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January 6, 2006

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 5014479  
3. Holtec Letter 5014480

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 25 March 2003 and 31 December 2005.

It is noted that the last such biennial reports (References 2 and 3) were submitted on 24 March 2003, and that the period between those filings and this filing exceeds the 10 CFR 72.48(d)(2) requirement for the reports to "be submitted at intervals not to exceed 24 months." We have entered this violation into our company's formal quality assurance corrective action program for investigation and corrective actions to prevent future reoccurrence.

Sincerely,

Evan Rosenbaum, P.E.

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

Document ID: 5014585

NMSSDI

ENCLOSURE

HI-STAR 100 AND HI-STORM 100 DRY CASK STORAGE SYSTEMS  
NRC Docket Nos. 72-1008 and 72-1014

10 CFR 72(d)(2) Report

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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 and adverse change).
6. The seventh and eighth columns of the report are the description of the change, test or experiment and the summary of the evaluation (for full evaluations only).

## 10 CFR 72.48(d)(2) Report for the HI-STAR 100 and HI-STORM 100 Cask Systems

| 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)  |
|---------|------------|-------------|----------------|-------------|-----------------|--|--|--|
| 113     | 1          | 1008 & 1014 | 1022           | ECO         | Full Evaluation | MPC-24 Fuel Basket                                     | <p>The proposed change alters the basket configuration of the MPC-24. The internal dimensions (pitch, sheathing thickness and some of the angle sizes) are modified. The purpose of this change is to allow for additional clearance for certain types of fuel assemblies, which will reduce operator time required to load the basket, thereby reducing the total dose requirements during a loading campaign.</p> <p>REV. 1 - Change the number of narrow Boral panels on the fuel basket periphery to 16. Revised 72.48 applicability section of checklist.</p>   | The proposed change has been evaluated for impact upon safety margins, probability of occurrence, and consequences of previously identified normal/off-normal/accident conditions. The proposed change alters the cell configuration and spacing of the MPC-24 basket. The potential concerns are criticality, structural and thermal analysis. All three of these areas were reviewed for a potential impact upon the licensing basis. The criticality evaluation has shown that the proposed change increases the safety margins. The thermal evaluation has changes in the analysis, but remains within existing specified criteria. The structural evaluations maintain positive margins to the applicable Code limits.  |
| 399     | 2          | 1008 & 1014 | 1021           | SMDR        | Screening Only  | MPC-68 Boral   | One Boral panel (S/N VH110722-1) is below the minimum width requirement by 0.022".   | N/A  |
| 507     | 2          | 1014        | 1024           | ECO         | Full Evaluation | HI-STORM 100 Classic Lid Shield and Overpack Top Plate | <p>[1] Decrease the length of BOM Item 7 from 11-3/4" to 10-1/2". [2] Increase the diameter of BOM item 6 from 67" to 70". The tolerance on the 70" diameter shall be +/-1/4". [3] The weld between item 6 and item 7 is changed to a 1/8" fillet weld. [4] Create BOM Item 56, Quantity=1, Material = SA516 GR 70, Nomenclature = Shear Ring, Description = 3/4" thk. 73 1/2" I.D. x 108" O.D. Plate (cut in four pieces). Create a detail of this item to include a tolerance of 108" +3/16"/-0". There shall also be a circular cut-out and break thru to the 108" O.D. of radius of 3 1/2", placed on the 103" B.C. equally spaced at 90 degrees apart. This plate shall be welded to the bottom of the HI-STORM lid to BOM item 10b with a 3/8" fillet weld along the 73 1/2" I.D. ring and along the vents. [5] BOM Item 9, The top plate shall be changed to a 3/4" thk. 109" I.D. x 132" O.D. (cut in four pieces). The tolerance on the I.D. shall be 109" +1/4"/-0". This plate shall replace the existing top plate, and be welded to the top of the outer shell with a 1/4" fillet weld along the outer radius of the plate, and a 1/8" fillet weld along the vents. [6] Delete note 6 from dwg. 1561 sh. 2. [7] Delete MPC cavity lengths from dwg. 1495 sh. 1. [8] Delete note 14 from dwg. 1495 sh. 2. [9] Delete shield shell details from dwg. 1495 sh. 2, dwg. 1495 sh. 5, BM-1575 sh. 1, and add notes 15 and 16 to list dates of shield shell deletion and lid/top plate redesign. [10] Change the material for item 16 to add "OR SA193-B7"</p> <p>REV. 1: Only adds the justification for proposed change #10.</p> <p>REV. 2: This revision has been made only to provide clarification to the response provided in Section III.H of the evaluation.</p> | <p>Proposed changes consist of modifying lid shield steel for each of fabrication and splitting top ring into two pieces, making a shear ring arrangement, to eliminate shear stresses on lid studs during tipover and allow the use of SA193-B7 for the lid stud material. With respect to shielding analysis, splitting overpack top plate into two pieces is more than offset by extending lid bottom plate into annulus so existing design basis calculations remain bounding. With respect to thermal analysis, top plate modification is negligible and extension of lid bottom plate into annulus is bounded by existing design basis calculations. With respect to operations and occupational exposures, elimination of lid stud shims may reduce duration of lid installation steps and reduce personnel doses. With respect to structural analysis, safety factors for the tipover analysis are reduced so a full evaluation of the structural impact is required. Full evaluation has determined that no accident or malfunction is increased in either frequency or magnitude of consequences, that no new accident condition are created and that no fission product barrier limit is exceeded. Evaluation has determined that proposed changes may be implemented without prior NRC approval.</p> <p>REV. 1: Only adds the justification for proposed change #10.</p> <p>REV. 2: This revision has been made only to provide clarification to the response provided in Section III.H of the evaluation.</p> |

10 CFR 72.48(d)(2) Report for the HI-STAR 100 and HI-STORM 100 Cask Systems

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|---------|------------|--------|----------------|-------------|-----------------|------------------------------------|---|--|
| 513     | 1          | 1008   | 1027           | ECO         | Screening Only  | HI-TRAC Lid Spacer, Ancillary #335 | <p>Rev. 0: Issue design documents (eco 1027-53, dwg 3766 r0 &amp; ps-1335r0) for the HI-TRAC lid spacer, ancillary #335. The HI-TRAC lid spacer is an optional piece of ancillary equipment used with the HI-TRAC overpack only when the HI-TRAC is handled in a vertical orientation of when the HI-TRAC transfer lid is not used. It consists of a metal ring, that is installed between the HI-TRAC upper flange and the HI-TRAC top lid, and threaded studs that are used in place of the HI-TRAC top lid studs. Its purpose is to increase the clearance between the top of the MPC and the underside of the HI-TRAC top lid. This increased clearance is operationally beneficial during MPC transfer operations. The spacer is fabricated of the same material as the HI-TRAC upper flange and is designed with outside and inner diameters similar to that of the HI-TRAC upper flange. The threaded studs are fabricated from the same material and to the same standards as the HI-TRAC top lid studs. Use of the lid spacer entails using HI-TRAC lid studs that are longer than those delineated on the existing BOM in the HI-STORM FSAR.</p> <p>Rev. 1: This revision corrects the statement previously made concerning the HI-TRAC lid spacer material. The spacer material is carbon steel.</p> | N/A  |
| 518     | 0          | 1014   | 1022           | ECO         | Full Evaluation | MPC-24E/24EF Basket, Basket Welds  | <p>Licensing Drawing 3925 "MPC-24E/EF Basket Assembly" Rev. 1</p> <p>1) Sheet 3: Weld Detail B - change center column weld size from 3/16" to 3/4" and incorporate weld pitch of 24.</p> <p>2) Sheet 3: Change fillet weld for L shapes from 3/16" to 0.08". Incorporate periphery fillet weld along the length of item 14, cell channel (C-Shape) of size 0.08". Incorporate inner fillet weld along the length of item 14, cell channel (C-Shape), of size 0.197".</p>  | Proposed change #2 required a structural evaluation. The structural evaluation modeled the MPC 24E basket welds as pinned joints, thus resulting in increased and decreased safety factors (none less than 1). No accident or malfunction frequency or malfunction is affected. No new accidents, malfunctions or malfunction results are created. Cask operating and handling procedures are unchanged. No fission product boundary design limits are affected. The evaluation has determined that the proposed activity may be implemented without obtaining an amendment to the license or CoC. |

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|---------|------------|-------------|----------------|-------------|-----------------|---|--|---|
| 552     | 2          | 1008 & 1014 | 1021           | ECO         | Full Evaluation | MPC-68/68F/68FF Lid, MPC-24/24E Lid     | <p>REV. 0 [1] Add Sheet 10, MPC-68 Optional Lid Assembly, and Sheet 11, MPC-68 F Optional Lid Assembly, to Drawing 3739 to show optional lid design to enable the MPC lid to be fabricated from two separate pieces. The lids will be fabricated from two pieces, Items 50 and Item 51 for the MPC-68 or Items 60 and 61 for the MPC-68F. Items 50 and 60, MPC Lid-Opt, height is 5" +1/32", -0". Items 51 and 61, Shield Plug, height is 5" +1/32", -0". The two items will be assembled using an 3/16" MIN all around circumferential groove weld. When assembled the MPC lid will have the same dimensions as the one piece forged lid. Add notes on Sheets 2, 6, and 9 to refer to the new configuration. Items 50 and 60 shall be classified as ITS-A. Items 51 and 61 shall be classified as ITS-B. [2] Add Sheet 8, MPC-24/24E Optional Lid Assembly to Drawing 3471 to show optional lid design to enable the MPC lid to be fabricated from two separate pieces. The lids will be fabricated from two pieces, Items 35 and 36. Item 35, MPC Lid-Opt, height is 5" +1/32", -0". Item 36, Shield Plug, height is 4 1/2" +1/32", -0". The two items will be assembled using an 3/16" MIN all around circumferential groove weld. When assembled the MPC lid will have the same dimensions as the one piece forged lid. Add notes on Sheets 2, and 5 to refer to the new configuration. Item 35 shall be classified as ITS-A. Item 36 shall be classified as ITS-B.</p> <p>REV. 1 [1] MPC-24/24E: Change item 35, optional lid, height to 4-3/4" (+1/32", -0") and item 36, shield plug, height to 4-3/4" (+1/32", -0").</p> <p>REV. 2 Drawing 3923 added to list of Affected Documents. Sections of the evaluation changed to clarify accident/malfunction ambiguities.</p> | <p>REV. 0: The lid thickness remains the same so shielding is not adversely affected. The structural analyses have been evaluated and the safety margins remain acceptable. The confinement barrier remains the same. The 72.48 evaluation has determined that the proposed change may be implemented without prior NRC approval.</p> <p>REV. 1: Same as Rev. 0. The 72.48 evaluation has determined that the proposed change may be implemented without prior NRC approval.</p> <p>REV. 2: Same as Rev.-1: The proposed activity may be implemented without obtaining an amendment to the license or CoC.</p>  |
| 595     | 1          | 1014        | 1025           | SMDR        | Full Evaluation | HI-TRAC 125D Pool Lid and Mating Device | <p>REPAIR INSTRUCTIONS: UST&amp;D is to machine the bottom of the HI-TRAC pool lid to reduce the high-point overall thickness of the pool lid by 0.50" +0.0/-0.06. The thickness may be accomplished by (Option 1) machining the entire bottom surface of the pool lid (i.e., Item #4 and #1) or (Option 2) the removal of the existing Item #4, machining Item #1, and replacement of Item #4 with a thinner plate of SA516 Grade 70. For Option 1, after all machining, the thickness of Item #4 shall be confirmed by UT thickness measurements to be equal to or greater than 1/2". In addition, for Option 1, the groove weld between Item #4 and #1 shall be repaired to 1/4" min. with final VT &amp; PT inspection in accordance with Holtec DWG 3438. For Option 2, if Item #4 is to be replaced, the replacement plate shall be a minimum of 1/2" thick and groove weld between Item #4 and #1 shall be 1/4" minimum with VT &amp; PT inspection in accordance with Holtec DWG 3438. After machining and welding, the locations with removed paint shall be painted with Carboline 890 in accordance with HSP-318.</p>   | <p>The PA is a one-time-only repair to bring about the required clearance between the CGS HI-TRAC pool lid/pool lid gasket and the underside of Item #30 of the mating device. Structural and shielding evaluations show that positive safety margins are maintained. No accident or malfunction is modified, either in frequency of occurrence or magnitude of consequences. No new accident or malfunction is created. Fission product barriers are not affected. No new methods of evaluation are introduced. The full evaluation revealed that the proposed activity may be implemented without obtaining an amendment to the license or CoC.</p> |

