

PRELIMINARY NOTIFICATION- REGION III

October 23, 2007

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE - PNO-III-07-012

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 III staff on this date.

Facility

Byron Station Unit 1 and 2
Exelon Generation Company, LLC
Byron, Illinois
Docket: 50-454/50-455
License: NPF-37/NPF-66

Licensee Emergency Classification

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

SUBJECT: BOTH UNITS AT BYRON SHUT DOWN DUE TO A LEAK IN PIPE

DESCRIPTION:

On October 19, 2007, at 7:55 PM, Exelon Nuclear Company notified the NRC that operators at the Byron Station began to shut down both reactors due to a leak in an essential service water pipe.

The discovery of the leak led to declaring the essential service water system inoperable. According to the plant's Technical Specifications, both reactors had to be shut down.

The essential service water system draws water from the river to the cooling basins. Water from the basins would be used to cool important plant safety components required to safely shut down the reactor in an emergency.

Plant systems performed their functions as designed. The plant was shut down safely and is in a stable shutdown condition. There is no threat to public health and safety.

The leak occurred while plant workers were inspecting essential service water system pipes. The inspections were performed to follow up on indications of external corrosion that had been previously identified on all eight similar essential service water pipes.

These pipes go from the basins into the ground. Rust was found on sections of piping located between the basins and the ground.

The utility is investigating the cause of the leak and evaluating what repairs need to be completed prior to restarting both units.

The NRC resident inspectors and region-based inspectors have been monitoring these issues associated with the essential service water system degradation prior to and since the shutdown.

The duration of the dual unit shutdown is expected to exceed 72 hours. There has been media coverage of the issue.

The State of Illinois has been notified.

The information in this preliminary notification is current as of 4:30 p.m. on October 22, 2007.

This information has been reviewed with plant management.

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