

BNL ALARA CENTER**Processes and Practices Related to Occupational Dose****ID: 77****BWR-TEMPORARY RADIATION SHIELDS FOR CONTROL ROD DRIVE FLANGES OF BWRS****Keywords:** CONTROL ROD DRIVE SHIELDS; RADIATION SHIELDING; CONTROL ROD DRIVE FLANGES; RADIATION SHIELD; PORTABLE SHIELDS; TEMPORARY RADIATION SHIELDS**Description:**

Control rod drive removal/rebuild and replacement on the average results in 60 MAN-REM per outage. The major source of radiation during removal and replacement excluding the CRD itself is the radiation from emanating from the bottom of the reactor vessel. Temporary shields which attach to CRD flanges under the reactor vessel reduces the dose to workers during CRD removal/replacement and other work conducted under the vessel. These temporary shields have been utilized at several BWRS and have proven to be cost effective.

References and Selected Abstracts:

1. Brown, F. and Dedrich M., "CRD Flange Radiation Shields," Pennsylvania Electric Association, Fall Meeting, 1985.