE 1)" Under load case I.D. E5 and revise NOTE 1 to eliminate load case E5. Change the reference location to subsection 3.4.4.3.1.10 for both the MPC lid and baseplate and change "docket 72-1008 3.4.4.3.1.5 (thermal stress)" to "3.4.4.3.1.2 (stress)". 3. In subsection 3.4.4.3, revise sentence to read as: "For example, analysis of the MPC lid under normal conditions is not included ..." 4. Add new subsection 3.4.4.3.1.10 (analysis of MPC closure lid and baseplate (load case E5)). 5. In table 3.4.4, revise the MIN. safety factors for MPC lid and baseplate for load case I.D. E5 to 8.6 and 1.17, respectively. Change the reference location to subsection 3.4.4.3.1.10 for both the MPC lid and baseplate. 6. In table 3.4.4, revise the MIN. safety factor for the MPC shell from 13.6 to 2.60 for load case I.D. E5. Change "3.4.4.3.1.5 (thermal stress) of docket 72-1008" to "3.4.4.3.1.2 (stress)". 7. In table 2.2.16, revise the footnote to read as: "HI-STAR MPC loadings are those specified in THE HI-STAR SAR under docket number 71-9261, which does not impose any off-normal condition loadings." 8. In table 3.0.1, under V.1.d.i.(4) confinement, specific analyses, delete 3.4.4.3.1.5 from the last column of the table. 9. In subsection 3.4.4.3.1.3.a (elastic stability) replace the existing results from the HI-STAR FSAR (docket no. 72-1008) with the latest bounding results from the HI-STAR SAR (docket no. 71-9261). Revise text accordingly. 10. In 3.4.4.3.1.3, revise sentence to read as: "Material properties are selected corresponding to a metal temperature of 600 degrees F..." Revise critical buckling stress calculation accordingly using young's modulus (E) of Alloy X at 600 degrees F. 11. In 3.4.8.1, revise allowable stress and safety factor for top lid -end strike to agree with LAR 1014-2. 12. In 3.4.8.2.1, delete the words "Conservatively based on a reduced 5/8" weld". 13. In table 3.1.17, revise the footnote to read as: "Values for reference temperatures are chosen to bound the thermal results in chapter 4. Lower temperature values may be used provided that they are at least equal to the calculated temperature for the specific component and location or otherwise justified."	The frequency of occurrence and consequences of all previously evaluated accidents are unchanged by the proposed changes (PCs). Except for supplemental cooling, the cask system is passive (I.E., not subject to malfunction), and the SCS malfunctions have a probability of 1.0 and the consequences of such malfunctions are unchanged. No loading or handling procedures or equipment are changed, so no new accidents are introduced. All fission product barriers remain below their design basis temperature and pressure limits. No new methods of analysis are used.
760	0	1014	1026	ECO	Screening Only	HI-TRAC 100D (DWG 4128R3), water jacket end plate	The latest revision of the HI-TRAC 100D licensing drawing indicates that a weld (1/2" fillet weld shown in quadrant a8 on sheet 6 of DWG 4128R3) is required on the bottom of the water jacket bottom end plate only. In response to the fabricator's suggestions, a weld should be placed on the top and bottom of the water jacket bottom end plate to minimize weld distortion and allow for proper fit-up. The 1/2" single sided fillet weld is changed to indicate a double sided fillet weld. There is no adverse impact by adding a weld to the top of the water jacket bottom end plate, therefore only a 72.48 screening is required.	N/A