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|---------|------------|-------------|----------------|-------------|-----------------|---|--|---|
| 601     | 2          | 1014        | 1024           | ECO         | Screening Only  | HI-STORM 100 GSCPs and Lid Stud Washers | <p>[1] Drawing 1561, Sheets 3 &amp; 4 - Change the tolerance of the inlet &amp; outlet gamma shield cross plate length from +1/2",-0" to +/- 1/8".</p> <p>[2] BM-1575, Sheet 2 - Change the description of the Lid Washer, to S/S from C/S with the dimensions of 1/2" min. thick x 3-1/2" ID x 8" min. OD and delete "optional". Drawing 1561, Sheet 2 - Delete the term "optional" in the lid washer callout.</p> <p>[3] Drawing 1495, Sheet 2 - Change the HI-STORM inner cavity height tolerance from +/- 3/16" to +3/4, -3/16".</p> <p>[4] Drawing 1561, Sheet 2 - Change the tolerance of the top lid concrete shield thickness (10.5") from +/- 1/4" to +1/4", -5/8".</p>   | N/A   |
| 614     | 1          | 1008 & 1014 | 1024           | ECO         | Screening Only  | HI-STORM Classic Inner Shell            | <p>Item 3, the inner shell, is shown on sheets 1 thru 5 of drawing 1495 and on sheets 2 and 6 of drawing 1561. Item 3 has no axial welds. Sheets 1 and 2 of drawing 1495 show the one circumferential weld in item 3. Sheet 2 incorporates the AWS symbol for the weld, a both-sided 3/8" groove weld around its entire circumference. 3/8" welds require only the visual examination as called for in the text adjacent to the symbol.</p> <p>The PC is to remove the words "and PT or MT final surface per note 7 or note 13" from sheet 2 of drawing 1495. Notes 7 and 13 are to be deleted. The last HI-STORM overpack weld location listed in table 9.1.4 of the FSAR deals with the requirements for the inner shell welds. This entry is to be deleted from the table.</p>  | N/A   |
| 618     | 1          | 1008 & 1014 | 1021           | SMDR        | Full Evaluation | MPC Closure Ring                        | <p>[1] Drill through the closure ring and tap a hole for 1/4-20 set screw. Set screw is to be positioned a minimum of 1/8" below flush. Add set screw to BOMs as a new optional item. [2] Chapters 7, 8, 9, and 10 of the HI-STORM FSAR are affected to add a drilled/tapped hole in the closure ring to be filled by a set screw and plug weld in the field, which will allow the option to leak test the MPC Lid-to-Shell weld and the Vent Port Cover Plate Welds at the same time. As the leakage rate test will be measuring the port cover plate and MPC lid-to-shell welds at the same time, it is conservative to assume a pressure delta of only 1 atm to determine the measured leakage rate. The helium pressure behind the port cover plates is 1 atm, but the helium pressure behind the MPC lid-to-shell weld is approximately 2 atm.</p> <p>This Change is site specific. FSAR Mark-ups to Rev. 0 of the HI-STORM FSAR have been attached to the corresponding SMDR as they apply to the client. These changes will not be incorporated into the living FSAR.</p> | [1 & 2] The hole, setscrew, and plug weld are identical to those used on the port cover plates. A structural evaluation has been performed that analyzes the stress in the seal weld, resulting in a shear stress of 50 psi and a Safety factor of 326.4. This analysis was performed for the vent port cover plates. The cover plates and the closure ring are the same thickness and the weld being applied is the same diameter and thickness. Therefore the stress and safety factor is applicable to the closure ring as well as the cover plates. Using this change the MPC primary confinement welds can be leakage rate tested as a whole providing a quantified leakage rate that is easily compared to the technical specification requirements. The proposed change does not affect the function of the closure plate. The 72.48 evaluation has determined that the proposed change may be implemented without prior NRC approval. |
| 631     | 1          | 1014        | 5014           | ECO         | Screening Only  | HI-TRAC 125 Lift Yoke                   | <p>Rev. 0: Increase the maximum weight of the lift yoke for 125-ton HI-TRAC from 3600 lbs to 4000 lbs.</p> <p>Rev. 1: Increase the maximum weight of the lift yoke for 125-ton HI-TRAC from 4000 lbs to 4200 lbs.</p>  | N/A   |

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|---------|------------|--------|----------------|-------------|-----------------|--|---|--|
| 638     | 2          | 1014   | 1023           | ECO         | Full Evaluation | MPC-32 Fuel Basket Panels, Sheathing and Basket Supports | <p>[1] Reduce the thickness of the Boral sheathing from 0.075" to 0.035". Increase the nominal id of cells containing Boral by 0.04". Decrease the size of the welds affixing the sheathing to the basket panel from 1/16" to 0.035". [2] Increase the length of the wide 90-degree oriented plates in the fuel basket by 1/2". Increase the maximum width of the assembled fuel basket. [3] Modify the length and angle of the u-shaped basket supports.</p> <p>REV. 1 - Revised to reflect revision status of source eco. Added licensing drawing 3923 to list of affected documents above.</p> <p>REV. 2 - Note that PCs 2 and 3, which ease fabrication, maintain the relative clearance between the basket and basket support so there is no effect on the results of the thermal expansion calculations (which are based on the nominal gaps) and no impact from these changes when taken together.</p>   | Screening has determined that the proposed change [1] is adverse from shielding and structural perspectives, and that proposed changes [2] and [3] are not adverse. The probability of occurrence and consequences of previously evaluated accidents are not increased, and no new accidents are introduced. There are no malfunctions evaluated for the passive casks systems. There is no reduction in the integrity of any fission product barrier. No new methods of evaluation are introduced in evaluating the changes. The evaluation has determined that the proposed change may be implemented without prior NRC approval. These changes create a slight reduction in the MPC free volume, but the effect is negligible. Therefore there is no impact on the confinement analysis.  |
| 641     | 0          | 1014   | 1024           | ECO         | Full Evaluation | HI-STORM 100S Overpack                                   | <p>Create new HI-STORM 100S Version B from 100S. Numerous changes are made. Primary changes are as follows:</p> <p>[1] The overall height of the overpack is reduced from 231 1/4" (short) and 242 3/4" (tall) to 218 1/2" (short) and 229 1/2" (tall).</p> <p>[2] The solid baseplate is eliminated and replaced with a built-up plate structure referred to as the base unit. The base unit consists of a bottom plate and a top plate, connected by intervening structural members.</p> <p>[3] Inlet vents are removed from body and incorporated into the base unit. Base unit top plate has flow slots to connect the inlet vents with the overpack cavity.</p> <p>[4] The inlet vent dimensions are changed from 10" x 15" to 3" x 30". The outlet vent dimensions are changed from 6" x 25" to 4 3/4" x 26".</p> <p>[6] The concrete and steel pedestal that supports the MPC is replaced by an all-steel pedestal welded to the top of the base unit.</p> <p>[7] The 2" thick plates that pass through the overpack lid are eliminated to connect all the concrete sections in the lid. The thickness of the remaining structural steel in the lid is increased to 1".</p> <p>[8] The one-piece radial ribs are replaced with shorter two-piece ribs, one near the top of the overpack and one near the bottom.</p> <p>[9] The length of the anchor block and the side welds between the anchor block and the radial plate are increased from 12" to 17". The weld between the bottom of the anchor block and the radial plate is eliminated.</p> | The proposed modification affects several structural calculations, but all calculated safety factors remain above the required 1.0 minimum. Thermal analysis of the proposed changes shows that no thermal limits are exceeded and the MPC internal pressures are not increased at all. Shielding analysis of the proposed changes shows that accident dose limits remain acceptable. As a result of these considerations: there is no increase in the probability of occurrence or the consequences of any previously evaluated accident or malfunction; no new accidents are created because there is no change in the method of operating the HI-STORM; no temperature and/or pressure limits are not exceeded, so the fission product barrier limits are not exceeded; the proposed activity does not adversely affect the fit, form, or function of the HI-STORM; and the use of the two-fluid model for evaluating HI-STORM 100S Version B thermal performance is conservative and, therefore, does not constitute a departure from a method of evaluation. This evaluation has determined that the proposed activity may be implemented without prior NRC approval. |



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|---------|------------|-------------|----------------|-------------|-----------------|----------------------------|--|---|
| 651     | 1          | 1014        | 1024           | ECO         | Full Evaluation | HI-STORM 100 Anchor Blocks | Add SA 350-LF2 to the specification for the bolt anchor blocks. Allow the use of 5" diam round bar in lieu of 5"x5" square bar.  | The evaluation has determined that the PA has no effect on any conclusions reached in the UFSAR. The safety factor for an alternate calculation presented in the UFSAR remains above unity, although it is reduced to the same degree as the anchor blocks cross-sectional area. Structural safety margins are reduced by the use of LF2 material as opposed to LF3 by approximately 4%. Prior to the PC the lowest calculated safety factor in non-weld material was 1.38, so all safety factors remain above unity. No accident or malfunction frequency or malfunction is affected. No new accidents, malfunctions or malfunction results are created. Cask operating and handling procedures are unchanged. No fission product boundary design limits are affected. The evaluation has determined that the proposed activity may be implemented without obtaining an amendment to the license or CoC. |
| 653     | 0          | 1014        | 1023           | SMDR        | Screening Only  | MPC-32 Cell ID             | Two cells have maximum cell widths that exceed the drawing allowable. The maximum allowable cell id is $8.79" + 0.06" = 8.85"$ . Actual maximum widths are 8.918" (0.068" over) and 8.923" (0.073" over). Deviation only occurs in localized areas (point-to-point measurements) in the bottom two feet of the fuel basket. It is proposed to accept this condition as is.   | N/A   |
| 654     | 0          | 1008 & 1014 | 1021           | SMDR        | Screening Only  | MPC-68 Anti-Rotation Bars  | A mis-positioned anti-rotation bar in an MPC-68 unit fails to perform it function. An extra anti-rotation bar is to be installed to prevent fuel basket rotation. The existing mis-positioned bar will be left in place.   | N/A   |
| 655     | 0          | 1008 & 1014 | 1022           | SMDR        | Full Evaluation | MPC Closure Ring           | [1] Drill through the MPC closure ring and tap a hole for 1/2-13 set screw. Set screw is to be positioned a minimum of 1/8" below flush. Add set screw to BOMs as a new optional item. [2] Chapters 7, 8 and 9 of the HI-STORM FSAR are revised as appropriate to address the use of the hole in the closure ring, which will allow the option to leak test the MPC lid-to-shell weld and the vent and drain port cover plate welds at the same time. The hole in the closure ring is sealed by a set screw and plug weld, which is visually and liquid penetrant examined prior to declaring the MPC ready for storage. | The proposed design change is a minor improvement to the design to enhance the ability to helium leak test the closure welds. The design basis of the cask system remains the same as that described in the FSAR. The change does not alter the handling procedures for the HI-STAR 100 System or the HI-STORM 100 System and causes only minor and approved changes to system operation.   |
| 656     | 0          | 1014        | 1024           | SMDR        | Screening Only  | HI-STORM 100 Lid Studs     | Several lid studs do not have an unthreaded portion that aligns with the lid plates. It is proposed to use these studs as is.  | N/A   |



