

October 14, 2009

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE -- PNO-IV-2009-005

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by the Region IV, Arlington, Texas, staff on this date.

Facility

Basin Electric Power Cooperative
Laramie River Station
Wheatland, Wyoming
Docket 030-14682
License 33-18224-01

Licensee Emergency Classification

Notification of Unusual Event
 Alert
 Site Area Emergency
 General Emergency
 Not Applicable

SUBJECT: POTENTIAL OVEREXPOSURES TO MEMBERS OF THE PUBLIC

DESCRIPTION:

On September 23, 2009, the NRC was notified about an event which involved the potential radiation exposure of an employee of the Laramie River Station power plant in Wheatland, Wyoming. This three-unit, coal-fired power plant is operated by Basin Electric Power Cooperative, which is an NRC licensee authorized to possess fixed nuclear gauges.

The initial report involved a plant welder who was working in the immediate vicinity of five fixed nuclear gauges used to monitor coal flow through coal chutes at the power plant. In the course of this work, the welder was potentially exposed to the radiation beam emitted from the fixed nuclear gauges. The sources of radiation were nominally 50 millicuries each of cesium-137. These gauges had not been taken out of service during the conduct of this work.

NRC dispatched an inspector on October 5, 2009, to begin a reactive inspection. During the onsite portion of this inspection, it was determined that the welder could have potentially received in excess of 100 millirem during the 10 days that he worked in the immediate vicinity of the fixed nuclear gauges. Since the licensee does not consider this worker to be an occupationally exposed radiation worker, this worker is considered to be a member of the public and the applicable dose limit is 100 millirem, a small fraction of the limit for occupational workers.

Subsequently, on October 12, and October 14, 2009, the licensee notified the NRC of the preliminary results of its calculations of potential radiation exposure to this welder. The calculations indicated a dose in the range of approximately 180 millirem to 1300 millirem, with a best estimate of about 650 millirem. Additionally, the licensee identified 13 other persons who were potentially exposed to radiation during this same time period. Of these additional 13 persons, the licensee believes that five of them may have received doses in excess of the dose limit to members of the public, ranging from approximately 140 to 500 millirem. The licensee is required to submit a written report of the results of its review to NRC by October 23, 2009.

The NRC's special inspection is ongoing. The NRC's Region IV Office is currently reviewing the licensee's preliminary findings and conclusions, and is independently assessing the significance, causes, contributors, and circumstances associated with this event.

The information presented herein is current as of 2 p.m. CDT, October 14, 2009.

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