72.48 #	72.48 Rev.	CoC #s	Holtec Project	ECO or SMDR	7248 Type	Affected Component	Description of Change, Test or Experiment	Summary of Evaluation (Full Evaluations Only)
762	0	1008 & 1014	5014	ECO	Full Evaluation	MPC-68, MPC-32, and MPC-24	The changes to the HI-STORM FSAR HI-2002444, Rev. 3 are as follows: 1. Section 1.0.3, Table 1.0.3, Item 7.V.4, Justification - Delete "fabrication shop leakage testing" 2. Section 2.0.1, Structural - Delete "(performed during MPC fabrication)" 3. Section 2.0.1, Confinement - Delete "fabrication shop" before "leak testing" 4. Table 2.0.1, Leak Testing - Remove Welds Tested "Shell seams, shell-to-baseplate" and add "vent and drain port cover plates"; and Revise Leak Rate to "Leaktight" per ANSI N14.5 [9.1.5]. 5. Section 7.1.1, fourth Paragraph - Delete first line, "The MPC shell and baseplate are helium leak tested during fabrication...defined in Chapter 9" 6. Section 7.1.3, 2nd Paragraph - Delete 4th sentence, "Welds other than ... weld integrity" 7. Section 9.1.1, Table 9.1.1, Leak Test - Replace under Fabrication, "Helium leak rate testing... shop welds" by "None" 8. Section 9.1.3 - Remove the helium leakage test requirement for fabrication shop welds. The leakage testing is only applicable to vent and drain port welding.	The shop helium leakage testing is unnecessarily redundant and can be eliminated. This change does not affect the functional integrity of the MPC and the requirements of ISG-15 and ISG-18 are maintained.
763	0	1014	5014	ECO	Screening Only	N/A	Make the following changes to the HI-STORM FSAR HI-2002444, Rev. 3: 1. Revise NOTE below Table 2.2.9 as follows: A static coefficient of friction of 0.53 between the ISFSI pad and the bottom of the overpack shall be used. If for a specific ISFSI a higher value of the coefficient of friction is used, it shall be verified by test. The test procedure shall follow the guidelines included in the Sliding Analysis in Subsection 3.4.7.1. 2. In Subsection 3.4.7.1 under 'Sliding Analysis' - Revise the last sentence in the paragraph starting "To ensure against unreasonably low coefficient of friction .....", as follows: If a higher value is used, the coefficient of friction is required to be verified by test (see Table 2.2.9). 3. Table 2.0.5, Item #5 - Add "See Note 1 below." in column 2, and add the note below the table: "Note 1 - GH ad GV may be the coincident values of the instantaneous horizontal and vertical accelerations, and the inequality shall be evaluated at each time step. 4. Table 2.0.5, Item #6 - Revise the sentence in parenthesis (in column 1) as follows: "(.... must be confirmed by testing if a value greater than 0.53 is used.)" 5. Table 2.0.5, Item #6 - Replace the sentence in column 3 with "Not applicable"	N/A
765	0	1014	5014	ECO	Screening Only	HI-STORM 100A & 100SA	HI-STORM FSAR, REV. 4: Following changes are made to clarify impact testing requirements with respect to the HI-STORM 100A. [1] Section 3.1.2.3, Item #2 - A paragraph is added as follows: "Even though SA516 Gr. 70 material is exempt from impact testing per the above, certain components of the HI-STORM 100A overpack, namely the lug support ring, the gussets, and the baseplate, are impact tested, as a defense-in-depth measure, because they are potentially subject to high tensile stress levels (i.e., greater than 6,000 psi) during an earthquake." [2] Table 3.1.18: Added test requirement "Per NF-2331" for "HI-STORM 100A baseplate, lug support ring, and gussets" and Note 2 - "In accordance with ASME Code Subsection NF, impact testing is not required for these components; specified testing is performed strictly for defense-in-depth.	The screening has determined that the change has no adverse effect and therefore, can be implemented without further regulatory evaluation.

72.48 #	72.48 Rev.	CoC #s	Holtec Project	ECO or SMDR	7248 Type	Affected Component	Description of Change, Test or Experiment	Summary of Evaluation (Full Evaluations Only)
766	0	1014	1026	ECO	Screening Only	HI-TRAC 100D pool lid	Dwg. 4128, Rev. 4 - Licensing Drawing: The bolt hole pattern Note on the Pool Lid Top (Item 34) is changed to include a depth dimension (of 1-5/8") rather than through hole indication. This change prevents the potential for affecting the attached part during post-assembly drilling. The change is per HMD's suggestion because the bolt holes are drilled post-assembly of the Pool Lid assembly. During drilling components directly attached to the pool lid top (e.g. Item 32) may be affected. To prevent this and to ensure that there is sufficient thread for the pool lid bolt (Item 40) engagement, a depth dimension is added to the bolt hole pattern.	N/A
768	0	1014	1024	ECO	Full Evaluation	HI-STORM 100S radial ribs	As an option, the long radial plate has been changed from a single-piece to a two-piece configuration such that one piece is located near the top of the overpack and the other near the bottom. The top edge of the top radial plate (dimensions shall be 27 7/16" x 38") and the bottom edge of the bottom radial plate (dimension 27 7/16" x 30") is located in the same location as the top and bottom edges of the single piece radial plate. Dwg. No. 3669, Rev. 10: Sheet 2, 'Note 2' is added to include the above change as an option. HI-STORM FSAR, HI-2002444, Rev. 4: Text revision as required to address that above change. The specific changes are as follows: Chapter 2 Section 2.0.2 - Changed "four radial ribs" and "four ribs" to "radial ribs". Chapter 3, Section 3.1.2.1.2 (under "Normal Conditions") - Changed "... two concentric steel shells and the steel rib plates, and by the concrete columns ..." to "... two concentric steel shells and the concrete columns ..." Chapter 3, Section 3.4.3.5 - Added the following footnote to the results summary table for the HI-STORM 100S Top and Bottom Lifting Analysis: "Result is specific to HI-STORM 100S overpacks fabricated with full height radial plates. For HI-STORM 100S overpacks fabricated with shorter top and bottom radial plates (i.e.' two-piece configuration), the results tabulated below for the HI-STORM 100S Version B, for the radial rib to inner and outer shell welds, are bounding." Chapter 3, Section 3.4.4.3.2.1 - Changed "(ribs are not full-length for HI-STORM 100S Version B)" to "(ribs are not full-length for HI-STORM 100S Version B; HI-STORM 100S can be fabricated with full or partial length ribs)"; changed "There are four radial ribs ..." to "In the HI-STORM 100, there are four radial ribs ..."; changed "For the HI-STORM 100S Version B, ..." to "For the HI-STORM 100S and the HI-STORM 100S Version B, ..."; changed "... since they are not full length ..." to "... since they are not required to be full length ..."	The proposed change does not affect the structural integrity of the HI-STORM system, and its performance with respect to shielding, criticality and thermal characteristics remains unchanged. The full evaluation has determined that the change may be implemented without prior NRC approval.
772	0	1008 & 1014	1023	ECO	Screening Only	MPC UPPER fuel spacers	Dwg. 3923 Rev. 14 [1] Sheet 5, Upper Fuel Spacer Plate: Added an optional 3/4-10 UNC threaded thru hole (Nom.) for both the PWR and BWR upper fuel spacers. [2] Upper PWR Fuel Spacer Assembly: Indicated that the upper fuel spacer lower plate is optional. [3] Sheet 3: Replaced "Max." with "Ref." on the 190-5/16" overall height dimension. Added a dimension from the top of the baseplate to the top of the shell. This dimension shall be 187-7/16" +0", -3/16".	N/A