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| 657     | 0          | 1014        | 1024           | ECO         | Full Evaluation | HI-STORM 100 and 100S Inner and Outer Shells, Radial Plates | Allow an optional construction of the HI-STORM 100 and 100S overpacks with the inner shell thickness reduced from 1 1/4" to 1" and the outer shell thickness increased from 3/4" to 1". If either shell thickness is changed, then both must be changed. The anchor block positions will be kept the same.  | The proposed modification does not adversely affect any facets of system qualification an operation other than shielding performance. Shielding analysis of the proposed changes shows that accident dose limits remain acceptable. As a result of these considerations: there is no increase in the probability of occurrence or the consequences of any previously evaluated accident or malfunction; no new accidents are created because there is no change in the method of operating the HI-STORM; temperatures and, therefore, pressures are not changed, so the fission product barrier limits are not exceeded; the proposed activity does not adversely affect the fit, form, or function of the HI-STORM; and no new method of evaluation are required for evaluating the changes. This evaluation has determined that the proposed activity may be implemented without prior NRC approval. |
| 658     | 0          | 1014        | 1024           | SMDR        | Screening Only  | HI-STORM 100 Overpack Anchor Blocks                         | Sixteen (16) anchor blocks to be used on HI-STORM 100 Classic overpacks were manufactured without the counterbore shown on sheet 2 of drawing 1561. Additionally, eight (8) of these anchor blocks have less than the drawing allowable 3 1/2" minimum threaded length. It is proposed to accept these anchor blocks as is.   | N/A  |
| 659     | 0          | 1014        | 1025           | ECO         | Screening Only  | HI-TRAC 125D Pool Lid, Pool Lid Ring                        | LICENSING DWG 3768, 125 TON HI-TRAC-125D ASSEMBLY<br>1) Sheet 4: Decrease the outside diameter of Pool Lid Ring from 92 1/2" to 92".  | N/A  |
| 661     | 1          | 1014        | 1025           | SMDR        | Full Evaluation | HI-TRAC 125D Bottom Flange                                  | To ensure adequate sealing between the HI-TRAC bottom flange and the pool lid, it is proposed to machine the bottom flange to a flatness of +/- 1/8" while maintaining a minimum bottom flange thickness of 1.8" (10% below the nominal stock thickness).   | The proposed modification reduces several calculated safety factors, all of which remain above the required 1.0 minimum, so there is no increase in the probability of occurrence or the consequences of any previously evaluated accident or malfunction. There is no change in the method of operating the HI-TRAC, so no new accidents are created. The HI-TRAC bottom flange has no effect on MPC temperatures and pressures, so the fission product barrier limits (intact fuel cladding temperature, MPC enclosure vessel temperature and internal pressure) are not exceeded. This evaluation has determined that the proposed manufacturing activity may be implemented without prior NRC approval.  |
| 662     | 0          | 1014        | 1024           | SMDR        | Screening Only  | HI-STORM Shear Ring and Top Plate                           | Four shear rings have inner and outer deviating diameters. For the 1st, 3rd and 4th rings, it is proposed to accept the outer diameters and correspondingly reducing the inner diameters of the overpack top plates to obtain the intended gap between the two items. For the 2nd ring, it is proposed to accept the outer diameter, as the shear ring to top plate gap is within the intended range. It is proposed to accept all inner diameter deviations as is. | N/A  |
| 663     | 0          | 1008 & 1014 | 1021           | ECO         | Screening Only  | MPC-68/68F Basket Welds                                     | 1) Deleted 1/16" weld size from all sheathing weld symbols.<br>2) Deleted "or 1-4" stitch weld pattern from vertical sheathing weld symbol.   | N/A  |

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|---------|------------|-------------|----------------|-------------|----------------|--|---|---|
| 664     | 0          | 1014        | 1025           | SMDR        | Screening Only | HI-TRAC 125D Water Jacket                | An indication found during MT of a HI-TRAC 125D water jacket plug weld after hydrotest, is to be repaired, but the hydrotest is not to be repeated. Subsection 9.1.2.2.1 states "...hydrostatic test shall be repeated until all examinations are found to be acceptable". Note that the Holtec drawing 3438, Rev. 10 does not require MT or PT of the plug welds and, consequently, MT/PT was not performed on the plug welds prior to the hydrotest. Based on discussions with the QC inspector who performed the MT, it is probable that the indication existed prior to the hydrotest, but was not detected during the visual examination. The safety factor for the plug welds is reported in the HI-STORM FSAR Rev. 1 as 16. Therefore, there are large margins on the plug welds, which supports the assertion that the indication existed prior to the hydrotest and was not discovered during visual examination of the weld. HSP-112 and HI-STORM FSAR Subsection 9.1.2.2.1 require the re-hydro after the weld repair. The HI-STORM FSAR commits to Subsection NF for the HI-TRAC water jacket and Subsection NF does not require a hydrotest. Subsection NB, which does require pressure testing, specifies an acceptance criteria of no leaks. Therefore, the PT/MT of all accessible welds after hydro is over and above any requirements of the ASME Code. | N/A   |
| 665     | 0          | 1014        | 1025           | ECO         | Screening Only | HI-TRAC 125D Water Jacket Plug Welds     | It is proposed to require a PT or MT inspection to the plug welds that connect the water jacket shells to the underlying ribs.  | N/A   |
| 666     | 0          | 1014        | 1024           | SMDR        | Screening Only | HI-STORM 100 Nameplate                   | The nameplate on one overpack was mounted lower than specified on the design drawing. The actual distance from the bottom of the overpack to the bottom of the nameplate is 36", while the drawing specifies a nominal height of 60". It is proposed to accept this condition as is.  | N/A   |
| 667     | 0          | 1008 & 1014 | 5014           | ECO         | Screening Only | MPC Lid Space During Welding And Cutting | Modify the HI-STORM and HI-STAR FSARs to require purging or exhausting the space beneath the MPC lid during lid-to-shell root pass placement and during lid removal (cutting). Affected portions of the HI-STORM FSAR are Section 1.2.1.3.1, Section 3.4.1, Table 3.4.2, Table 8.0.1, Section 8.1.5 (Step 3), and Section 8.3.3 (Step 8). Affected portions of the HI-STAR FSAR are Section 1.2.1.3.1, Section 3.4.1, Table 3.4.2, Table 8.0.1, Section 8.1.5 (Step 25), and Section 8.3.2 (Step 14).   | N/A   |
| 668     | 1          | 1014        | 1024           | SMDR        | Screening Only | HI-STORM 100 Top Plate                   | Overpack top plate sections (item 9) are positioned off center relative to cask centerline. It is proposed to repair the condition by trimming material from the inner edge of the top plate where the id, as measured from the overpack centerline, is too small and adding material where the id is too large. Material addition will be accomplished by applying weld material (buttering) and/or the installation of 3/4" high shims (shim thickness and length as required). Any shims used to build up areas where the top plate id is too large will be attached by continuous groove or bevel welds with weld sizes of 1/8" or the shim material thickness, whichever is less.  | N/A   |

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|---------|------------|-------------|----------------|-------------|-----------------|--|---|--|
| 669     | 1          | 1008 & 1014 | 1021           | ECO         | Screening Only  | MPC-68/68F/68FF, 32/32F Shell Basket Support Plates, Shims, Angles and Welds | <p>1) Change the safety classification of BOM Item 33, "BSKTSHIM-ANG" or BASKET ANGLE SHIM, on MPC 68,68F,68FF shell structure, from NITS to ITS-C.</p> <p>2) Change the safety classification of BOM Item 29, "BSKTSUPPORT-ANG" or BASKET SUPPORT ANGLE, on MPC 32,32F shell structure, from NITS to ITS-C.</p> <p>***HI-STORM FSAR, CHAPTER 2, TABLE 2.2.6, MATERIALS AND COMPONENTS OF THE HI-STORM 100 SYSTEM, MPC***</p> <p>3) Revise the text in the codes and standards block for shims to read "NON CODE (SHIMS DIRECTLY WELDED TO ANGLE PLATE BASKET SUPPORTS ARE ASME SECTION II)".</p> <p>***HI-STORM FSAR, CHAPTER 3, SECTION 3.1.1 DISCUSSION***</p> <p>4) Add the following sentence to the last paragraph: "SINCE NO STRUCTURAL CREDIT IS REQUIRED FOR THE WELD BETWEEN THE ADJUSTABLE BASKET SUPPORT PIECES (SHIMS AND BASKET SUPPORT FLAT PLATES) THEN THE ADJUSTABLE BASKET SUPPORTS ARE CLASSIFIED AS NITS."</p> <p>***HI-STAR PART 72 FSAR, CHAPTER 2, TABLE 2.2.6, MATERIALS AND COMPONENTS OF THE HI-STAR 100 SYSTEM, MPC***</p> <p>5) SAME AS #3</p> <p>***HI-STAR FSAR, CHAPTER 3, SECTION 3.1.1 DISCUSSION***</p> <p>6) SAME AS #4</p> | N/A  |
| 670     | 0          | 1014        | 1026           | ECO         | Full Evaluation | 100 TON HI-TRAC (creates "100D" version, including Mating Device)            | <p>*** New Licensing Drawing 4128 "100 TON HI-TRAC 100D ASSEMBLY" ***</p> <p>The HI-TRAC 100d is a variation of the standard HI-TRAC 100 (original licensed Holtec 100 ton transfer cask) with several design updates/features found in the HI-TRAC 125d.</p> <p>Major changes include the following: Remove pocket trunnions. Modify the bottom flange for engagement with a mating device. Reduce the number of bolts between the bottom flange and the pool lid from 36 to 16. Incorporate gussets between the bottom flange and the water jacket bottom plate. Reduce the number of water jacket ribs. Replace top lid studs and nuts with bolts. Incorporate water jacket port cover plates.</p> <p>Fabricate lifting trunnion and cap from one piece and from either SA350LF2 or SA350LF3. Fabricate top flange from SA350LF2 or SA350LF3. Upgrade pool lid drain system. In addition, the transfer lid is not used with the HI-TRAC 100d design and is replaced by a slightly smaller version of the HI-STORM mating device currently used with the HI-TRAC 125d.</p>  | The full evaluation revealed that the proposed activity may be implemented without obtaining an amendment to the license or CoC. |
| 671     | 0          | 1008 & 1014 | 1021           | SMDR        | Screening Only  | MPC-68 Fuel Basket Panel and Sheathing                                       | One SA-240-316 basket cell plate with SA-240-316LN sheathing attached was inadvertently installed in an SA-240-304 fuel basket. It is proposed to accept this condition as is.  | N/A  |

