

**Licensee/Facility:**

Westinghouse Electric Company

Dockets:

**Notification:**

MR Number: H-2005-0004

Date: 01/27/2005

Letter

**Subject:** Interim Part 21 - 2005-0005 - Charging Pump Runout During Safety Injection (SI)

**Discussion:**

Interim Part 21 - 2005-0005 - Centrifugal Charging Pump Runout During Safety Injection (SI)

Westinghouse has identified an issue concerning a vulnerability of a single operating Centrifugal Charging Pump to exceed vendor runout limitations. Pump runout is the maximum flow that can be developed by a centrifugal pump without damaging the pump.

The vulnerability exists during a large break loss of coolant accident (LBLOCA) scenario when the charging pump discharge isolation valves stroke closed and the SI isolation valves stroke open in parallel. This action realigns the system from a normal charging configuration to a safety injection configuration. The pump's capability following the flow transient to perform long term consistent with design and analysis assumptions needs to be evaluated.

Westinghouse is currently determining the amount of flow beyond runout and the duration of the condition for various plant designs. Evaluation of a 4-loop plant shows this runout condition to be approximately 10 gpm above approved flow rates for 3 seconds.

During a telephone conversation with NRC's Operating Experience staff on 2/4/2005, Westinghouse indicated that it has not yet contacted its customers to inform them of this potential issue. Westinghouse will complete its evaluations by April 15, 2005.

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