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777	0	1014	1024	ECO	Screening Only	HI-STORM lid outlet vent opening height	The side view of the lid outer ring on the HI-STORM 100S Version B licensing drawing (DWG 4116R11) indicates a height for the outlet vent opening of 4 9/16" Ref. The dimension is being changed to 4 5/8". The dimension indicated on the licensing drawing is a REF dimension and is being changed to maintain consistency between the fabrication drawing (3996) and the licensing drawing (4116). The increase of 1/16" to the outlet vent opening height dimension is insignificant and under the height utilized in the shielding analysis for the outlet vents. The increase in height by 1/16"does not impose an adverse effect, therefore only a 72.48 screening is required.	N/A
781	0	1014	1024	ECO	Screening Only	HI-STORM 100S	[2]Drawing 3669 Rev.10, Sheet 4: On Sheet 4 show an optional detail similar to "Detail E" for the channel attachments. The detail will show the inner shell without the channel mounts and the channels mounted directly to the inner shell. The weld symbol should indicate the welds to be 24" long and on 72" centers.	N/A
782	1	1014	1021	ECO	Screening Only	MPC - neutron absorber length	The following changes are made per ECO 1022-68 Rev. 0: Dwg. 3925 Rev. 5 [1] Sheet 2, Note 1 and 2: Specified 155-7/8" as a minimum for the length of the neutron absorber. Dwg. 3926 Rev. 7 [5] Sheet 2, Notes 1, 2: Specified 155-7/8" as a minimum for the length of the neutron absorber. The following change is made per ECO 1021-80 Rev. 0: Dwg. 3928 Rev. 8 [1] Sheet 2, Note 1: Specified 155-7/8" as a minimum for the length of the neutron absorber. The following change is made per ECO 1023-45 Rev. 0: Dwg. 3927 Rev. 9 [1] Sheet 2, Note 1: Specified 155-7/8" as a minimum for the length of the neutron absorber. ***Revision 1 changes Equipment Certificate No to 1014 only.***	N/A
786	0	1014	1024	ECO	Screening Only	HI-STORM 100S exit vents	A change has been made on the HI-STORM 100S Licensing drawing 3669 Rev.13 Sheet 8 to section view N-N a 6" dimension for the exit vent height was added. The exit vent height dimension is a critical dimension and was added to the licensing drawing because the vent height determines the area for air to flow which is consistent with the thermal calculations. The addition of this dimension does not impose an adverse effect, therefore only a 72.48 screening is required.	NA

72.48 #	72.48 Rev.	CoC #s	Holtec Project	ECO or SMDR	7248 Type	Affected Component	Description of Change, Test or Experiment	Summary of Evaluation (Full Evaluations Only)
812	2	1008 & 1014	5014	ECO	Full Evaluation	HI-TRAC pool lid bolts and transfer lid bolts; MPC lift cleat stud nuts; HI-STORM lid nuts	Revise Table 8.1.5 of the HI-STORM FSAR (HI-2002444, Rev. 4) as follows: [1] HI-TRAC Pool Lid Bolts (36 Bolt Lid): Change torque requirement from 58 ft-lbs to wrench tight. [2] HI-TRAC Pool Lid Bolts (16 Bolt Lid): Change torque requirement from 110 ft-lbs to wrench tight. [3] 100-Ton HI-TRAC Transfer Lid Bolts: Change torque requirement from 203 ft-lbs to wrench tight. [4] 125-Ton HI-TRAC Transfer Lid Bolts: Change torque requirement from 270 ft-lbs to wrench tight. [5] MPC Lift Cleats Stud Nuts: Change torque requirement from 793 ft-lbs to wrench tight. [6] HI-STORM Lid Nuts: Change torque requirement from 100 ft-lbs to hand tight. As a result of changes [2-4] above, make the following changes to the safety factors reported in the FSAR: [7] Section 3.4.4.3.3.3, Transfer Lid Attachment Integrity Under Side Drop: change the HI-TRAC 125 Attachment shear capacity safety factor from 1.392 to 1.159 [8] Section 3.4.4.3.3.3, Transfer Lid Attachment Integrity Under Side Drop: change the HI-TRAC 100 Attachment shear capacity safety factor from 1.532 to 1.331 [9] Section 3.4.4.3.3.3, HI-TRAC 125D Pool Lid Attachment Integrity Under Side Drop: change the Maximum Bolt Tensile Stress safety factor from 10.20 to 45.80 [10] Section 3.4.4.3.3.3, HI-TRAC 125D Pool Lid Attachment Integrity Under Side Drop: change the Combined Tension and Shear Interaction safety factor from 3.58 to 3.72 [11] Section 3.4.4.3.3.3, HI-TRAC 100D Pool Lid Attachment Integrity Under Side Drop: change the Maximum Bolt Tensile Stress safety factor from 11.66 to 79.0 [12] Section 3.4.4.3.3.3, HI-TRAC 100D Pool Lid Attachment Integrity Under Side Drop: change the Combined Tension and Shear Interaction safety factor from 8.52 to 9.08 [13] Table 3.4.5, Load Case I.D. 02.b: Change minimum Transfer Lid safety factor from 1.392 to 1.159 [14] Table 3.4.9: Change HI-TRAC Transfer Lid Separation during Side Drop safety factor from 1.329 to 1.159 [15] Section 3.4.4.3.3.3, HI-TRAC 125D Pool Lid Attachment Integrity Under Side Drop: change the Lateral Shear Force safety factor from 1.925 to 1.929 ***Revision 2**** [16] Section 3.4.4.3.3.3, Change Transfer Lid Attachment Integrity Under Side Drop capacity from 1,770.0 to 1,475.0 [17] Section 3.4.4.3.3.3, Change Transfer Lid Attachment Integrity Under Side Drop capacity from 1,729.0 to 1,503.0	The proposed changes do not affect the structural integrity of the HI-TRAC / HI-STORM system, and its performance with respect to shielding, criticality and thermal characteristics remains unchanged.

