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Operating Experience

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Introduction

- Port Caps - Example of Operating Experience and Information Sharing
 - Port Cap Function and Experience
 - Communications and Activities
 - Preventing Recurrence



Port Cap Function and Experience

- Port Caps are part of the Holtec MPC closure system
- They are threaded, remotely operated valves, and are closed after the MPC is drained, dried and backfilled with helium
- Since 2001, there have been 5 instances where a port cap became stuck while attempting to close after helium backfill was complete
- In all cases, fuel was maintained in a safe condition and MPC processing was completed after appropriate repairs/replacements



Communications and Activities in Case of a Stuck Cap

- Holtec is informed, either through our loading team or the client
- The MPC condition is evaluated. Contingency plans are prepared/reviewed to insure that the fuel is maintained in a safe condition while repairs are made. The crew reviews the work plan and implements the repair
- Event is entered into Holtec's and/or client's corrective action program for determination of the cause, recommended corrective actions, and actions to prevent recurrence
- Event is discussed at the Users Group call and entered into the Lessons Learned Database
- HIB (Holtec Information Bulletin) is generated to provide information to all users
 - Event, Cause, Actions at Holtec
 - Recommendations and Guidances for Port Cap preparation and operation



Preventing Recurrence

- Why did it happen repeatedly
 - Infrequent event (~1 in 100)
 - Different conditions in every plant
 - After each occurrence, (additional) actions to prevent recurrence were identified, communicated and implemented
 - Apparently, there is no single cause
 - Material, Design, Manufacturing, Foreign Material, Operations, Skill of Craft, and Thermal Conditions all play a potential role
- Holtec is working in coordination with the HUG fabrication subcommittee to redesign the port connection

