

DRESDEN III

Commonwealth Edison Company

Supplement to Construction Permit Application -

Reactor Vessel Non-Destructive

Testing of Plate

June 10, 1966

Non-Destructive Testing of Plate

in the Reactor Vessel

The following exemplifies the non-destructive testing of material in a reactor vessel during fabrication of the reactor vessel. The non-destructive testing performed on plate is used.

The next sheet lists the location, significant fabrication steps, non-destructive test, and a brief description of the test, all as performed on the plate as it is fabricated into a completed reactor vessel. The 100% Surface Longitudinal Ultrasonic Test is a revision of the information previously presented.

The radiographic testing is performed on pressure welds in the plate. As a result of some overlap of the film on the plate, the plate is radiographically tested adjacent to welds. The 100% Local Longitudinal Test performed in the area of surface attachments is in accordance with more restrictive acceptance standards than the other 100% Surface Longitudinal Ultrasonic Test, to assure non-laminar foundation structure for the attachments.

The ASME Section III 9" grid longitudinal test is performed within the scope of the 100% Surface Longitudinal Ultrasonic Test at that point.

PLATE NON-DESTRUCTIVE TESTING

Location	Fabrication Step	NDT	Description
Mill			Best Mill Practice Electric Arc Vacuum Degas
		UT) MT)	Established Comercial Quality
Plant	Flat	UT	100% Surface Long. (9" Grid*) 9" Grid Shear
	Rolled	MT	Weld Preparations*
	Weld Quench & Temper	UT	100% Surface Long.
		RT	Welds*
		MT	Both Sides*
	Clad Nozzle Cut Outs	MT	Exposed Edges*
		RT	Welds*
Local Surface Attachments	UT	100% Local Long.	
Hydro	MT	Exterior	

*ASME - Section III Requirements

Legend:

- UT - Ultrasonic Test
- MT - Magnetic Particle Test
- RT - Radiographic Test
- NDT - Non-Destructive Test