72.48 #	72.48 Rev.	CoC #s	Holtec Project	ECO or SMDR	7248 Type	Affected Component	Description of Change, Test or Experiment	Summary of Evaluation (Full Evaluations Only)
816	1	1014	1023	ECO	Full Evaluation	MPC-32 fuel basket supports	Dwg. 3927 Rev. 10 [10] Sheet 4, Detail D & E: For the 1/8" fillet weld between the support plates and the MPC shell, specified a 1-8 stitch pattern. ***Revision 1 changes Equipment Certificate No to 1014 only.***	The frequency of occurrence and consequences of all previously evaluated accidents are unchanged by the proposed activity. Except for the supplemental cooling system, the cask system is passive (i.e., not subject to malfunction), and the SCS malfunctions have a probability of 1.0 and the consequences of such malfunctions are unchanged. No loading or handling procedures or equipment are changed, so no new accidents are introduced. All fission product barriers remain below their design basis temperature and pressure limits. No new methods of analysis are used.
820	0	1014	1024	ECO	Screening Only	HI-STORM lid bolts (ITEM 42)	It is proposed to add an option for the T-Handle HI-STORM lid bolts to utilize a hex drive and separate tool for installation rather than the T-handle (Item 42). Licensing Drawing 4116, Rev. 12 is revised as follows: Add option for the HI-STORM lid bolts to have either a T-handle or a carbon steel 1-7/8" hex bar, 1-1/2" long.	N/A

72.48 #	72.48 Rev.	CoC #s	Holtec Project	ECO or SMDR	7248 Type	Affected Component	Description of Change, Test or Experiment	Summary of Evaluation (Full Evaluations Only)
821	0	1014	1024	ECO	Full Evaluation	HI-STORM Overpack 100S Version B and C	It is proposed to make the following changes to the HI-STORM 100S, Ver. B licensing drawing (DWG 4116, Rev. 12): [1] Sheet 4: On the Exploded Assembly View change the Base Bottom Plate from SA 516 Grade 70 to Carbon steel. [2] Sheet 4: On the Exploded Assembly View change the material on the Base Spacer Block from SA 36 to Carbon steel. [3] Sheet 4: On the Exploded Assembly View change the material on the Base Shield Block from SA 36 to Carbon steel. [4] Sheet 4: On the Section View B-B change the material on the MPC Support from SA 36 to Carbon steel. [5] Sheet 8: On the Exploded View change the material on the Lid Outer Ring to SA 516 Grade 70 or SA 36. [6] Sheet 8: On the Exploded View change the material on the Lid Cover Plate to SA 516 Grade 70 or SA 36. [7] Sheet 8: On the Exploded View change the material on the Inner Ring from SA 36 to Carbon steel. [8] Sheet 8: On the Exploded View change the material on the Lid Vent Shield from SA 36 to Carbon steel HI-STORM FSAR (HI-2002444, Rev. 4) Changes: [9] Table 2.2.6 - Items addressed in [1] through [8] above are revised. [9] Table 2.2.6 - Items addressed in [1] through [8] above are revised. [10] Table 3.3.6 - Heading changed to SA AND CARBON STEEL MATERIAL PROPERTIES [11] Page 3.4-48 - Section 3.4.4.3.2.2 Table - Lid outer ring to lid shield ring weld allowable and factor of safety are changed to 33.3 and 1.159, respectively; and Shield block shell to lid weld allowable and safety factor are changed to 30.3 and 1.125, respectively. [12] Page 3.4-50 - Section 3.4.4.3.2.3 Table - Lid vent shield bending stress intensity and factor of safety are changed to 36.0 and 2.75, respectively; and Lid inner ring compression allowable and safety factor are changed to 24.0 and 1.43, respectively. [13] Page 3.4-94 - Section 3.4.4.3.3 Table - Top lid end strike allowable and safety factor are changed to 50.65 and 1.065, respectively. [14] Table 3.4.5 - Safety factors for Load Case 02: changed from 1.134 to 1.125; and for Load Case 04: 2.65 to 2.60 (Side Strike) and 1.35 to 1.065 (End Strike). [15] Table 3.4.9 - For Circumferential stress (for missile strike) safety factor changed to 2.60. [16] Table 3.4.9 - Editorial change HI-STORM storage overpack external pressure - FSAR location changed to 3.4.4.5.2.	The proposed change does not affect the structural integrity of the HI-STORM system, and its performance with respect to shielding, criticality and thermal characteristics remains unchanged. The full evaluation has determined that the change may be implemented without prior NRC approval.
822	0	1014	1024	ECO	Screening Only	HI-STORM 100S & 100S Version B outer shell and lid	The proposed activity is to add the following note to DWG 3669, Rev. 14 and DWG 4116, Rev. 13: "Multiple holes may be drilled and tapped in the HI-STORM body / lid for the purpose of attaching temperature monitoring equipment. Holes shall be 3/8" (MAX) x 5/8" (MAX). depth. After installation of the temperature monitoring equipment all holes shall be plugged." The proposed activity gives the ability to mount conduit to the HI-STORM body and lid for use with a temperature monitoring system.	N/A

