

## BNL ALARA Center Data Base

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### INNOVATIVE APPROACHES AT TMI-2

**Keywords:** OPERATIONAL AND MAINTENANCE TECHNIQUES; REMOTE SYSTEM; TMI CLEANUP

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**Objectives:** The aim of this project is to explore new ways to perform nuclear plant operations and maintenance tasks.

**Comments:** A centralized Coordination Center enables GPU Nuclear to maintain close supervision of work in the reactor building and to minimize the number of people entering. It has served to reduce exposure and to enhance the supervision of tasks and industrial safety.

Annual employee training includes an evaluation of a radiation worker's ability to dress properly and to conduct work in a radiological area. Preparation for doing actual tasks often includes practicing planned radiological work in a non-radiological area. TMI-2 radiation workers are provided with a Personnel Access Facility where support personnel assist workers in donning protective clothing and supervise entries into radiological areas. A computerized heat stress index, personal cooling devices, employee training and administrative controls limit potentially dangerous heat stress in workers.

The use of battery-powered respirators allows greater worker comfort and efficiency.

**Remarks/Potential for dose limitation:** Making use of remote supervision to monitor and supervise the work in the highly contaminated reactor containment building has been one successful technique to reduce occupational exposures. Extensive use of training mock-ups, setting up of a dedicated area for dressing in protective apparel, use of battery powered respirators and the heat stress control program to improve the comfort and increase the efficiency of radiation workers, have also contributed to the reduction in exposure.

**References:** J. E. Hildebrand, "TMI-2 Shows the Benefits of an Innovative Approach", Nuclear Engineering International, October 1988, Vol. 33, No. 411, pp. 14-15.

**Duration:** from: 1988 to: 1990

**Funding:** N/A

**Status:** In progress

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