

2009 NRC Special Inspection - RB Concrete Separation

03-Dec-09 9:05:23 AM

Request Number:	10		
Individual Contacted:	Garry Miller	Date Contacted:	10/22/2009
Requestor/Inspector:	Dan Naus	Category:	Question
Request:	When CTL is using IR and IE, can they determine relative concrete quality of locations tested as part of CTL NDE procedures?		
References:			

Response Assigned to:	Paul Fagan	Date Due to Inspector:	10/26/2009
-----------------------	------------	------------------------	------------

Response:

In general, the Impulse Response (IR) test results is influenced by concrete quality and existence of defects at the test point. The aspects in concrete influencing IR results include presence of delamination, cracking, significant void or honeycomb and change in concrete properties. The most significant factor is the presence of delamination which effectively reduces the thickness of wall or slab responding to the impact. Considerable difference in quality of concrete is typically reflected in the test results. For example, a core removed from panel RBCN-0014-N (Core #13) where a higher mobility value was obtained by NDT, had less coarse aggregate in the concrete, which changed density and modulus in that localized area, no delamination was noted in these areas with subsequent boroscope examinations.

Misc Notes:	
-------------	--

Response By:	Paul Fagan		
Reviewed By:		Date Response Provided:	11/12/2009
Status:	Closed	Date Closed:	

P/ 31