72.48 #	72.48 Rev.	CoC #s	Holtec Project	ECO or SMDR	7248 Type	Affected Component	Description of Change, Test or Experiment	Summary of Evaluation (Full Evaluations Only)
824	0	1014	5014	ECO	Full Evaluation	MPC-24, -32, -68 fuel baskets	Added the following notes to MPC basket licensing drawings 3928 Rev. 9, 3927 Rev. 11, 3926 Rev. 8, 3925 Rev. 6 [1] Neutron absorber panels may be made up of one long panel of indicated width or two shorter panels of indicated width as long as the total length is maintained as indicated and the gap between panels is maintained at no more than 1/4". [2] Neutron absorber panels may have a reduction in width of up to 1/32" over a length of no more than 12" provided the average width of the panel is no less than the minimum specified.	The proposed change does not affect the structural integrity of the MPC, and its performance with respect to shielding, criticality and thermal characteristics remains unchanged. The full evaluation has determined that the change may be implemented without prior NRC approval.
828	1	1014	1021	SMDR & ECO	Screening Only	MPC-68, -32, -24 vent cap	The following are the changes proposed on Dwg. 3923: 1. The 3/8" long seal bolt is replaced with a ½" long bolt. 2. The aluminum seal washer is replaced with Alloy 1100 aluminum washer. 3. Use ¼" stainless steel lock washer between the aluminum seal washer and the seal bolt. 4. Torque the seal bolt to 3 ft-lbs.	N/A
831	0	1014	5014	ECO	Full Evaluation	HI-STORM	HI-STORM FSAR (HI-2002444, Rev 4): [1] Add the following text to Section 3.4.7.2 and as a Note to Table 2.2.1 (see attached markups for exact locations) - "The overpack is also qualified to sustain without tip-over a lateral impulse load of 60 psi (differential pressure for 85 milliseconds maximum) [3.4.5]." [2] Delete the word "DELETED" from Reference 3.4.5 in Section 3.8 and replace with "Evaluation of Bounding Explosion Pressure Limits for HI-STORM 100", Holtec Report HI-2063635, Revision 0."	The proposed change does not affect the structural integrity of the HI-STORM system, and its performance with respect to shielding, criticality and thermal characteristics remains unchanged. The full evaluation has determined that the change may be implemented without prior NRC approval.
832	0	1014	1021	ECO	Screening Only	MPC enclosure vessel	***Drawing NO. 3923, REV. 15 - MPC enclosure vessel licensing DWG*** 2) Sheet 3: Remove requirement and mention of secondary containment including note 4 and references to note 4.	N/A
833	0	1014	1024	ECO	Screening Only	lid lift block	It is proposed to make the following changes to DWG 4116, Rev. 14: [1] Sheet 7: Inner Shell: Remove box from inner shell I.D. dimension (73" Min) [2] Sheet 8: Lid Top View: Remove box from stud pipe bolt circle dimension (113" diam. / 103" diam.) [3] Sheets 8 & 9: Add third optional lid closure bolt design [Closure bolt (SA 193 B7) & Bolt Handle (C/S 1 ¼-7UNC HEX NUT)] [4] Sheet 9: Lid Lift Block: Change length from 17-1/2" to 18-1/2".	N/A

