

# Risk-Informed Regulation Option 2 RISC Summary Report

## Wolf Creek Nuclear Operating Company Containment Spray System

### DESIGN BASIS ASSESSMENT

**GROUP DESCRIPTION** All non-safety related SSCs with the EN-02 function.

**ASSOCIATED COMPONENTS**

See attached sheet for full list of associated components.

**PRESENT SAFETY CLASS**

NS

**FUNCTION DESCRIPTION**

Reduce containment fission products from the containment atmosphere after a LOCA and control containment sump pH by incorporating NaOH from the Spray Additive Tank into containment spray, via the spray additive eductor, to the containment spray pumps.

### RISK ASSESSMENT

<u>Risk Assessment Area</u>	<u>Risk Classification</u>	<u>Comment</u>
<b>INITIATING EVENT RISC</b>	RISC-4	Not a significant contributor to an initiating event.
<b>EQUIPMENT FAILURES</b>	RISC-4	Not modeled in PRA.
<b>OPERATOR ACTION FAILURES</b>	N/A	Not modeled in PRA.
<b>FIRE RISC</b>	RISC-4	Not a significant contributor to an external fire event.
<b>FLOOD RISC</b>	RISC-4	Not a significant contributor to an external flood event.
<b>SEISMIC RISC</b>	RISC-4	Not a significant contributor to an external seismic event.
<b>OTHER EXTERNAL EVENTS RISC</b>	RISC-4	Not a significant contributor to any additional external events.
<b>SHUTDOWN RISC</b>	RISC-4	Not a significant contributor to shutdown.
<b>PRELIMINARY RISC</b>	RISC-4	Non-safety related and low safety significant.
<b>SENSITIVITY RISC</b>	N/A	Not modeled in PRA.
<b>DEFENSE IN DEPTH RISC</b>	RISC-4	N/A
<b>SAFETY MARGIN RISC</b>	RISC-4	No change to design basis functions.
<b>OVERALL RISC</b>	RISC-4	Non safety significant and non-safety related.

### OTHER RISK INFORMED APPLICATIONS

<u>Risk Informed Application</u>	<u>Risk Classification</u>	<u>Comment</u>
<b>MAINTENANCE RULE (a4)</b>	LOW	Consistent with EN-02 function.
<b>IN-SERVICE TESTING (IST)</b>	N/A	
<b>RI VALVE (MOV/AOV) PROGRAM</b>	N/A	
<b>TECH SPEC RELAXATION</b>	N/A	

### CRITICAL ATTRIBUTES

1	2	3	4	5

### IDP ASSESSMENT

**RISC GROUP**



**IDP COMMENTS**

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Wolf Creek Nuclear Operating Company      Containment Spray System

## ***PASSIVE MATRIX SUMMARY***

**SEGMENT ID**    CS04B

**SEGMENT DESCRIPTION**      Containment spray train B discharge from pump to exit of Room 1110

**FINAL RI-ISI**                      MEDIUM  
**PROGRAM RANKING**

### ***PASSIVE RISK ASSESSMENT***

<b><i>Risk Assessment Area</i></b>	<b><i>Rank</i></b>	<b><i>Comment</i></b>
<b><i>QUANTITATIVE</i></b>	MEDIUM	Modeled in original RI-ISI Program
<b><i>IE FREQ</i></b>	FALSE	N/A
<b><i>RCPB</i></b>	FALSE	N/A
<b><i>SAFETY FUNCTION</i></b>	TRUE	Pipe failure may result in complete drain of RWST, therefore, failing the emergency core cooling safety function.
<b><i>OP ACTION</i></b>	FALSE	N/A
<b><i>SS COMP</i></b>	FALSE	N/A
<b><i>SAFE SHUTDOWN</i></b>	FALSE	N/A
<b><i>FP BARRIER</i></b>	FALSE	N/A
<b><i>EOP</i></b>	FALSE	N/A
<b><i>INADV RELEASE</i></b>	FALSE	N/A
<b><i>MITIGATE</i></b>	FALSE	N/A
<b><i>DEFENSE IN DEPTH</i></b>	FALSE	N/A
<b><i>SAFETY MARGIN</i></b>	FALSE	N/A
<b><i>OVERALL</i></b>	<b>HIGH</b>	Potential impact on passive functionality for Containment Spray System.

### ***PASSIVE IDP ASSESSMENT***

**IDP RANKING**

**IDP COMMENTS**