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|---------|------------|--------|----------------|-------------|----------------|--|--|---|
| 673     | 1          | 1014   | 5014           | ECO         | Screening Only | N/A                                    | <p>There is no change in the design code for the HI-STORM nor in the lowest service temperatures (LST's) applied to load bearing metal parts of the HI-STORM. Restrictions resulting from their imposition are unchanged, but have been improperly interpreted. This gives rise to the following corrections.</p> <p>1. Requirements with respect to brittle fracture were incorrectly imposed on SA516 Gr. 70 material greater than 3/4" thick. Accordingly, revise section 3.1.2.3 and table 3.1.18 of the HI-STORM FSAR (rev, 1) to properly exempt normalized SA516 Gr. 70 material with thickness greater than 5/8", but less than 2-1/2", from impact testing.</p> <p>2. In table 3.1.18 of the HI-STORM FSAR (rev, 1), correct impact test requirements for normalized SA515 Gr. 70 material. Impact testing was not required for this material greater than 3/4" thick. The code requires impact testing for this material in thicknesses greater than 5/8".</p> <p>The PA is to correct errors in section 3.1.2.3 and table 3.1.18 of the HI-STORM FSAR (rev, 1).</p> | N/A   |
| 674     | 1          | 1014   | 1025           | SMDR        | Screening Only | HI-TRAC 125D Pool Lid Lift Holes       | Drawing 3768, rev 4, shows HI-TRAC 125d pool lid lift hole threads as 7/8-9unc. As-built lid has 1-8unc threaded holes. It is proposed to accept as is.  | N/A   |
| 675     | 1          | 1014   | 1024           | SMDR        | Screening Only | HI-STORM Outer Shell                   | <p>The outer shell of three units were manufactured from un-normalized SA-516-70 plate that was not impact tested. It is proposed to accept these units as is.</p> <p>Rev. 1 - Revised to recognize increase in revision status of initiating SMDR. No changes to this screening were required.</p>  | N/A   |
| 676     | 0          | 1014   | 1025           | ECO         | Screening Only | HI-TRAC 125D Bottom Flange and Gussets | Modify bottom flange to "square off" four sides. The outer diameter bottom flange will become a "truncated" circle with four flatted sections located 90 degree apart, with a nominal dimension across the flats of 93 3/4 inches. The wedge shaped gussets at the center of each flat section will be replaced with rectangular gussets that do not extend beyond the water jacket base plate. Change the lid top plate thru holes to 1 1/4" min.   | N/A   |
| 677     | 0          | 1014   | 1024           | SMDR        | Screening Only | HI-STORM 100S Overpack Concrete        | Table 1.D.1 of the FSAR requires compliance with Chapter 5 of ACI 349-85, which invokes ASTM C-94-81. Currently, the State of New York requires that the mixing water added to the concrete be measured to an accuracy of +/- 2% of the required total, not the 1% required by ASTM C-94-81. The most recent inspection of the batch plant proposed to provide the HI-STORM concrete indicates that the tolerance of the mixing water is within State requirements, but outside of ASTM C-94-81 requirements. The ASTM C-94-81 total water accuracy requirement of +/- 3% will still be achieved.  | N/A   |

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|---------|------------|-------------|----------------|-------------|----------------|----------------------------|--|---|
| 678     | 0          | 1014        | 5014           | ECO         | Screening Only | HI-STORM 100 and 100S Lids | Purchase Specification 1200, Rev 2, "Multi-Purpose Rigging System For Dry Storage", requires that a minimum angle of 60 degrees from the horizontal be maintained when rigging the HI-STORM Lid. Appendix 3.AC, LIFTING CALCULATIONS, addresses lifting of the HI-STORM 100 lid. That appendix incorrectly states that lifting of the lid is limited to a straight (90 degree from the horizontal) lift. The appendix then assumes a lift angle of 65 degrees for the purpose of analysis. The PC is to correct the stated limit to the required 60 degrees minimum and present an analysis for that value of lift angle. The load angle factor developed from the Crosby Catalog was calculated for an incorrect lift angle and the factor was improperly applied. Accordingly a further aspect of the PC is to revise the text at the end of HI-STORM FSAR Subsection 3.AC.7 to properly apply the Crosby Load Angle Factor and recalculate the safety factor for the required lift angle. Making these changes will increase the safety factor for the lid lift from the current 1.784 to 2.302, taking high-density concrete in the 100S lid into account. | N/A   |
| 679     | 0          | 1008 & 1014 | 1021           | SMDR        | Screening Only | MPC-68 Fuel Basket Panel   | One SA-240-316 basket cell plate was inadvertently installed in an SA-240-304 fuel basket. It is proposed to accept this condition as is.  | N/A   |
| 680     | 0          | 1008 & 1014 | 5014           | ECO         | Screening Only | Overpack and MPC           | [1] IN SUBSECTION 1.2.1.1 OF THE HI-STORM FSAR DELETE THE SENTENCE "Only a single alloy from the list of acceptable Alloy X materials may be used in the fabrication of a single MPC basket or shell - the basket and shell may be of different alloys in the same MPC" and add "Any steel part in an MPC may be fabricated from any of the acceptable Alloy X materials listed below, except that all steel pieces comprising the MPC shell (i.e., the 1/2" thick cylinder) must be fabricated from the same Alloy X stainless steel type."<br><br>[2] IN SUBSECTION 1.2.1.1 OF THE HI-STAR FSAR DELETE THE TEXT "(only a single alloy from the list of acceptable Alloy X materials may be used in the fabrication of a single MPC)" and add "Any steel part in an MPC may be fabricated from any of the acceptable Alloy X materials listed below, except that all steel pieces comprising the MPC shell (i.e., the 1/2" thick cylinder) must be fabricated from the same Alloy X stainless steel type.."   | N/A   |
| 681     | 0          | 1014        | 1024           | HSP         | Screening Only | HI-STORM Overpack Concrete | FSAR APPENDIX 1.D. provides concrete requirements for the HI-STORM Overpack concrete. A minor deviation to ASTM C 637 and C 33 (providing clarifications and exceptions for the high-density aggregates) is proposed. The HI-STORM FSAR 1.D.1. specifies that density and compressive strength are the critical characteristics of the concrete in the HI-STORM system. The proposed changes do not significantly affect the HI-STORM concrete critical characteristics, nor are the other design parameters significantly affected by the proposed changes. Table 1.D.1 will have to be changed to reflect a "Nominal Maximum Aggregate Size" of "1 1/2 inch" and Note 2 will need to be modified to reflect the requirements of the high-density coarse aggregate.   | N/A   |

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|---------|------------|-------------|----------------|-------------|-----------------|--|---|---|
| 682     | 0          | 1008 & 1014 | 5014           | ECO         | Full Evaluation | MPC Lid  | <p>The following changes should be made to revision 1 of the HI-STORM FSAR and HI-STAR FSAR:</p> <p>(1) In Table 3.3.1, include the ultimate stress of SA-336 forging materials (type F304, F304LN, F316, and F316LN) in parentheses adjacent to the existing ultimate stress of SA-240 plate material.</p> <p>(2) Apply the same changes as mentioned in (1) to Table 1.A.2</p> <p>Add the following footnote to both tables in both documents:</p> <p>"The ultimate stress of Alloy X is dependent on the product form of the material (i.e., forging vs. plate). Values in parentheses are based on SA-336 forged materials (type F304, F304LN, F316, and F316LN), which are used solely for the one-piece construction MPC lids. All other values correspond to SA-240 plate material."</p> | The proposed modification reduces a calculated safety factor, which remains above the required 1.0 minimum, so there is no increase in the probability of occurrence or the consequences of any previously evaluated accident or malfunction. There is no change in the method of operating the HI-STORM system, so no new accidents are created. There is no effect on MPC temperatures and pressures, so the fission product barrier limits (intact fuel cladding temperature, MPC enclosure vessel temperature and internal pressure) are not exceeded. This evaluation has determined that the proposed activity may be implemented without prior NRC approval.   |
| 683     | 1          | 1014        | 1024           | ECO         | Full Evaluation | HI-STORM 100 Classic Lid                       | [1] Add Item 65, Heat Shield Ring C/S 3/8" Thk. x 1" Wide x 69" OD. ITS-B, and Item 66, Heat Shield 14 Gage C/S 68" OD ITS-B to BM-1575. [2] 1561, Sht. 2: Show Item 65, Heat Shield Ring, attached to Item 6, Lid Bottom Plate, by an 1/8" Fillet Weld all-around and Item 66, Heat Shield, attached to Item 65, Heat Shield Ring, by a seal weld all-around. The heat shield ring, Item 65, may be made from more than one piece provided ends of pieces are joined by seal welds. [3] Add Views of Items 65 and 66 to Dwg 1495 Shts. 1 and 2.  | The proposed change reduces concrete temperatures in the lid shield concrete. This change does not affect the concrete critical characteristics of density and compressive strength. No accident probabilities or consequences are affected. No malfunction probabilities or consequences are affected. No new accidents or new consequences of existing malfunctions are created. No fission product boundary is affected. Rev. 1: Revision made to address required change to Appendix 3.AF to address differential thermal expansion evaluation of a hot MPC in a HI-TRAC being transferred into a cold overpack (0°F). Revision demonstrates that sufficient clearance remains with the inclusion of the heat shield. |
| 684     | 1          | 1014        | 5014           | ECO         | Full Evaluation | HI-STORM Concrete                              | [1] Change the maximum local overpack concrete temperature limit under long term conditions from 200° F to 300°F.   | The proposed change will change the design basis temperature to a higher limit. This change does not affect the critical characteristics of density and compressive strength. No accident probabilities or consequences are affected. No malfunction probabilities or consequences are affected. No new accidents or new consequences of existing malfunctions are created. No fission product boundary is affected. REV. 1: ACI-349 allows instances where concrete temperatures exceed 150 F in general or 200 F in local areas if test data supports the compressive strengths used and concrete deterioration does not occur.   |
| 686     | 0          | 1014        | 1024           | SMDR        | Screening Only  | HI-STORM 100S VER. B Base Shield Block Threads | One base shield block (item 3a) threaded hole has three threads completely torn out and three additional threads partially torn out. A torque test of this threaded feature has been successfully passed. It is proposed to accept this item as is.   | N/A   |
| 687     | 0          | 1014        | 1024           | ECO         | Screening Only  | HI-STORM 100 & 100S Channels                   | Dwg. 3669, Sheet 4: Change the channel face-to-face dimension to be 69-1/2" REF (69" MIN. and 70-1/4" MAX.). This change only affects the tolerance. The nominal dimension does not change.   | N/A   |