72.48 #	72.48 Rev.	CoC #s	Holtec Project	ECO or SMDR	7248 Type	Affected Component	*Description of Change, Test or Experiment*	Summary of Evaluation (Full Evaluations Only)
834	0	1014	5014	ECO	Full Evaluation	HI-TRAC 100 & HI-TRAC 125	Revise the results summary table in subsection 3.4.8.2.2 of the HI-STORM FSAR (REV. 5) as follows: [1] Change the maximum stress intensity in the HI-TRAC 100 water jacket from 28.331 to 33.383; [2] Change the maximum stress intensity in the HI-TRAC 100 inner shell from 11.467 to 15.6; [3] Change the maximum plastic strain in the HI-TRAC 100 water jacket from 0.0000932 to 0.0; [4] Change the maximum stress intensity in the HI-TRAC 125 water jacket from 19.073 to 33.697; [5] Change the maximum stress intensity in the HI-TRAC 125 inner shell from 6.023 to 18.669. Revise the results summary tables in subsection 3.4.4.3.3.1 of the HI-STORM FSAR (REV. 5) as follows: [6] Change the tangential bending stress in the HI-TRAC 125 water jacket outer panel from 18.41 to 14.18; [7] Change the tangential bending stress in the HI-TRAC 100 water jacket outer panel from 22.47 to 13.63; [8] Change the circumferential stress in the HI-TRAC 125 water jacket outer enclosure (level a load) from 18.797 to 14.57 and change the corresponding safety factor from 1.397 to 1.80; [9] Change the circumferential stress in the HI-TRAC 100 water jacket outer enclosure (level a load) from 22.781 to 13.94 and change the corresponding safety factor from 1.152 to 1.88; [10] Change the circumferential stress in the HI-TRAC 125 water jacket outer enclosure (level b load) from 19.041 to 14.81 and change the corresponding safety factor from 1.84 to 2.36; [11] Change the circumferential stress in the HI-TRAC 100 water jacket outer enclosure (level b load) from 23.00 to 14.16 and change the corresponding safety factor from 1.52 to 2.47; Revise the results summary table for the water jacket stress evaluation in subsection 3.4.4.3.3.4 of the HI-STORM FSAR (REV. 5) as follows: [12] Change the HI-TRAC 125 enclosure shell panel bending stress from 18.41 to 14.18 and change the corresponding safety factor from 1.426 to 1.851; [13] Change the HI-TRAC 100 enclosure shell panel bending stress from 22.47 to 13.63 and change the corresponding safety factor from 1.168 to 1.926; [14] Delete the results for "HI-TRAC 125 weld stress - enclosure shell panel single fillet weld" from the table; [15] Delete the results for "HI-TRAC 100 weld stress - enclosure shell panel single fillet weld" from the table; ***continued on next page***	The evaluation concluded that the proposed changes do not have any adverse impact on the structural, thermal, shielding, containment and criticality function of the cask system. No existing accidents are affected in terms of either frequency or consequences. No new accidents are created. The transfer casks remain completely passive, so no malfunctions exist.

<table>
<tr><th>72.48 #</th><th>72.48 Rev.</th><th>CoC #s</th><th>Holtec Project</th><th>ECO or SMDR</th><th>7248 Type</th><th>Affected Component</th><th>Description of Change, Test or Experiment</th><th>Summary of Evaluation (Full Evaluations Only)</th></tr>
<tr><td>834</td><td>0</td><td>1014</td><td>5014</td><td>ECO</td><td>Full Evaluation</td><td>HI-TRAC 100 & HI-TRAC 125</td><td>*** continued from previous page***

[17] Change "HI-TRAC 125 - enclosure panel direct stress" to "HI-TRAC 125 - radial rib direct stress";
[18] Change the HI-TRAC 100 enclosure panel direct stress from 1.736 to 1.975 and change the corresponding safety factor from 10.84 to 8.861;
[19] Change "HI-TRAC 100 - enclosure panel direct stress" to "HI-TRAC 125 - radial rib direct stress";
[20] In table 3.4.5, change the minimum safety factor for load case I.D. 03 from 1.168 to 1.39;
[21] In table 3.4.9, change the minimum safety factor for "HI-TRAC water jacket - enclosure shell bending" for pressure load only from 1.17 to 1.85;
[22] In table 3.4.9, change the minimum safety factor for "HI-TRAC water jacket - enclosure shell bending" for pressure plus handling load from 1.14 to 1.80;</td><td></td></tr>
<tr><td>836</td><td>0</td><td>1008</td><td>5014</td><td>ECO</td><td>Full Evaluation</td><td>MPC-68</td><td>(1) HI-STAR FSAR Appendix 3.M
Under Sheathing Weld Capacity
Change Ws from 17.48 lb. to 20.0 lb. and as a result, change the calculated weld shear stress (Sw) from 1839 psi to 2024 psi.
(2) HI-STAR FSAR Table 3.4.9
Change Safety Factors for the MPC-68 as follows:

