

PWR Owners Group



Testing and Analysis to Reduce Debris Generation Zones of Influence for GSI-191

Project Update
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ZOI Project Update

Summary of Test Facility Modifications

- Increase in nozzle centerline elevation from 24” to 72”
- Nozzle design
 - 4” diameter (actual dimension)
 - Smoothed transition at entrance
 - Eliminates potential for choking flow
 - Instrumented and non-instrumented versions
- Burst disks and holders
 - Disks: 6” diameter, 1800 psi upstream / 1200 psi downstream
 - Holders decreased in ID to eliminate expansions / contractions
 - Larger evacuation port in spool piece
- Loop configuration
 - Modified to assure no choke points upstream of nozzle

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Facility Inspections

- Upstream of loop modifications:
 - Video inspection of existing piping
- For loop modifications:
 - Procedure(s) for inspection at each step during fabrication process (dimensional, physical obstructions, etc.)
- For each test:
 - Pre-test procedure(s) to incorporate
 - Verification of proper burst disk assembly
 - Instruments
 - Examination for physical obstructions, etc.
 - Post-test procedures for
 - Measurement and cataloging of spent burst disks
 - Inspection of equipment

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ZOI Project Update - Key Schedule Interface Dates

Milestone	Planned Completion	Actual Completion
Order long lead materials for testing; place order for tests.	12/20/10	12/22/2010
Complete design review – facility modifications	2/16/11	Intermediate review completed 2/8/11
Completion of test facility modifications	3/31/11	
Discuss preliminary test data and predictions	4/29/11	
Completion of instrumented tests	5/13/11	
Discussion of all instrumented tests	5/31/11	
Discuss preliminary Phase 1 Target Test results	6/30/11	
Completion of Target Tests	7/26/11	
Discuss preliminary Phase 2 Target Test results	8/5/11	
Complete supplemental instrumented tests (if necessary)	8/16/11	
Discuss draft report results	10/31/11	
Issue topical report	12/15/11	