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|---------|------------|-------------|----------------|-------------|-----------------|--|--|---|
| 688     | 0          | 1008 & 1014 | 5014           | ECO         | Full Evaluation | Fuel Basket Sheathing Welds                      | The size of the fuel basket sheathing attachments welds are reduced to 0.024" in Appendix 3.Y of the HI-STORM FSAR (HI-2002444) and in appendix 3.m of the HI-STAR FSAR (HI-2002610).  | The proposed weld size change does not increase the associated weld stresses above allowable levels. The change does not affect the frequency of occurrence of any accident or malfunction. The change does not affect the consequences of any accident or malfunction. The change does not create any new accidents or any new malfunction consequences. No fission product barrier is affected. The evaluation has determined that the proposed change may be implemented without further review.   |
| 689     | 0          | 1014        | 1025           | ECO         | Full Evaluation | HI-TRAC 125D Bottom Flange and Port Cover Gasket | To ensure adequate sealing between the HI-TRAC bottom flange and the pool lid, it is proposed to machine the bottom flange to a flatness of +/- 1/8" while maintaining a minimum bottom flange thickness of 1.8" (10% below the nominal stock thickness).  | The proposed modification reduces several calculated safety factors, all of which remain above the required 1.0 minimum, so there is no increase in the probability of occurrence or the consequences of any previously evaluated accident or malfunction. There is no change in the method of operating the HI-TRAC, so no new accidents are created. The HI-TRAC bottom flange has no effect on MPC temperatures and pressures, so the fission product barrier limits (intact fuel cladding temperature, MPC enclosure vessel temperature and internal pressure) are not exceeded. This evaluation has determined that the proposed change may be implemented without prior NRC approval. |
| 690     | 0          | 1014        | 1024           | SMDR        | Screening Only  | HI-STORM 100S Anchor Blocks and Radial Plates    | [1] Cut an access hole at each of the 4 cut-outs in the Top Plate, Item 11, to allow access to the Radial Ribs, Item 6. Each cut out is to have a radius no larger than 9" and be rewelded after Anchor Block modification. [2] Cut out the Anchor Blocks, Item 7, by cutting into the radial ribs, Item 6. The cut is to be started approximately 7.9" from the inner shell and ended approximately 3 5/16" from the outer shell. The depth of the cut-out shall be a minimum of 15". [3] The cut-out section of radial rib, including the anchor block, is to be rotated 180 degrees (i.e., in plan view) and rewelded into place so that it is on a 113" bolt circle using full penetration groove welds. The full penetration groove welds are to be inspected by VT and MT. [4] Seal weld the access cut-outs back in place on the Top Lid. | N/A   |
| 691     | 0          | 1014        | 1025           | ECO         | Screening Only  | HI-TRAC Pool Lid Shield Plugs                    | Modify the Table 2.2.6 entry for HI-TRAC "SHIELD PLUGS FOR LIFTING HOLES" to change the material specification from "C/S" to "C/S or S/S".   | N/A   |
| 693     | 0          | 1014        | 5014           | ECO         | Full Evaluation | HI-TRAC 125D                                     | [1] Increase the Bounding weight of the HI-TRAC 125D from 143,000 lbs to 146,000 lbs and update HI-STORM FSAR as required. [2] Increase the Total Bounding weight in Table 3.2.4 from 245,000 lbs. to 250,000 lbs.   | The proposed modification updates bounding weights reported in the HI-STORM FSAR, so there is no increase in the probability of occurrence or the consequences of any previously evaluated accident or malfunction. No new accidents are created because there is no change in the method of operating the HI-TRAC. The HI-TRAC weights have no effect on MPC temperatures and pressures, so the fission product barrier limits are not exceeded. The proposed activity does not adversely affect the fit, form, or function of the HI-TRAC. This evaluation has determined that the proposed activity may be implemented without prior NRC approval.                                       |



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|---------|------------|--------|----------------|-------------|-----------------|---|---|---|
| 694     | 1          | 1014   | 1024           | SMDR        | Screening Only  | HI-STORM 100 Classic Lid Optional Heat Shield | Optional lid heat shield has four small (0.7% of total heat shield area) dents, with a maximum depth of 1/4". It is proposed to accept this as-built condition as is.<br><br>Revision 1 - Optional heat shield has two small (1.4 % of total heat shield area) dents, with a maximum depth of 1/4". It is proposed to accept this as-built condition as is. Added SMDR-1088 to list of source documents.  | N/A   |
| 695     | 1          | 1014   | 1025           | SMDR        | Screening Only  | HI-TRAC 125D Water Jacket Trunnion Plate      | As a result of the repair of a manufacturing deviation, the water jacket trunnion plate thickness is reduced from 1" nominal to as low as 3/4" (REVISION 1). It is proposed to accept this condition as is.<br><br>To ensure proper operational function, the HI-TRAC inner shell was ground in localized areas to eliminate potential interferences. UT testing performed post-grinding obtained inner shell thickness values for the ground areas. ASME Code limits (Section III, Subsection NF) are on global stresses only (i.e., excludes effects of local discontinuities and concentrations); peak stresses are not considered (NF-3121.4). Small affected area will not affect global stresses, so the structural integrity as defined by ASME Code is not reduced. Small loss in shielding thickness and localized nature will have negligible effect on dose rates, plus shielding integrity will be confirmed by gamma scan. It is proposed to accept this as-built condition as is. | N/A   |
| 696     | 0          | 1014   | 1025           | SMDR        | Full Evaluation | HI-TRAC 125D Top Lid                          | [1] Modify the River Bend HI-TRAC 125D Top Lid to be a 1 1/2" Thk. x 64" ID x 81 1/4" OD SA 516 Grade 70 Ring with a 2" Thk lid spacer welded to the bottom with a 1/4 fillet weld with a 2-8 stitch pattern. The two pieces are to be welded together, and then the 24 holes through drilled into both items.  | The proposed modification reduces several calculated safety factors, all of which remain above the required 1.0 minimum, so there is no increase in the probability of occurrence or the consequences of any previously evaluated accident or malfunction. No new accidents are created because there is no change in the method of operating the HI-TRAC. The HI-TRAC top lid has no effect on MPC temperatures and pressures, so the fission product barrier limits are not exceeded. The proposed activity does not adversely affect the fit, form, or function of the HI-TRAC. This evaluation has determined that the proposed activity may be implemented without prior NRC approval.                   |
| 697     | 0          | 1014   | 5014           | ECO         | Full Evaluation | HI-STORM (all types) Lid Bottom Plate         | [1] Increase the overpack lid bottom plate design temperatures by adding a new row to Table 2.2.3 of the HI-STORM FSAR as follows: HI-STORM 100 COMPONENT = "OVERPACK LID BOTTOM PLATE", NORMAL CONDITION DESIGN TEMP. = "400" AND OFF-NORMAL AND ACCIDENT CONDITION TEMP LIMITS = "550".<br>[2] Change the lid bottom plate long-term temperature limit in Table 4.4.36 of the HI-STORM FSAR from "350" to "400".  | The proposed modification affects several structural calculations, but all calculated safety factors remain above the required 1.0 minimum, so there is no increase in the probability of occurrence or the consequences of any previously evaluated accident or malfunction. No new accidents are created because there is no change in the method of operating the HI-STORM. The HI-STORM lid has no effect on MPC temperatures and pressures, so the fission product barrier limits are not exceeded. The proposed activity does not adversely affect the fit, form, or function of the HI-STORM. This evaluation has determined that the proposed activity may be implemented without prior NRC approval. |

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| 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)  |
|---------|------------|-------------|----------------|-------------|-----------------|--|--|--|
| 698     | 0          | 1014        | 1024           | ECO         | Screening Only  | HI-STORM 100S VERSION B Screen Mount and Vent Seal Welds | Change the welds that affix the top vent screen mounts and vent seal (the "picture frame" around the vent opening) from 3/16" full length fillets to 1/8" stitch fillets. Make the stitch welds affixing the screen mounts a 1-3 pitch. Make the stitch welds affixing the vent seal a 1-6 pitch.  | N/A  |
| 699     | 0          | 1008 & 1014 | 1022           | SMDR        | Full Evaluation | MPC Lid  | The lid from MPC-24 S/N 1 will be replaced with the lid from MPC-24 S/N 5, which is to have depressions machined into the underside of the lid to allow the lid to sit lower.<br>Four depression/slots centered at the lift lug locations will have the following dimensions:<br>Width: 4" maximum<br>Length From OD: 5" maximum<br>Depth: 5/16" maximum<br>The final surface will be examined by PT in accordance with NB-2546.<br>The serial number marking of S/N 5 atop the MPC lid and replace with the marking of serial number 1. | The full evaluation has determined that the change may be implemented without prior NRC approval.  |
| 700     | 0          | 1008 & 1014 | 5014           | ECO         | Screening Only  | MPC Enclosure Vessel                                     | [1] Sheet 3: Change 3/4" J Groove Lid -to-Shell Weld Note to say "VT & UT & PT ROOT & FINAL SURFACE OR MULTI-LAYER PT (SEE NOTE 3 THIS SHEET)" in both Detail D [2] Sheet 3: Change the profile of Detail D for MPC 24, 24E, 32, and 68 to have a tapered edge similar to that of the "F" lids. [3] Sheet 4: Change the profile of Detail E for MPC 24, 24E, 32, and 68 to have a tapered edge similar to that of the "F" lids.  | N/A  |
| 701     | 0          |             | 1105           | DWG         | Screening Only  | HI-STAR/HI-TRAC Lift Yoke                                | The farley lift yoke weight is nearly 5000 lbs, exceeding the FSAR specified maximum value of 4200 lbs. It is proposed to accept this one-time deviation from the FSAR.  | N/A  |
| 703     | 0          | 1014        | 1025           | SMDR        | Screening Only  | HI-TRAC Top Lid and Pool Lid                             | [1] HI-TRAC top lid lift points circle violates licensing drawing tolerance. Allowable circle diameter is 56 +/- 3/8". Individual lift points are up to 1 1/16" out of tolerance. It is proposed to accept this deviation.<br>[2] HI-TRAC pool lid lift holes depth violates licensing drawing tolerance by 0.1625". Allowable holes depth is 1 11/16". Actual is 1.850". It is proposed to accept this deviation.   | N/A  |
| 704     | 0          | 1008 & 1014 | 1022           | SMDR        | Full Evaluation | MPC-24 Version A Cover Angle                             | As the result of a manufacturing deviation, it is proposed to allow a 1 1/4" diameter hole in a corner angle of the fuel basket. The center of the hole would be approximately 56" up from the bottom of the fuel basket and approximately 1 1/2" from the edge of the corner angle.   | There are no malfunctions associated with the HI-STAR and HI-STORM systems so no malfunction likelihood, consequences or results can be increased. The structural integrity of the fuel basket is maintained, so no accident consequences can be increased. Method 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. |

