

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>
INITIATING EVENT RISC	RISC-4	Not a significant contributor to an initiating event.
EQUIPMENT FAILURES	RISC-4	Not modeled in PRA.
OPERATOR ACTION FAILURES	N/A	Not modeled in PRA.
FIRE RISC	RISC-4	Not a significant contributor to an external fire event.
FLOOD RISC	RISC-4	Not a significant contributor to an external flood event.
SEISMIC RISC	RISC-4	Not a significant contributor to an external seismic event.
OTHER EXTERNAL EVENTS RISC	RISC-4	Not a significant contributor to any additional external events.
SHUTDOWN RISC	RISC-4	Not a significant contributor to shutdown.
PRELIMINARY RISC	RISC-4	Non-safety related and low safety significant.
SENSITIVITY RISC	N/A	Not modeled in PRA.
DEFENSE IN DEPTH RISC	RISC-4	N/A
SAFETY MARGIN RISC	RISC-4	No change to design basis functions.
OVERALL RISC	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>
MAINTENANCE RULE (a4)	LOW	Consistent with EN-02 function.
IN-SERVICE TESTING (IST)	N/A	
RI VALVE (MOV/AOV) PROGRAM	N/A	
TECH SPEC RELAXATION	N/A	

CRITICAL ATTRIBUTES

1	2	3	4	5

IDP ASSESSMENT

RISC GROUP

IDP COMMENTS



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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

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

PASSIVE IDP ASSESSMENT

IDP RANKING

IDP COMMENTS

