

## Errata and Addenda Sheet

## Applicable to:

Publicatio	n NO				- 02			-	
Title_ Sa	fety	Eva	luati	on	to	Justi	fy		
Operatio	on wi	th	Loss	of	Jet	Pump			
Flow In	dicat	ion	for	Qua	d C	ities	1	8	2

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Note: Correct all copies of the applicable publication as specified below.

Item	References (Section, Page Paragraph, Line)	Instructions (Corrections and Additions)
01	Page 5-1	Replace with new page 5-1.
		8912070183 891129 PDR ADDCK 05000254 P PNU

EAS 07-0289 Revision 1

## 5. EFFECT ON ECCS PERFORMANCE ANALYSIS

The diffuser upper pressure taps are located at approximately the same elevation as the bottom of the active fuel. To minimize the signal noise and to account for any differences in the velocity distribution at the diffuser entrance, there are three 0.125 inch diameter holes at the diffuser entrance to measure the static pressure in the diffuser. A manifold connects these taps and the instrument line is connected to this manifold inside the vessel. If the jet pump instrument line should break inside the vessel, it would establish an additional leakage path through these taps to the downcomer annulus which would allow water intended for core cooling to leak into the downcomer and delay core reflooding.

The design basis loss-of-coolant accident (LOCA) for Quad Cities Units 1 and 2 is a recirculation suction line break with a single failure of a DC battery which disables one Core Spray (CS) System and two of the four Low Pressure coolant injection (LPCI) pumps. An extra High Pressure Coolant Injection (HPCI) System failure was assumed to facilitate comparison with the battery failure case in the BWR-3/4 generic analysis. In this case, core cooling is accomplished by the one remaining Core Spray System that injects inside the core shroud plus the two remaining LPCI pumps. During reflooding, the leak through the instrument line would start to occur when the water level reaches the bottom of the active fuel. Leakage would continue as the water level rises to the jet pump suction elevation which is at approximately two-thirds of the core height. This additional leakage was calculated to be less than 3 gallons per minute through the three 0.125 inch pressure taps in any one diffuser. Even if three diffusers were leaking at this rate, the total flow loss would amount to much less than 1% of the total ECCS flow available. Previous sensitivity studies have shown that a leakage increase of this magnitude has no effect on ECCS performance limits. Consequently, no changes to the current ECCS performance limit calculations are necessary.