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| 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)  |
|---------|------------|-------------|----------------|-------------|-----------------|-------------------------------------|---|--|
| 705     | 1          | 1014        | 1024           | SMDR        | Full Evaluation | Top Lid                             | <p>[1] On unit 92, after installing the lid it was found that there was a gap of 11/16" between the top plate (item 15) and the lid bottom plate (item 25). The 11/16" was the maximum gap present between items 15 and 25. This gap exceeds the maximum gap of 5/8" allowed in Holtec document PS-140.</p> <p>[2] On unit 101 and 142, after installing the lid it was found that there was a gap of 3/4" between the top plate (item 15) and the lid bottom plate (item 25). The 3/4" was the maximum gap present between items 15 and 25. This gap exceeds the maximum gap of 5/8" allowed in Holtec documents PS-140 and HSP-169.</p> <p>[3] On unit 173, after installing the lid it was found that there was a gap of 7/8" between the top plate (item 15) and the lid bottom plate (item 25). The 7/8" was the maximum gap present between items 15 and 25. This gap exceeds the maximum gap of 5/8" allowed in Holtec document HSP-169.</p> | <p>Since there are no malfunctions associated with the HI-STORM system so no malfunction likelihood, consequences or results can be increased.</p> <p>The structural integrity of the HI-STORM is maintained, so no accident consequences can be increased. Method of handling and operating the cask is not affected; so no new accidents can be created. The proposed deviation has no effect on the MPC enclosure vessel therefore, no fission product boundary limit is exceeded. This is one time manufacturing deviation.</p> <p>The full evaluation has determined that the change may be implemented without prior NRC approval.</p> |
| 706     | 0          | 1008 & 1014 | 5014           | ECO         | Full Evaluation | MPC Vent and Drain Port Cover Plate | Reduce the groove weld between the port cover plate and the MPC lid from 3/16" to 1/8".   | The proposed activity does not adversely affect the fit, form, or function of the HI-STORM. The 72.48 evaluation has determined that the proposed activity may be implemented without further evaluation.  |
| 707     | 1          | 1014        | 1024           | ECO         | Screening Only  | HI-STORM 100S Version B             | <p>Rev. 1: Revised to add that FSAR Table 8.1.5 is affected by proposed change 1.</p> <p>Rev. 0:<br/>Dwg. 4116 Rev 7:<br/>[1] Sheet 9: Delete 9/32" diameter holes in hex nut head.<br/>[2] Sheet 12, Isometric Assembly View: Delete NITS welds to attach the lid screen mounts and lid vent seal from drawing.<br/>[3] Sheet 12: Revise lid mount weld to be an all around stud weld with note, "16 PLCS. # SEE NOTE 5".<br/>[4] Delete the lid screen mount and the lid vent seal from all views in the licensing drawing package.<br/>[5] Sheet 10: Delete "SEE NOTE 5" from exploded assembly view.</p>  | N/A  |
| 708     | 0          | 1014        | 1024           | ECO         | Screening Only  | Lower Gamma Shield Cross Plate      | Change the reference distance for the location of tab on the lower gamma shield cross assembly from 9-3/4" to 10-1/2".  | N/A  |
| 709     | 0          | 1014        | 1024           | ECO         | Screening Only  | HI-STORM 100S Version B             | <p>[1] SHEET 2: Update assembly views to depict addition of screen mounting blocks and the rectangular shape of the inlet screen. Show the outlet screen lower ends to be slightly notched.</p> <p>[2] Sheet 3: Update view of bottom screen to show mounting plates.</p> <p>[3] Sheet 4: Update view of bottom screen to show mounting plates.</p> <p>[5] Sheet 10: Update view of bottom screen to show mounting plates.</p>  | N/A  |

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|---------|------------|-------------|----------------|-------------|-----------------|---------------------------------|---|---|
| 710     | 0          | 1014        | 1024           | SMDR        | Full Evaluation | HI-STORM Overpack Concrete      | An approximately 1" deep by 2" diameter void was left in the overpack concrete during HI-STORM Unit Serial #134 fabrication. The concrete was finished and hardened when this was discovered. The void was created due to an interference of the scaffolding. A piece of the scaffolding was positioned with the support bar below the level of the concrete. After concrete placement there was no way to adjust the placement of the scaffolding since it was in use and there was no crane available.  | The change will not significantly affect the intended structural design function, radiation shielding, and thermal characteristics of the concrete in the HI-STORM system.<br><br>There are no malfunctions that can occur, and no likelihood of occurrence of a malfunction can be increased. The structural integrity of the HI-STORM is maintained, so no accident consequences can be increased. The method of handling and operating cask is not affected, so no new accidents can be created. The proposed deviation has no effect on the MPC enclosure vessel. Therefore, the fission product barriers and the confinement boundary are completely unaffected. |
| 711     | 0          | 1008        | 1020           | ECO         | Screening Only  | HI-STAR 100 Closure Bolt Washer | BM-1476, Sheet 2 Rev. 17: [1] Item 49: Change material from S/S to ASTM A564, 17-7 PH.<br><br>HI-STAR FSAR:<br>[1] Table 2.2.6: Change the material for the closure bolt washer from S/S to ASTM A564, 17-7 PH.   | N/A   |
| 712     | 0          | 1008 & 1014 | 5014           | ECO         | Screening Only  | MPC                             | Revision 2 of the HI-STORM FSAR and Revision 2 of the HI-STAR FSAR have been revised to incorporate the following changes: The changes consist of additional elaboration of the note on page 8.1-12 in HI-STORM FSAR, and a similar elaboration of the note on page 8.1-11 in HI-STAR FSAR, for clarification and consistency with the methodology in FSAR Section 4.5. Specifically, the additional text added to the original 'Note' states that once the MPC lid is installed, the HI-TRAC/MPC removal from the spent fuel pool should proceed in a continuous manner. This note prohibits any significant pause during the operation to limit the rise in MPC water temperature while in the fuel pool that may adversely affect the assumptions in the determination of the time-to-boil time limit. | N/A   |
| 713     | 0          | 1014        | 1058           | N/A         | Screening Only  | MPC Lid Fit-up/HI-TRAC          | The use of temporary wedges to help round the lid region of the MPC shell for welding has been proposed. The wedges will be installed between the inner diameter of the HI-TRAC lid bolting ring and the MPC outer shell in two or more places. The wedges will be stainless steel to prevent corrosion of the MPC and secured to prevent them from falling into the annulus region. All shims will be removed following successful completion of the root pass of the MPC Lid-to-Shell weld. The HI-TRAC inside surfaces shall be protected and checked for damage to the coating and repaired if necessary prior installation of the next MPC. Deflection of the shell using the shim shall be limited to 3/8" or less.   | N/A   |

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|---------|------------|-------------|----------------|-------------|-----------------|---|--|--|
| 714     | 0          | 1008 & 1014 | 1021           | SMDR        | Full Evaluation | MPC-68 Basket Cell Plate (Dwg 1401, Item 1) | As a result of a manufacturing deviation, it is proposed to allow a 1-1/4" diameter hole in a fuel basket cell plate. The center of the hole would be approximately 6-7/8" down from the top end of the cell plate and approximately 2-1/4" from the edge of the cell plate (at 270 degrees).  | There are no malfunctions associated with the HI-STAR and HI-STORM systems so no malfunction likelihood, consequences or results can be increased. The structural integrity of the fuel basket is maintained, so no accident consequences can be increased. Method 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. |
| 715     | 0          | 1014        | 1026           | SMDR        | Screening Only  | HI-TRAC 100D Inner Shell                    | The HI-TRAC inner shell was ground to allow for the insertion of the plug gage. After the grinding of the inner shell a localized area of the shell thickness was determined to be under tolerance. The inner shell is 0.75" thick. The worst case localized thickness is 0.645" over an area of 36 sq. Inches.  | N/A  |
| 716     | 0          | 1008 & 1014 | 5014           | ECO         | Screening Only  | MPC Lid                                     | <p>HI-STORM FSAR (HI-2002444) REV. 2</p> <p>[1] Section 8.1.3: After step 9b add note to read "The MPC Shell is relatively flexible compared to the MPC Lid and may create areas of local contact that impede Lid insertion in the Shell. Grinding of the MPC Lid below the minimum diameter on the drawing is only permitted to alleviate interference with the MPC Shell in areas of localized contact. Care should be taken to minimize the amount and depth of grinding. If the amount of material removed from the surface exceeds 1/8", the surface shall be examined by a liquid penetrant method (NB-2546). The weld prep for the Lid-to-Shell weld shall be maintained after grinding."</p> <p>HI-STAR FSAR (HI-2012610) REV. 1</p> <p>[2] Section 8.1.3: After step 9b add note to read "The MPC Shell is relatively flexible compared to the MPC Lid and may create areas of local contact that impede Lid insertion in the Shell. Grinding of the MPC Lid below the minimum diameter on the drawing is only permitted to alleviate interference with the MPC Shell in areas of localized contact. Care should be taken to minimize the amount and depth of grinding. If the amount of material removed from the surface exceeds 1/8", the surface shall be examined by a liquid penetrant method (NB-2546). The weld prep for the Lid-to-Shell weld shall be maintained after grinding."</p> | N/A  |
| 717     | 0          | 1008 & 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.  | N/A  |

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|---------|------------|--------|----------------|-------------|-----------------|--|---|---|
| 718     | 0          | 1014   | 1023           | ECO         | Full Evaluation | MPC-32 basket neutron absorber<br>MPC-24/24A basket neutron absorber<br>MPC-68 basket neutron absorber | <p>[1] Drawings 3925 and 3927 - Change the nominal thickness of Metamic neutron absorber panels from 0.101" to 0.106".</p> <p>[2] Drawing 3926 - Change the nominal thickness of Metamic neutron absorber panels from 0.075" to 0.077".</p> <p>[3] Drawing 3928 - Change the nominal thickness of Metamic neutron absorber panels from 0.101" to 0.106".</p>  | <p>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.</p> <p>The full evaluation has determined that the change may be implemented without prior NRC approval.</p> |
| 719     | 0          | 1014   | 1024           | ECO         | Screening Only  | HI-STORM 100S Version B  | In summary, the changes made to the HI-STORM 100S Version B are to change the lower part of the overpack to be similar to the HI-STORM 100S. The resulting HI-STORM overpack is to be designated the HI-STORM 100S Version C.   | N/A   |
| 720     | 0          | 1014   | 5014           | ECO         | Screening Only  | MPC / FHD  | Revise the HI-STORM FSAR to clarify the distinctions between drying and backfilling the MPC using the Vacuum Drying System and Forced Helium Dehydration System. Revise Sections 1.2 and 8.1.1 to clarify the general operating descriptions. Revise Chapter 8, Section 8.1.5 Steps 6 and 7 to clearly distinguish the steps required to dry and backfill for both methods individually, giving each method its own Step.   | N/A   |
| 721     | 4          | 1014   | 1024           | SMDR        | Screening Only  | HI-STORM 100S VERSION B Lid Vent Shield (Dwg 3996 - Item 34)   | <p>Due to a lack of available material, item 34 on dwg 3996 needs to be fabricated from two pieces. It is proposed that the item be burned into two halves and then joined at the seam in the middle by placing a 1/4" thk. X 3" wide carbon steel plate over the gap and tack welding it to the two halves. The completed item 34 will then be tack welded to item 28 as usual per dwg 3996, sheet 14.</p> <p>Revision 1 - DELETED - See 72.48 #755</p> <p>REVISION 2 - Revised to eliminate the specific HI-STORM serial numbers indicated on Revision 0 and 1 of this 10CFR72.48. Applicable HI-STORM serial numbers are tracked using the component completion records. Deleted the change to the HI-STORM 100s version c added by revision 1 of this 10CFR72.48. The change found in revision 1 of the 10cfr72.48 is to be addressed in 72.48 #755.</p> <p>REVISION 3 - Corrected a typo above from revision 0. The carbon steel plate is 1/4" thick not 1" thick. This revision does not affect the 72.48 screening/evaluation form.</p> <p>REVISION 4 - Revised to add discussion about the impact from a tornado missile.</p> | N/A   |

