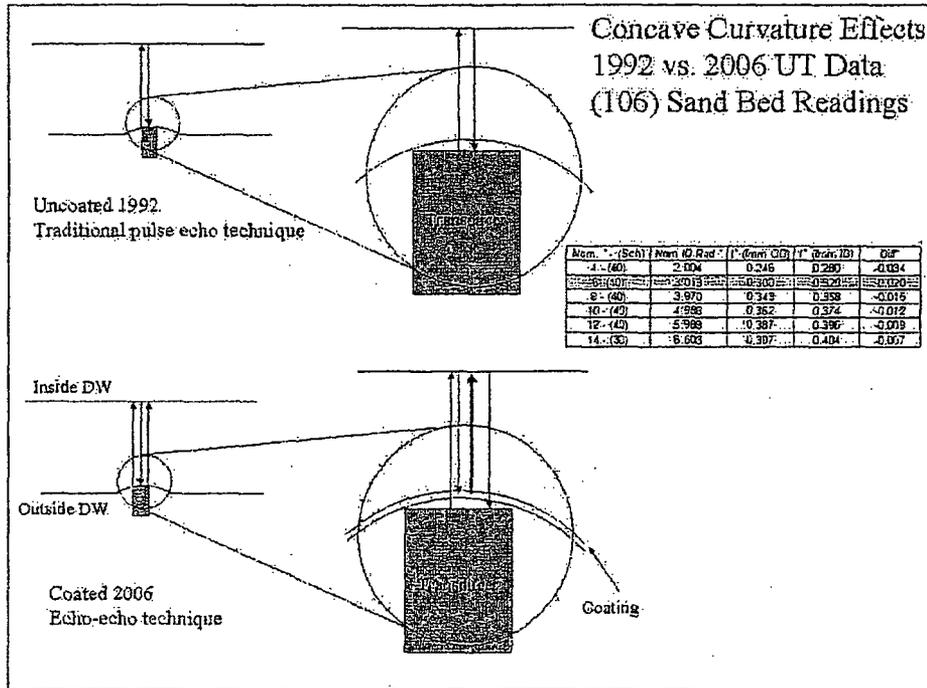


RAS 14368



DOCKETED  
IISNRC

October 1, 2007 (10:45am)

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

The upper sketch shows the ultrasonic technique used during 1992 and illustrates a typical (but exaggerated) dished area produced when surface prep was performed in 1992. The sound travel is shown with the arrows. The "air-gap" was assumed to be minimal.

The lower sketch shows the newer technology which allows us to now use a technique called "Echo to Echo". This technique was selected due to the surface being coated. The technique subtracts the coating thickness and displays only the actual thickness by using the multiple echoes generated (i.e. the 2<sup>nd</sup> round trip.) The echo-to-echo technique also subtracts the "air-gap" to display only the actual metal thickness. The bold (red) arrow shows the dimension that is being recorded.

The chart shows the mock-up results, comparing several various diameters and the resulting differences relating to concavity. The inspectors interview selected the 3" radius sample as the one to most represent a typical dish area.

**U.S. NUCLEAR REGULATORY COMMISSION**

In the Matter of AmerGen Energy Co. LLC

Docket No. 50-0219-LR Official Exhibit No. Exh 515

OFFERED by: Applicant/Witness [Signature]

IDENTIFIED on 9/20/07 NRC Staff Witness/Panel N/A

Action Taken: **ADMITTED** **REJECTED** **WITHDRAWN**

Reporter/Clerk [Signature]

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