

**BNL ALARA CENTER****Processes and Practices Related to Occupational Dose**

ID: 72

**MAIN STEAM LINE PLUGS****Keywords:** MAIN STEAM LINE PLUGS; MSIV; LEAK DETECTION; LEAKAGE; PIPE PLUGS; LLRT**Description:**

Remotely installed main steam line plugs are available which may be installed from inside the reactor pressure vessel without lowering the water level and does not interfere with any RPV activities during plant refueling. Once installed, these plugs allow testing and maintenance on the main steam SRVs and MSIVs. In addition, inspection of the main steam system can be performed in parallel with refueling operations, and thereby permit the pressurization of the MSIV in a direction tending to close the valve. This avoids needless seat maintenance to achieve LLRT criteria. Remotely operated main steam line plugs has saved as much as five days in refueling, inspection, and main steam maintenance schedules, with related reductions in these tasks cumulative exposures.

**References and Selected Abstracts:**

1. Johnson C.P., et. al., "Collective Radiation Exposure Task Force Report: Hope Creek Generating Station," April 1987, pp. 52.
2. Yoli A. H., "The Development of a Main Steam Line Plug for BWR Application," EPRI NP-3689, September 1984. (Available from Research Reports Center, Box 50490, Palo Alto, CA 94303.)
3. Ishii K., "Controlling Exposure in BWRs". Nuclear Engineering International, June 1986, pp. 28.