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|---------|------------|--------|----------------|-------------|-----------------|-----------------------------------|---|---|
| 722     | 0          | 1008   | 1020           | SMDR        | Full Evaluation | HI-STAR 100 Closure Bolts         | HI-STAR 100 Overpack Serial Number 006 was supplied to Dresden with closure bolts, items 32 and 11, fabricated from SA 193-B7. The drawing (3913) and HI-STAR FSAR/SAR calls for SB637 N00718. It is proposed to accept this condition as is for conditions of storage (Part 72) only.                      | The analysis of the closure bolts is detailed in App. 3.F of the HI-STAR FSAR. The analysis conservatively applies the transportation loadings to the storage condition. Specifically, the HI-STAR is assumed to under go a top end drop at 80 degrees to maximize the loading of the MPC onto the underside of the closure plate. The MPC is assumed to apply a loading of 60g's times the weight of the MPC. Under storage conditions, a top end drop is not a credible accident. As discussed in Section 2.2.3.1 of the HI-STAR FSAR, the handling accidents are the bottom end drop and side drop. Under a tip-over accident, it may be possible for the MPC to apply a loading to the underside of the closure plate. This loading will be well below 45g's. Attachment A to SMDR-1205 demonstrates that the SA193-B7 bolts are adequate for a 45g loading. Accordingly, the SA193-B7 bolts are acceptable for storage.  |
| 723     | 0          | 1008   | 1025           | ECO         | Full Evaluation | HI-TRAC 125D Inner & Outer Shells | The proposed change in the licensing drawing (3768, rev. 5) is the following:<br>1. The inner shell welds (sheet 8) and the outer shell welds (sheet 6) are shown as full penetration. The welds are proposed to be changed to partial penetration welds with 1/4-inch (minimum) double bevel groove welds. | All accidents evaluated in the FSAR are either naturally occurring or are postulated to occur with a frequency of 1.0 which is the maximum possible frequency, and so no increase is possible due to the proposed activity. Since the activity does not require any change in the operation and operating procedures, and the HI-STORM system is passive in its operation, there are no malfunctions associated with the HI-TRAC, and so no malfunction frequency or its consequences are increased. Analyses performed for cask drop accident scenarios demonstrate that while the reduction of the weld thickness reduces the calculated safety factors, they still remain above 1.0; the deceleration levels for the fuel assemblies due to the impacts are below the design basis of 45g's, and the stresses have comfortable margins against the allowable limits. The change will maintain the structural integrity of the HI-TRAC, since the factor of safety for the inner and outer shell will remain above 1.0; and there are no other SSCs are affected; therefore, there is no possibility of creation of an accident of different type than any previously evaluated in the FSAR. The proposed modification does not affect the mechanism of heat transfer from the fuel assemblies and the MPC enclosure vessel to the environment; therefore, the temperature and pressure limits of these barriers will not change. The method of evaluation remains the same as described in the FSAR. |



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|---------|------------|-------------|----------------|-------------|-----------------|---|--|--|
| 724     | 0          | 1008 & 1014 | 5014           | ECO         | Screening Only  | MPC Confinement and HI-STAR Helium Retention Boundary | <p>****HI-STORM FSAR HI-2002444 REV. 2****</p> <p>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."</p> <p>****HI-STAR FSAR HI-2012610 REV. 1****</p> <p>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."</p> | N/A  |
| 725     | 0          | 1014        | 1024           | SMDR        | Full Evaluation | HI-STORM 100S (VERSION C) Top Plate & Shear Ring      | Due to the current design of the mating device at ANO, there exists a 1/4" gap between the mating device support ring (item 15, dwg. 3437) and the HI-STORM overpack body concrete during MPC loading operations. To eliminate this gap, it is proposed that the HI-STORM cask top plate thickness be reduced to 3/4" for the above serial numbers. The HI-STORM lid shear ring thickness must also be reduced to 3/4" in order to interface with the HI-STORM cask top plate.   | Structural analysis has shown that the limiting remains greater than 1.0. The reduction in the top plate and shear ring plate does not have an adverse impact on the shielding or thermal effectiveness of the HI-STORM overpack and in addition, the proposed change does not alter the procedure to load/unload the HI-STORM.  |
| 726     | 0          | 1014        | 1025           | SMDR        | Full Evaluation | HI-TRAC 125D Inner Shell                              | Insertion of a test gauge into the cavity of HI-TRAC 125d s/n 9, to ensure proper operational clearances, resulted in binding of the gauge near the area of the trunnion blocks. The inner shell in localized areas is machined/ground to eliminate interferences causing difficulties in gauge insertion. It is proposed to allow the minimum inner shell thickness of 0.61 inch, the minimum weld size of 0.094 inch at the circumferential seam and the minimum weld size of 0.6875 inch at the lifting trunnion block to the inner shell weld. Any deficiency in shell thickness or the weld size shall be weld repaired to meet the minimum requirements specified here. After any weld repair, the test gauge will be reinserted. Shielding adequacy will be confirmed by gamma scan after the lead pour.  | The proposed repair is to ensure that no operational difficulties will occur during cask loading. Although the reduction of the inner shell thickness is localized, and an earlier evaluation (SMDR-955) suggested that an area of 17 sq. feet is acceptable if the thickness falls below 0.75 inch, a structural evaluation was performed with the entire shell thickness of 0.61 inch. It was demonstrated in the structural evaluation that with the uniform reduction of inner shell thickness to 0.61 inch the deceleration levels under a drop accident are still below the design basis of 45g's. The bending stresses in the shells and the circumferential girth weld are below yield and provides a comfortable margin against the allowable stresses for Level D events. The changes have no adverse impact on shielding, criticality and thermal performances. |

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|---------|------------|-------------|----------------|-------------|-----------------|---|---|---|
| 728     | 0          | 1014        | 1025           | SMDR        | Full Evaluation | 125D                                    | Twenty four 3-inch long top lid hexagonal bolts and associated washers (item # 27 and #35 in dwg. 3438, rev. 19) are replaced with four 6-inch long hexagonal bolts with the same size and material (SA193-B7 1-8UNCX6").   | The design basis function for the HI-TRAC top lid bolts was to secure the top lid during normal operating conditions and an accident condition of a side drop event. HI-STORM FSAR Appendix 3.AH demonstrates the adequacy of the existing design at holding the lid in position under a side drop and also ensuring that the MPC cannot be ejected during any secondary impact. At the Farley Plant, the loaded HI-TRAC will only be held in the vertical orientation by a single-failure proof crane and will not be handled in the horizontal position. Consequently, the side drop accident is not credible for the operations at the Farley Plant. The new four longer bolts have been demonstrated to be more than adequate to hold the lid in position. The sole function of the washers was to minimize marring of the top lid painted surface during installation of the bolts. The elongation of the bolts will also ensure that the top lid painted surface is not marred. This deviation has not adverse impacts on the criticality, shielding, thermal, or confinement functions of the HI-STORM 100 System. |
| 729     | 0          | 1014        | 1024           | SMDR        | Screening Only  | HI-STORM 100S VERSION B Lid Vent Shield | The material for Item #34 on Dwg. 3996 (MIC #C-2071) was dedicated per QP-04-0967. The yield strength of the test sample was tested and it measured 35,000 psi. The ASME SA-36 material specification requires 36,000 psi minimum yield strength. It should be noted that the ultimate strength meets the requirements of SA-36.  | N/A   |
| 731     | 0          | 1008 & 1014 | 1023           | SMDR        | Screening Only  | MPC-32 Basket                           | After peeling back the sheathing of the MPC-32 cell plate the actual size of the burn gouge was measured to be 1" long x 5/16" wide x 3/16" deep. UST&D recommends removal of depression caused by the gouge by blending it into the surrounding area in accordance with NG-2538 of ASME Code. UST&D recommends the final metal thickness in the affected area be accepted as is. | N/A   |

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| 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     | 0          | 1008 & 1014 | 1021           | ECO         | Full Evaluation | MPC-68 Basket Supports                              | DWG 3928 REV 5<br>[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 shall 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". | There are no malfunctions associated with the HI-STORM/HI-STAR systems, 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.<br><br>The full evaluation has determined that the change may be implemented without prior NRC approval. |
| 733     | 0          | 1014        | 1025           | SMDR        | Screening Only  | HI-TRAC Top Lid                                     | The height of the HI-TRAC top lid measures 5 1/8" which is out of tolerance with the dwg. 3438 rev 19 dimension of 4 3/4" +/- 1/4". The 1/8" dimensional deviation is the result of weld distortion on the bottom plate.  | N/A  |
| 735     | 0          | 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".  | 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.<br><br>The full evaluation has determined that the change may be implemented without prior NRC approval.          |
| 738     | 0          | 1008        | 5014           | ECO         | Screening Only  | HI-STAR Neutron Shield Enclosure - Pressure Testing | Pneumatic Testing of the HI-STAR Neutron Shield Enclosure Vessel: Change the pressure test hold time from 15 minutes to 10 minutes.   | N/A  |

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|---------|------------|-------------|----------------|-------------|----------------|--------------------------------------|---|---|
| 739     | 0          | 1008 & 1014 | 5014           | ECO         | Screening Only | MPC-68 & MPC-32 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.  | N/A   |
| 740     | 0          | 1008 & 1014 | 1022           | SMDR        | Screening Only | MPC-24 Cell ID                       | Two MPC-24 baskets will have cells with maximum cell widths that exceed the drawing allowable. The maximum allowable cell id is 8.92" + 0.06" = 8.98". The actual maximum cell width is 9.05" (0.07" over). Deviation occurs in cell numbers 1,12,13, & 24 only as layed out in dwg 3926. It is proposed to accept this condition as is.  | N/A   |
| 741     | 0          | 1014        | 5014           | ECO         | Screening Only | HI-TRAC Trunnion                     | REVISE APPENDIX 3.E - LIFTING TRUNNION STRESS ANALYSIS FOR HI-TRAC OF THE HI-STORM FSAR REV. 2 AS FOLLOWS:<br><br>1) Change the unthreaded length (i.e. the exposed trunnion length) of the trunnion from 3.375" to 3.625" to make it consistent with the length shown on the HI-TRAC 125d fabrication and licensing drawings 3438 and 3768.<br><br>2) Revise the moment arm length in section 3.e.6.1.2 to account for a triangular load distribution between the lifting trunnion and the lift yoke arm.<br><br>Also revise subsections 3.4.3.1 and 3.4.3.2 of the HI-STORM FSAR rev. 2 to reflect the changes to appendix 3.e. | N/A   |
| 742     | 0          | 1008 & 1014 | 1022           | SMDR        | Screening Only | MPC-24, Version A Basket, Center Bar | It is proposed to add 0.035" thick shims welded to the center bar's (Item 1, DWG 3489) radius corners in order to maintain the minimum required flux trap dimension of 1.09". The shim material shall be formed to the contour of the center bar radius and tack welded into position. The shim material shall not be placed in the areas of the plug welds (shim shall stop approx. 1/4" from plug weld areas). It is also proposed to accept oversized plug welds of 7/8" to attach the cell plates to the center bar.  | N/A   |

