

Westinghouse Owners Group
Large Break (LB) LOCA Redefinition Program

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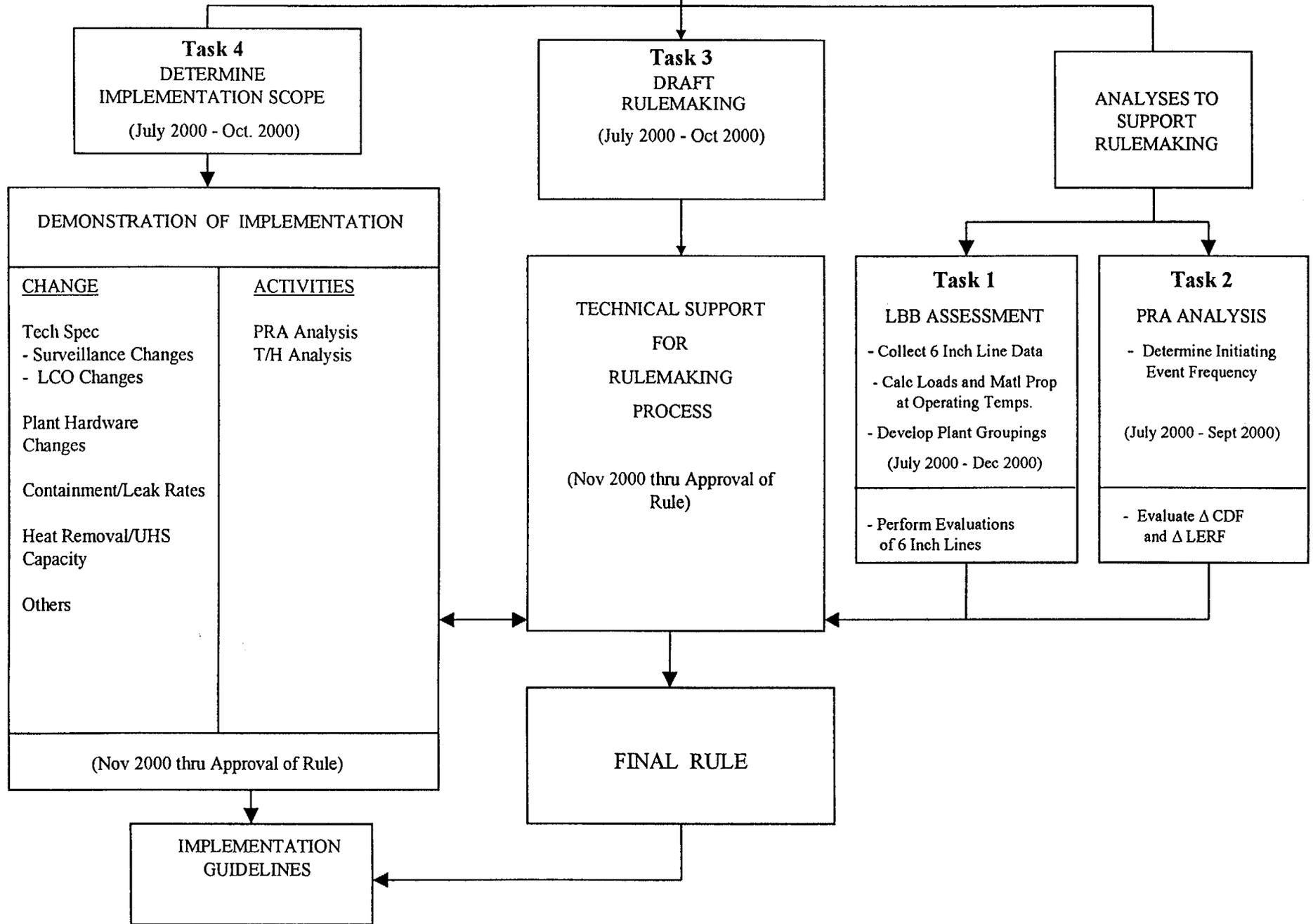
Presentation to NRC

July 11, 2000

Westinghouse Owners Group LBLOCA Redefinition

- Meeting Agenda
 - Status of WOG Program Activities
 - Four Tasks Initiated
 - Leak Before Break Data Collection and Grouping
 - Calculation of LBLOCA Initiating Event Frequency
 - Draft Rulemaking
 - Implementation Scope
 - Leak Before Break Technical Discussion
 - Future Activities
 - Summary of Meeting Action Items

LBLOCA REDEFINITION PROGRAM



Westinghouse Owners Group LBLOCA Redefinition

Leak Before Break (LBB)

- GDC 4 Allows Application of LBB to High Energy Piping
- LBB Approved to Eliminate Dynamic Effects (GDC 4) for Some Plants
 - Main Coolant Piping
 - Pressurizer Surge Piping
 - Accumulator Piping
 - RHR Piping
 - Main Coolant Bypass Piping

Westinghouse Owners Group LBLOCA Redefinition

Leak Before Break

- Extend Existing LBB Applications to Other Applications
 - Extend Beyond Application to Dynamic Effects
 - No Changes to Existing Methodology Contained in NUREG-1061, Vol 3 and Draft SRP 3.6.3
 - Adequate Margin of Safety Implicit in NUREG-1061, Vol 3 and Draft SRP 3.6.3
 - Perform Evaluations of Smaller Lines (Goal 6 Inches)
 - Optimize Generic Program
 - Minimize Plant Specific Reviews
 - Determine Plant Groupings to Utilize Grouping Approach
- Intend to Use LBB to Justify Performing LOCA Analysis In Small Break Range Only

Westinghouse Owners Group LBLOCA Redefinition

Leak Before Break

- Utilize Current LBB Methodology and Criteria
 - Calculate Normal and Faulted Loads
 - Determine Material Properties at Operating Temperatures
 - Perform LBB Analysis on Representative Lines by Plant Groupings
 - LBB Analysis Results will be Documented in WCAP Reports and Submitted for Staff Review

Westinghouse Owners Group LBLOCA Redefinition

- Leak Before Break Recommended Margins:
 - Margin of 10 on leak rate.
 - Margin of 2 on flaw size.
 - Margin of 1 on loads (using absolute summation method of faulted load combination).
- Westinghouse performed NRC approved LBB analyses for lines as small as 8 inches.
- WOG believes that LBB can be demonstrated for the 6 inch lines with adequate margins.

Westinghouse Owners Group LBLOCA Redefinition

Future Activities

- Meet with NRC in Early November to Discuss:
 - LOCA Initiating Event Frequencies
 - Implementation Scope
 - Status of Leak Before Break Groupings
 - Status of NRC Activities and Recommendations to Commission
 - Include Technical Branches in Meeting for Appropriate Topics
- Maintain Industry Involvement