



ROP PIM Reports - Event Dates: 01/01/2005 - 03/15/2010 - Generated on 03/15/10
By Types, Cornerstones, Event Dates, Sites
Key Word Search on tritium,
Significance: All
3 Open/Closed Final items selected - All Regions

Finding - Green 1
 NonCited Violation - Green 2

Cross Cutting Areas:

- SCWE - *Safety Conscious Work Environment*
- HP - *Human Performance*
- PIR - *Problem Identification and Resolution*

Finding						
Public Radiation Safety	06/30/2008	BRU	Green	*SCWE: N	*HP: Y	*PIR: N
Docket/Status: 05000325 (C) , 05000324 (C)						
Open: <u>2008003</u>						
(PIM) Failure to Conduct Adequate and Timely Evaluations of Onsite Groundwater Monitoring Well Tritium Concentration Trend Data						
<p>The inspectors identified a Green finding (FIN) for failure to properly evaluate the potential causes of increased tritium (H-3) concentrations in groundwater samples collected and reviewed in accordance with Brunswick procedure E&RC-3250, A“Environmental and Radiation Control.Â” Specifically, the licensee failed to properly evaluate, and initiate actions to address increasing H-3 concentrations reported from 2003 through 2007 for quarterly samples collected from Environmental Sampling Station (ESS)-2C and ESS-16 monitoring wells. The failure to properly investigate the increasing H-3 concentrations resulted in the licensee continuing to attribute the subject results to a 1994 U2 radioactive liquid effluent waste line break without considering potential leakage of contaminated liquids from U2 storm drain piping. This issue has been entered in the licensee’s CAP as NCR 268357. The finding is more than minor because it is associated with the Program and Process attribute of the Public Radiation Safety Cornerstone and adversely affects the cornerstone objective because it relates to effluent measurement and abnormal releases. The licensee’s failure to recognize the increasing groundwater tritium concentrations delayed actions to address and correct abnormal liquid releases within the switchyard area. Using the Public Radiation Safety Significance Determination Process, this finding was determined to be of very low safety significance (Green) because the performance deficiency did not result in offsite releases and resultant offsite doses to members of the public and was not a failure to implement the effluent program. Furthermore, the finding did not prevent the licensee from initiating appropriate corrective actions to determine extent of the contamination and to mitigate its effect on the surrounding environs. The cause of the finding was related to the cross cutting area of human performance, the component of work practices, and the aspect involving supervisory oversight of work activities, because the licensee failed to properly evaluate monitoring well sample data to determine the possible radiological effects of plant operation on the local groundwater.</p>						
NonCited Violation						
Occupational Radiation Safety	06/30/2007	BRAI	Green	*SCWE: N	*HP: N	*PIR: Y

1-2

Docket/Status: 05000456 (C) , 05000457 (C)

Open: 2007004

**(PIM) FAILURE TO IMPLEMENT A RADIATION PROTECTION PROGRAM
COMMENSURATE WITH THE EXTENT OF PLANT RADIOLOGICAL HAZARDS**

A finding of very low safety significance and an associated NCV of 10 CFR 20.1101(a) was identified by the inspectors for the licensee's failure to implement a radiation protection program commensurate with licensed activities and the ongoing radiological issues at the plant. Specifically, radiological controls were not effectively applied to secondary systems, which contained contaminated (tritium) fluids, to ensure that worker exposures and radiological effluents were fully monitored and controlled. The finding is greater than minor because it was associated with the process and procedures attribute of the Occupational Radiation Safety cornerstone and affected the cornerstone objective to ensure the adequate protection of worker health and safety from exposure to radiation from radioactive material during nuclear reactor operation. Specifically, the inspectors determined that the finding did not involve unintended collective dose resulting from a deficiency in As-Low-As-Reasonably-Achievable (ALARA) planning, work control, or exposure control. The inspectors also determined that the finding did not involve an overexposure, the substantial potential for an overexposure, and did not compromise the licensee's ability to assess dose. Consequently, the inspectors concluded that the finding was of very low safety significance. Corrective actions taken by the licensee included characterizing secondary systems to determine tritium concentration and prescribing radiological coverage and contamination control requirements for each system based upon this characterization. The cause of the finding was related to a cross-cutting aspect in the area of Problem Identification and Resolution because the licensee did not address radiological safety issues and adverse trends in a timely manner, commensurate with their safety significance and complexity (P.1(d)).

Occupational Radiation Safety	06/30/2007	BRAI	Green	*SCWE: N	*HP: Y	*PIR: N
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Docket/Status: 05000456 (C) ; 05000457 (C)

Open: 2007004

(PIM) FAILURE TO POST AREAS THAT CONTAIN RADIOACTIVE MATERIAL

A finding of very low safety significance and an associated NCV of 10 CFR 20.1902(e) was identified by the inspectors for the failure to post areas in which licensed material is used or stored. Specifically, two waste water lagoons, located within the Protected Area, and the Turbine Building each contained greater than 10,000 uCi of tritium and were not posted in accordance with 10 CFR 20.1902(e). The finding is greater than minor because it was associated with the process and procedures attribute of the Occupational Radiation Safety cornerstone and affected the cornerstone objective to ensure the adequate protection of the worker health and safety from exposure to radiation from radioactive material during nuclear reactor operation. Specifically, the inspectors determined that the finding did not concern unintended collective dose resulting from a deficiency in ALARA planning, work control or exposure control. The inspectors also determined that the finding did not involve an overexposure, the substantial potential for an overexposure, and did not compromise the licensee's ability to assess dose. Consequently, the inspectors concluded that the Significance Determination Process (SDP) assessment for this finding was of very low safety significance. Corrective actions taken by the licensee included posting the lagoons and areas of the turbine building appropriately as "CAUTION, RADIOACTIVE MATERIAL(S)." The cause of the finding was related to a cross-cutting aspect in the area of Human Performance because the licensee did not use conservative assumptions in decision making (H.1(b)).