

generation

*m***Power**

Containment Systems Overview

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REDACTED VERSION

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- Purpose
 - Discuss containment systems design features for the mPower reactor and applicability to the SRP
- Topics to be discussed
 - Containment layout overview
 - Summary of containment design parameters
 - Residual heat removal and containment cooling
 - Containment isolation system
 - Combustible gas control / containment purge
 - Leakage and containment testing
 - Containment analysis methodology
 - Control room ventilation system
 - Other nuclear island ventilation systems

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Containment Elevation Looking East

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Containment Elevation Looking North

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[CCI per Affidavit 4(a)-(d)]

Containment Plan at El. 17'-0"

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[CCI per Affidavit 4(a)-(d)]

Containment Plan at El. 32'-0"

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Containment Plan at El. 44'-0"

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[CCI per Affidavit 4(a)-(d)]

Containment Plan at El. 60'-0"

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[CCI per Affidavit 4(a)-(d)]

Containment Plan at El. 80'-0"

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[CCI per Affidavit 4(a)-(d)]

Containment Design Parameters

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[CCI per Affidavit 4(a)-(d)]

Containment Mass & Energy

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Post-LOCA Containment Cooling

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[CCI per Affidavit 4(a)-(d)]

Containment Isolation Provisions

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[CCI per Affidavit 4(a)-(d)]]

Combustible Gas Control

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[CCI per Affidavit 4(a)-(d)]

Containment Purge Operation Summary

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[CCI per Affidavit 4(a)-(d)]

Proposed Containment Purge System

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[CCI per Affidavit 4(a)-(d)]

Containment Leakage and Testing

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[CCI per Affidavit 4(a)-(d)]

Containment Analysis Methodology

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Subcompartment Analysis

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[CCI per Affidavit 4(a)-(d)]

Main Control Room Ventilation System Design Summary

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[CCI per Affidavit 4(a)-(d)]

Control Room Ventilation System

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Nuclear Island Ventilation System Design

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[CCI per Affidavit 4(a)-(d)]

Section	Title	Remarks
6.2.2	Containment Heat Removal	[
6.2.3	Secondary Containment	
6.5.1	ESF Atmosphere Cleanup	
6.5.2	Containment spray	
9.4.1	Control Room Ventilation	
9.4.2	Spent Fuel Area Ventilation	
9.4.5	ESF Ventilation Systems	

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[CCI per Affidavit 4(a)-(d)]