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| 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) |
|---------|------------|--------|----------------|-------------|----------------|--------------------|--|---|
| 743     | 0          | 1014   | 5014           | ECO         | Screening Only | MPC Baseplate      | <p>HI-STORM FSAR 2002444 REV. 2:</p> <p>[1] INCORPORATE THE FOLLOWING TEXT IN SECTION 3.4.4.3.1.2 OF CHAPTER 3 OF THE FSAR:</p> <p>Evaluation of MPC Baseplate Alternate Support Configuration</p> <p>The stress state in the MPC baseplate and adjacent canister is evaluated to assess the effect of the discrete support of the MPC under the action of vertical loading plus pressure and temperature. The alternate MPC supports consist of bearing pads (shims) at six locations around the periphery plus a central support to transfer vertical loads to the HI-STORM. The baseplate of the MPC has been previously analyzed under loading from the fuel basket and the fuel assemblies assuming the baseplate plate continuously supported around the periphery by the MPC canister shell (e.g., this condition arises during lifting and lowering of the MPC into the storage overpack). To evaluate the effect of a discrete support configuration, a finite element model of ½ of the baseplate is constructed using shell elements and includes a sufficient portion of the MPC canister to simulate the canister-to-baseplate joint and the bending boundary layer in the canister shell. Vertical loads from fuel assemblies and fuel basket are applied to the baseplate as a uniform pressure and a ring loading, respectively (these loads have been applied in the same manner in the evaluation of the baseplate under the MPC lowering condition for HI-STORM 100 system). The total vertical load is resisted at the peripheral and central discrete support locations. Under normal conditions of storage, the baseplate/canister is subject to normal service pressure and temperature plus the one-g dead weight loading. The state of stress in the MPC under design pressure and normal operating temperature has been previously considered using an axi-symmetric finite element model, and the results are discussed above (see "Finite Element Analysis") and summarized in Tables 3.4.7 and 3.4.8 (Level A condition). In Table 3.4.8, although the actual metal temperatures were used to develop the solution for the thermal stresses, the allowable stresses were conservatively chosen at the design temperature rather than at the actual operating temperature as befits a Level A analysis.</p> <p>The stress intensities arising in the MPC baseplate and in the lower portion of the canister from the added vertical load are added to the previously determined stress intensities arising from internal pressure and temperature (reported in Table 3.4.8 and adjusted downward for actual service pressure) to obtain the total stress intensity for the Level A normal operating condition. The computed stress intensities are then amplified to simulate the vertical seismic event and again summed with the results from Table 3.4.8 to obtain the total stress intensity for the Level D condition.</p> <p>The primary and secondary stress intensities in the MPC baseplate and canister shell are computed for the Level A normal operating condition. The maximum primary stress intensity in the MPC baseplate is also determined for the Level D vertical seismic event. All computed safety factors are above 1.0.</p> | N/A   |

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|---------|------------|-------------|----------------|-------------|-----------------|------------------------|--|---|
| 744     | 0          | 1014        | 1024           | SMDR        | Full Evaluation | HI-STORM Inner Shell   | Inner shell diameter out of tolerance. The inner shell outside diameter measures 75.255. The required diameter is $75 \frac{1}{2}'' + \frac{1}{4}'' - \frac{1}{8}''$ . The shell is -0.12" out of tolerance as per licensing drawing 4116 rev. 10.   | It is concluded that the change will result in a slightly increased (by 0.12 inch) HI-STORM shell concrete thickness, and consequently, about 300 lbs increase in overall weight. All FSAR analyses use an enveloping weight of 270,000 lbs which covers this additional 300 lbs. The shielding performance of the overpack system is slightly improved, while the structural, criticality and thermal performance is unchanged.<br>The full evaluation has determined that the change may be implemented without prior NRC approval. |
| 746     | 0          | 1014        | 1022           | SMDR        | Full Evaluation | MPC-24                 | The variation of the leg lengths of some of the angles (Item 5, Dwg. No. 3489) exceeds the tolerance (of +0.03"). Consequently, several flux traps sizes (between cells numbers: 4 & 5, 8 & 14, 11 & 17, and 20 & 21) are reduced. This deviation needs to be evaluated for potential increase in reactivity.  | An evaluation has been performed (Appendix P of HI-2012771, Rev. 8) to determine the effect of the reduction of the flux traps. It has been demonstrated that the change will have only a slight increase in the reactivity (approximately 3 standard deviations), and it has been concluded that the change will be well within the available design margin. There are no significant impact in the structural, thermal and shielding performances of the overpacks due to the change.   |
| 747     | 0          | 1008 & 1014 | 1027           | SMDR        | Screening Only  | Fuel Spacer            | This is a one time deviation. It is proposed to add 1/4" thk. Stainless steel plates on top of the existing fuel spacer. This will effectively lengthen the fuel spacer by 1/4" for each plate used. A maximum of three plates for a total thickness of 3/4" may be used. The plates will be 8-1/2" x 8-1/2" x 1/4" thk. With a 6-3/4" diameter thru hole centered on the plate. The plates will also have a 1" x 45 deg chamfer on each corner.   | N/A   |
| 749     | 0          | 1014        | 1305           |             | Full Evaluation | HI-TRAC Top Lid        | MPC transfer operations normally take place with the HI-TRAC top lid in place. The proposed change is to perform the operation without the top lid. The ability to operate the HI-TRAC without the lid would significantly reduce the labor and consequently the total personnel dose received during transfer operations. The top lid is a (1-inch thick) metal plate that is used to keep the MPC within the HI-TRAC and to provide a limited amount of radiation shielding during transfer operations.          | MPC transfer operations without the HI-TRAC top lid will not have any impact on structural the integrity of the SSCs that are important to safety, and functional capability in the area of thermal, criticality and shielding will remain practically unchanged.   |
| 750     | 0          | 1014        | 1305           |             | Full Evaluation | HI-TRAC Pool Lid Bolts | The transfer operation normally takes place with the pool lid fastened using the bolts tightened with the prescribed torque. The proposed change is to perform the operation without specific torque requirements (i.e., wrench tight). The change in the operating procedure will result in significant savings in labor, QA oversight, and personnel dose. The structural integrity will not be compromised in the case of a drop or tip-over of HI-TRAC with loaded MPC, since there is no preloading required. | The proposed change in operating procedure does 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.   |
| 751     | 0          | 1014        | 5014           | ECO         | Screening Only  | 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.   | N/A   |



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|---------|------------|-------------|----------------|-------------|-----------------|--|--|--|
| 752     | 0          | 1008 & 1014 | 1021           | SMDR        | Full Evaluation | MPC-68 Lid and Shell   | The proposed activity is to permit the fabrication and use in HI-STORM of sixteen (16) MPC-68s incorporating the following modified design features:<br>1) MPC Lid: Fabricate the diameters of the lids to 65.8" min. instead of the standard MPC-68 lid dimension of 66.75 min.<br>2) MPC Shell: Reduce the height of the 1/2" thick MPC shell by 11-5/8". Attach a 1" thick by 11-5/8" tall ring section to the top of the 1/2" MPC shell using a full penetration vee or double vee groove weld. Weld inspections will consist of VT, RT and PT (final surface).  | There are no malfunctions associated with the HI-STORM/HI-STAR systems, 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 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 temperature of the MPC enclosure vessel or the MPC operating pressure, so no fission product boundary limit is exceeded.<br><br>The full evaluation has determined that the change may be implemented without prior NRC approval. |
| 754     | 0          | 1008 & 1014 | 1021           | SMDR        | Full Evaluation | MPC-68 Lid   | Two MPC-68 lids marked as serial numbers 122 (PWRP 2300-114) and 123 (PWRP 2300-145) shall be returned to UST&D to be re-machined to the latest revision of Holtec drawing 1402 to facilitate fit up in MPC-68 shell serial numbers 160 and 161. These lids were originally fabricated in the optional design consisting of a 2 piece construction with a 3/16" v-groove weld joining the 2 pieces around their circumference. As a result of the re-machining to the smaller diameter of the latest revision of drawing 1402, this v-groove weld could potentially be undersized by as much as 0.095". Therefore, it is proposed to machine and weld these lids with (4) additional 1/4" min. v-groove (concave) welds equally spaced apart and 16" min. long at the joint between the 2 lid pieces. The minimum total weld area that will be achieved by these (4) additional welds is 16 square inches, which is less than that specified in the drawing. | 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 reduce the structural integrity of the MPC below the established limits, so it will not 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 any temperatures or the MPC operating pressure, so no fission product boundary limit is exceeded.<br><br>The full evaluation has determined that the change may be implemented without prior NRC approval.                      |
| 755     | 1          | 1014        | 1024           | SMDR        | Screening Only  | HI-STORM 100S Version C Lid Vent Shield (Dwg 4350 - Item 38) | Due to a lack of available material, item 38 on dwg 4350 needs to be fabricated from two pieces. It is proposed that the item be burned into two halves and then joined at the seam in the middle by placing a 0.25" thk. X 3" wide carbon steel plate over the gap and tack welding it to the two halves. The completed item 38 will then be tack welded to item 33 as usual per dwg 4350, sheet 12. This 72.48 evaluation is a revision to evaluation # 721 and is created in order to address the HI-STORM 100s version c change.<br><br>REV. 1: Revised to add discussion about the impact from a tornado missile.   | N/A  |



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|---------|------------|-------------|----------------|-------------|-----------------|---|---|--|
| 756     | 0          | 1008 & 1014 | 5014           | ECO         | Full Evaluation | MPC Vent And Drain Port Cover Plates                  | <p>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. These calculations are based on the current weld geometry (1/8" minimum groove) and do not reflect proposed change 2. The new values are as follows:</p> <p>Cover plate bending stress and safety factor (level a) = 14.08 ksi and 1.81, respectively<br/> Cover plate bending stress and safety factor (level d) = 28.16 ksi and 2.17, respectively<br/> Cover plate weld shear stress and safety factor = 7.55 ksi and 2.52, respectively</p> <p>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".</p> | 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 changes, 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. |
| 758     | 0          | 1014        | 1026           | SMDR        | Screening Only  | HI-TRAC 100D Top Half Outer Shell (DWG 4130R7 Item 5) | The top half of the HI-TRAC 100D outer shell (Item 5 on DWG4130R7) has a 3/4" x 45 degree bevel that is not required by the drawing. The weld used to connect item 5 and item 6 (bevel weld-weld 7) will be changed to a V-groove weld in order to accommodate the connection of the altered item 5 to item 6. The use of a V-groove weld will not reduce the strength of the connection between item 5 and 6 and will have no effect on the structural integrity or shielding and thermal performance of the component. The HI-TRAC 100D licensing drawing (DWG 4128R3) identifies the weld as a single sided bevel weld. Therefore a 72.48 evaluation will be required due to the change in the type of weld. The proposed resolution is to accept item 5 as is.  | N/A  |