Summary of Information Prepared by AECL for the 3rd NRC PIRT TH Meeting



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INDLOGIES INC.

Outline

- Introduction
- Reports / Papers
- Additional Information
- Presentations

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Introduction

- Provided information based on:
 - AECL notes and actions from the 2nd PIRT meeting on December 11-12, 2003
 - Email requests from Brent Boyack, January 03, January 15-16
 - Discussion at the meeting with Belkys Sosa, Jack Rosenthal and David Bessette on January 14, 2004
- AECL presentations for the 3rd PIRT meeting
 - Overview presentations
 - Details provided in the submitted reports (papers)
 - Scope based on guidance provided by NRC and the Panel

Reports

- PIRT for Critical Inlet Header Break LOCA in ACR-700
 - Report 108US-03500-LS-001
 - Sent to NRC on February 16, 2004
 - Copy available to each Panel member at the 3rd meeting in Washington
- PIRT for Single-Channel Severe Flow Blockage Event in ACR-700
 - Report 108US-03500-LS-002
 - Sent to NRC on February 16, 2004



Reports (cont'd)

- Scenario Description for RD-14M Critical Header Break LOCA Test B9401
 - Report 108US-03500-225-003
 - Sent to NRC on February 12, 2004
 - Electronic copy sent to NRC and Brent Boyack on February 12
- Scenario Description for ACR-700 Inlet Header Critical Break LOCA
 - Report 108US-03532-225-001
 - Sent to NRC on February 12, 2004
 - Electronic copy sent to NRC and Brent Boyack on February 12
 - This report is un updated version of an earlier preliminary paper sent to the Panel mid January



Reports (cont'd)

- CATHENA Simulation of RD-14M Critical Header Break LOCA Test B9401
 - Report 108US-03532-225-001
 - Sent to NRC on February 17, 2004
 - Copy available to each Panel member at the 3rd meeting



Additional Public Information

- CATHENA paper
 - "CATHENA: A thermalhydraulic code for CANDU analysis", by B.N. Hanna, published in Nuclear Engineering and Design 180 (1998) 113-131
 - Copy available for each Panel member at the 3rd meeting
- ACR and RD-14M posters to assist the Panel in the PIRT process at the 3rd meeting



Additional Proprietary Information

- Report on RD-14M Fuel Element Simulator characteristic time constant
 - TN-02-2071, "Design Description of a Modified RD-14M Test Section for Measuring Local FES Surface and Fluid Temperatures"
 - Provided as an attachment to the letter sent to NRC on February 13
- ACR-700 interconnect information
 - Detailed information on outlet header interconnect
 - Provided as an attachment to the letter sent to NRC on February 13
- CATHENA flow regimes model
 - Description of the flow regimes model in CATHENA provided as an attachment to the letter to NRC
 - Provided as an attachment to the letter sent to NRC on February 13

Presentations

- Scenario Description for RD-14M Critical Header Break LOCA Test B9401 and CATHENA Simulations
 - To be presented by Paul Ingham and Glen McGee
 - Available in the handouts for the meeting
- Scenario Description for ACR-700 Inlet Header Critical Break LOCA
 - To be presented by Dave Wright
 - Available in the handouts for the meeting
- Full Scale ACR Bundle Tests
 - Available in the handouts for the meeting
 - Laurence Leung available for discussions if needed



