

Conference Call Memorandum

Date: April 9, 2008

Subject: Hydrogen Event at CGS

Participants:

Columbia Generating Station

Don Gregoire
Rolly Fuller
John Suing
Dave Larkin
Neil Zimmerman

US NRC RIV

Blair Spitzberg
Ray Kellar
Vince Everett

US NRC SFST

Ray Wharton
Randy Hall
Bob Nelson
Jeff Hornseth
Matt Gordon

Summary:

A teleconference was held with the above participants at 1430 CDT on April 9, 2008. Mr. Spitzberg provided the introduction as to why the phone call had been requested by the agency. The agency was interested in the events surrounding the reported hydrogen explosion that had occurred during the canister welding on April 9, 2008. Mr. Zimmerman described the activities that had occurred on the previous shift. A summary of the activities are:

- The station was in the process of loading the 7th MPC during this loading campaign, which was the 22nd MPC to be loaded at CGS.
- The event occurred at approximately 0245 after the root pass weld had been completed and the welders were working on the hot wire pass. Two weld heads were being utilized by 2 operators. A "clang" noise was heard and the welding operation was stopped.
- The explosion had relocated the small caps that were placed over the vent and drain port openings about 3-4 inches and about a quart of water had been expelled from the drain port. A review of the incident was undertaken by Mr. Zimmerman. No contamination was discovered and no damage was found. The station believed that the heat generated during the hot wire process over the root pass weld (assumed to be thin) generated enough heat to ignite the hydrogen.
- The station welding procedure allowed the person-in-charge to stop the hydrogen monitoring and purging process after the root weld had been completed. The person-in-charge had authorized removing the hydrogen monitoring and purging equipment.
- In order to restart the welding operations, Mr. Zimmerman recommended that the weld area be examined to ensure that no defects were found, and that a continuous vent of the MPC be undertaken until all the welding had been completed. Prior to welding the next canister, the station recommended revising the welding procedure. This recommendation was approved by the station general manager and work resumed.

RIV personnel questioned if the provisions of TS 3.8 of Amendment 2 had been considered. The TS required that during the MPC lid-to-shell welding operations, combustible gas monitoring of the space under the MPC lid is required. There was no

allowance in the TS to stop the gas monitoring until all the welding had been completed. After some silence, the station found the TS requirement that had been quoted and admitted that this requirement had not been considered in the procedure.

SFST personnel then asked if the process utilized by CGS had been recommended by the cask vendor and questioned if other Holtec users could be following the same process. The station did not have an answer for the question but stated they would provide a response.

Mr. Spitzberg then informed the licensee that Mr. Kellar would be onsite next week for a routine inspection. However, the highest priority would be to review the events and corrective actions associated with the hydrogen event.

Mr. Kellar will document the events, licensee reviews and corrective actions in the inspection report.

Cc: NRC Participants
Len Wert
Claude Johnson
Zach Dunham
Ron Cohen