<table>
<tr><th>Row</th><th>Column</th><th>Value</th></tr>
<tr><td>Enclosure Vessel - Primary Membrane (Pm)</td><td>0 Degree Side Drop, Load Cases F3.b or E3.b</td><td>5.64</td></tr>
<tr><td>Enclosure Vessel - Primary Membrane (Pm)</td><td>45 Degree Side Drop, Load Cases F3.c or E3.c</td><td>7.12</td></tr>
<tr><td>Basket Supports - Primary Membrane (Pm)</td><td>Handling Load, Load Cases F2 or E2</td><td>5.84</td></tr>
<tr><td>Basket Supports - Primary Membrane (Pm)</td><td>0 Degree Side Drop, Load Cases F3.b or E3.b</td><td>6.67</td></tr>
<tr><td>Basket Supports - Primary Membrane (Pm)</td><td>45 Degree Side Drop, Load Cases F3.c or E3.c</td><td>8.67</td></tr>
<tr><td>Basket Supports - Local Membrane Plus Primary Bending (PL + Pb)</td><td>Handling Load, Load Cases F2 or E2</td><td>9.01</td></tr>
</table>

(3) HI-STAR FSAR Appendix 3.M
Under Sheathing Weld Capacity
On page 3.M-5 (below the words "For an MPC-68 panel, ..."), change "h = 156 in." to "h = 156 in. (use h = 139 in. for conservatism)"</td><td>The proposed changes do not adversely affect the structural integrity of the MPC, and its performance with respect to shielding, criticality and thermal characteristics remains unchanged.

The full evaluation has determined that the change may be implemented without prior NRC approval.</td></tr>
</table>

72.48 #	72.48 Rev.	CoC #s	Holtec Project	ECO or SMDR	7248 Type	Affected Component	Description of Change, Test or Experiment	Summary of Evaluation (Full Evaluations Only)
838	0	1014	5014	ECO	Screening Only	HI-STORM 100	Make the following text changes to the HI-STORM FSAR, HI-2002444, Rev. 4: [1] Section 3.1.2.3, Paragraph 5, Sentence 5: Change sentence to add SA36. Sentence to read, "...are made of SA516 Gr. 70, SA515 Gr. 70, or SA36..." [2] Table 3.1.18: Insert new row after "Ferritic steel with nominal section thickness of 5/8" or less". Material = "SA36 (thickness greater than 5/8")", Test Requirement = "Not required per NF-2311(b)(7)", Test Temperature = "-", Acceptance Criterion = "-". [3] Section 3.3.1.2, Paragraph 1, Sentence 1: Change to add SA36. Sentence to read, "...are SA516 Grade 70, SA515 Grade 70, and SA36." [4] Section 3.3.1.2, Paragraph 1: Add sentence 6 to read, "The material properties of SA36 are shown in Table 3.3.6." [5] Section 3.3.1.2, Paragraph 2, Sentence 1: Change to add Table 3.3.6. Sentence to read, "...are not included in Tables 3.3.2, 3.3.3, and 3.3.6 are weight..."	N/A
844	0	1014	5014	ECO	Screening Only	HI-STORM concrete	It is proposed to make the following text changes to the HI-STORM FSAR, HI-2002444 Rev. 4: [1] Appendix 1.D, Section 1.D.1, Second paragraph: Change the ITS category for the overpack concrete from ITS Category C to ITS Category B. [2] Table 2.2.6: Change the Safety Class from C to B for the Radial Shield, Pedestal Shield, Lid Shield, and Shield Block.	N/A
849	0	1014	1024	ECO	Full Evaluation	HI-STORM 100S	It is proposed to make the following changes to the HI-STORM 100S Licensing Drawing (DWG 3669 R15): [1] Sheet 2, Note 2: Change the length of the ribs from 27 7/16" to 27 1/2" in both places. Remove 'nom' designation from the rib dimensions. Also add "the shorter rib plates shall have a min. of 24" of weld connecting them to the inner and outer shells and to the vent top plate. [2] Sheet 5, Channel detail: Change the inner radius of the channel bend from R3/16" TYP. to R3/16" TYP. REF. [3] Sheet 7, Assembly Exploded View: Change the diameter of the concrete fill holes from 42" to 42" NOM. [4] Sheet 4: Reduce the top and side welds between the inlet vent and the inner shell from 3/8" to 1/8". [5] Sheet 6: Reduce the top and side welds between inlet vent and outer shell from 3/8" to 1/8". [6] Sheet 8, Detail R: Reduce the lid shield block cover to lid shield block shell weld from 1/4" to 1/8 " [7] Revise the last sentence in Note 2, Sheet 2 as - "THE SHORTER RIB PLATES AT THE BOTTOM SHALL HAVE A MIN. OF 24" OF WELD .....THE VENT PLATE." As a result of the above drawing changes, the safety factors reported in the summary table in Section 3.4.3.5 of the HI-STORM FSAR are revised as necessary. See the attached 72.48 evaluation for a complete list of the changes.	There are no malfunctions associated with the HI-STORM system so no malfunction likelihood, consequences or results can be increased. The structural integrity of the HI-STORM is maintained, so no accident consequences can be increased. Methods of handling and operating the cask systems are not affected, so no new accidents can be created. Cask system temperatures, including fuel cladding, are not increased and MPC internal pressures are not increased, so no fission product boundary limit is exceeded. No new evaluation methods are used.

72.48 #	72.48 Rev.	CoC #s	Holtec Project	ECO or SMDR	7248 Type	Affected Component	Description of Change, Test or Experiment	Summary of Evaluation (Full Evaluations Only)
853	0	1014	1024	ECO	Full Evaluation	HI-STORM 100S, 100S(Ver C.), and 100S (Ver. B) ANCHOR BLOCKS	It is proposed to change the anchor block internal threads from standard UNC Class 1B specifications to standard UNC Class 1B specifications plus 0.025" clearance for coating material. This change will be implemented on 100S, 100S Ver. B and 100S. Ver. C HI-STORMs. The following changes were made to the HI-STORM FSAR as a result of the proposed change described above: 1) In Subsection 3.4.3.5, change value for "Lifting Block Threads - Top Lift - Region A (3D*)" from 5.608 to 7.950 in results summary table for "HI-STORM 100S Top and Bottom Lifting Analyses" 2) In Subsection 3.4.3.5, change safety factor for "Lifting Block Threads - Top Lift - Region A (3D*)" from 3.36 to 2.37 in results summary table for "HI-STORM 100S Top and Bottom Lifting Analyses" 3) In Subsection 3.4.3.5, change value for "Lifting Block Threads - Top Lift - Region A (3D*)" from 6.548 to 9.315 in results summary table for "HI-STORM 100S Version B Top and Bottom Lifting Analyses" 4) In Subsection 3.4.3.5, change safety factor for "Lifting Block Threads - Top Lift - Region A (3D*)" from 3.00 to 2.11 in results summary table for "HI-STORM 100S Version B Top and Bottom Lifting Analyses" 5) In Subsection 3.4.3.5, change value for "Lifting Stud - Top Lift - Region A (3D*)" from 49.199 to 49.369 in results summary table for "HI-STORM 100S Version B Top and Bottom Lifting Analyses" 6) In Subsection 3.4.3.5, change safety factor for "Lifting Stud - Top Lift - Region A (3D*)" from 2.21 to 2.20 in results summary table for "HI-STORM 100S Version B Top and Bottom Lifting Analyses"	There are no malfunctions associated with the HI-STORM system so no malfunction likelihood, consequences or results can be increased. The structural integrity, thermal performance, and shielding effectiveness of the HI-STORM is maintained, so no accident consequences can be increased. Methods of handling and operating the cask systems are not affected, so no new accidents can be created. Cask system temperatures, including fuel cladding, are not increased and MPC internal pressures are not increased, so no fission product boundary limit is exceeded. No new evaluation methods are used.
854	0	1014	5014	ECO	Screening Only	HI-TRAC	It is proposed to change the test in the FSAR as follows: HI-STORM FSAR, REV. 4, Table 9.2.1, 12th Task in Column 1 - Remove "HI-TRAC and". This change removes the requirement to visually inspect the HI-TRAC identification markings on an annual basis.	N/A
856	0	1014	5014	ECO	Screening Only	Damaged fuel container screen	In Section 2.1.3, replace the phrase "250 x 250 fine mesh screens" in the first sentence of the second paragraph with "mesh screens having between 40x40 and 250x250 openings per inch". In Section 2.2.3.4, replace the phrase "fine mesh screens" in the sixth sentence with the phrase "mesh screens". In Section 6.4.2.4, reword the fourth sentence of the second paragraph to replace the phrase "250 x 250 fine mesh screens" with "mesh screens". Reword the fourth sentence of the third paragraph to read "... no more than 50 ft per square inch of screen." In Section 7.1.5, delete the seventh sentence of the second paragraph.	N/A
857	0		1027	PS	Screening Only	Damaged fuel container	Revise the HI-STORM 100 FSAR to correct requirements for damaged fuel container lifting points. Specifically, modify the first sentence of 3rd paragraph of Subsection 3.4.4.3.1.9 ("The upper closure assembly must ...") to read "The DFC lift point(s) must be designed in accordance with Item 3 in Section 5.1.6 of NUREG-0612 [3.1.1]."	N/A

72.48 #	72.48 Rev.	CoC #s	Holtec Project	ECO or SMDR	7248 Type	Affected Component	Description of Change, Test or Experiment	Summary of Evaluation (Full Evaluations Only)
863	0	1014	5014	ECO	Full Evaluation	HI-STORM Concrete in Overpack	HI-STORM FSAR 2002444, Rev.5 The requirements on HI-STORM shielding concrete discussed in Appendix 1.D is proposed to be revised. No critical properties of the concrete will change due to these changes to Appendix 1.D. The changes are as follows: [1] Clarified concrete aggregate grading requirements and sieve testing. Other aggregate testing requirements have been revised. [2] The concrete compressive strength tests requirements have been revised to include a condition that if the concrete strength exceeds the minimum required strength at an earlier time, it can be used as the official break test data in lieu of waiting for 28-day break results. [3] Additional editorial changes in the text to implement the above changes.	There are no malfunctions associated with the HI-STORM system so no malfunction likelihood, consequences or results can be increased. The structural integrity and shielding of the HI-STORM is maintained, so no accident consequences can be increased. Methods of handling and operating the cask systems are not affected, so no new accidents can be created. Cask system temperatures, including fuel cladding, are not increased and MPC internal pressures are not increased, so no fission product boundary limit is exceeded. No new evaluation methods are used.