

FOR INFORMATION ONLY

REACTOR COOLANT SYSTEM

OVERPRESSURE PROTECTION SYSTEMS

LIMITING CONDITION FOR OPERATION

3.4.8.3 Both shutdown cooling system (SCS) suction line relief valves with lift settings of less than or equal to 467 psig shall be OPERABLE and aligned to provide overpressure protection for the Reactor Coolant System.

APPLICABILITY: When the reactor vessel head is installed and the temperature of one or more of the RCS cold legs is less than or equal to:

- a. 214°F during cooldown
- b. 291°F during heatup

ACTION:

- b.x.* From MODES 5 or 6 24 hours either (1)
With one SCS relief valve inoperable, restore the inoperable valve to OPERABLE status within seven days or reduce T_{cold} to less than 200°F and depressurize and vent the RCS through a greater than or equal to 16 square inch vent(s) within the next eight hours. Do not start a reactor coolant pump if the steam generator secondary water temperature is greater than 100°F above any RCS cold leg temperature.
a total of 32
- c.x.* With both SCS relief valves inoperable, reduce T_{cold} to less than 200°F and, depressurize and vent the RCS through a greater than or equal to 16 square inch vent(s) within eight hours. Do not start a reactor coolant pump if the steam generator secondary water temperature is greater than 100°F above any RCS cold leg temperature.

e.x. In the event either the SCS suction line relief valves or an RCS vent(s) are used to mitigate an RCS pressure transient, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 30 days. The report shall describe the circumstances initiating the transient, the effect of the SCS suction line relief valves or RCS vent(s) on the transient and any corrective action necessary to prevent recurrence.

f.x. The provisions of Specification 3.0.4 are not applicable.

d. With the RCS vented per ACTIONS a, b, or c, verify the vent pathway at least once per 31 days when the pathway is provided by a valve(s) that is locked, sealed, or otherwise secured in the open position; otherwise, verify the vent pathway every 12 hours.

a. From MODE 4 with one SCS relief valve inoperable, restore the inoperable valve to OPERABLE status within 7 days or depressurize and vent the RCS through at least a 16 square inch vent(s) within the next 8 hours. Do not start a reactor coolant pump if the steam generator water temperature is greater than 100°F above any RCS cold leg temperature.



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REACTOR COOLANT SYSTEM

SURVEILLANCE REQUIREMENTS

4.4.8.3.1 Each SCS suction line relief valve shall be verified to be aligned to provide overpressure protection for the RCS ~~once every 8 hours~~ during

- a. Cooldown with the RCS temperature less than or equal to 214°F.
- b. Heatup with the RCS temperature less than or equal to 291°F.

4.4.8.3.2 The SCS suction line relief valves shall be verified OPERABLE with the required ^{setpoint} ~~at least once per 18 months~~.

as by Specification 4.0.5.

at least once per 31 days when the pathway is provided by a valve(s) that is locked, sealed, or otherwise secured in the open position; otherwise verify alignment every 12 hours.

THE
FEDERAL BUREAU OF INVESTIGATION
UNITED STATES DEPARTMENT OF JUSTICE
WASHINGTON, D. C. 20535

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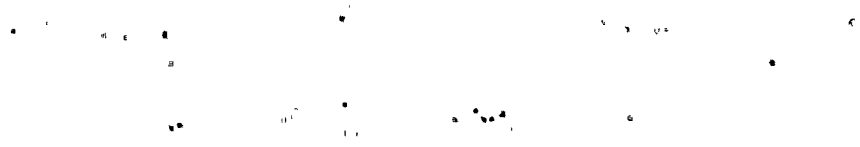
- a. 214°F during cooldown
- b. 291°F during heatup

ACTION:

- b. *From MODES 5 or 6* *24 hours* *either (1)*
~~With one SCS relief valve inoperable, restore the inoperable valve to OPERABLE status within seven days or reduce T_{cold} to less than 200°F and depressurize and vent the RCS through a greater than or equal to 16 square inch vent(s) within the next eight hours. Do not start a reactor coolant pump if the steam generator secondary water temperature is greater than 100°F above any RCS cold leg temperature.~~
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a total of 32
- c. With both SCS relief valves inoperable, reduce T_{cold} to less than 200°F and, depressurize and vent the RCS through a greater than or equal to 16 square inch vent(s) within eight hours. Do not start a reactor coolant pump if the steam generator secondary water temperature is greater than 100°F above any RCS cold leg temperature.
- e. In the event either the SCS suction line relief valves or an RCS vent(s) are used to mitigate an RCS pressure transient, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 30 days. The report shall describe the circumstances initiating the transient, the effect of the SCS suction line relief valves or RCS vent(s) on the transient and any corrective action necessary to prevent recurrence.
- f. The provisions of Specification 3.0.4 are not applicable.

d. With the RCS vented per ACTIONS a, b, or c, verify the vent pathway at least once per 31 days when the pathway is provided by a valve(s) that is locked, sealed, or otherwise secured in the open position; otherwise, verify the vent pathway every 12 hours.

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as by Specification 4.0.5.

at least once per 31 days when the pathway is provided by a valve(s) that is locked, sealed, or otherwise secured in the open position; otherwise verify alignment every 12 hours.

1944

The following is a list of the names of the persons who were present at the meeting held on the 1st day of January, 1944, at the residence of Mr. J. H. Smith, 1234 Main Street, New York City.

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complete action *venting of* *(2)* *cold*
at least a *total of 32*
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Condition	10 years	12 years	14 years
1	~85%	~75%	~65%
2	~75%	~65%	~55%
3	~65%	~55%	~45%
4	~55%	~45%	~35%
5	~45%	~35%	~25%

●

100

Concentration of inhibitor (mole/l)	Rate of polymerization (mole/l-hr)
0	0.008
0.001	0.007
0.002	0.006
0.003	0.005
0.004	0.004
0.005	0.003
0.006	0.002
0.007	0.0015
0.008	0.001
0.009	0.0008
0.01	0.0005

Figure 1 is a line graph showing the percentage of total catch versus the number of hauls for various fish species. The x-axis is labeled 'Number of hauls' and ranges from 0 to 10. The y-axis is labeled 'Percentage of total catch' and ranges from 0 to 100. There are 20 data series, each represented by a different line style and marker. The series are numbered 1 through 20. Series 1 (solid line, circles) shows a sharp increase in catch percentage as the number of hauls increases, reaching nearly 100% by haul 10. Series 2 (dashed line, squares) shows a more gradual increase, reaching about 80% by haul 10. Series 3 (dotted line, triangles) shows a very low catch percentage, remaining near 0% throughout. Series 4 (dash-dot line, diamonds) shows a moderate catch percentage, increasing to about 40% by haul 10. Series 5 (solid line, circles) shows a high catch percentage, reaching about 90% by haul 10. Series 6 (dashed line, squares) shows a moderate catch percentage, increasing to about 60% by haul 10. Series 7 (dotted line, triangles) shows a very low catch percentage, remaining near 0% throughout. Series 8 (dash-dot line, diamonds) shows a moderate catch percentage, increasing to about 40% by haul 10. Series 9 (solid line, circles) shows a high catch percentage, reaching about 90% by haul 10. Series 10 (dashed line, squares) shows a moderate catch percentage, increasing to about 60% by haul 10. Series 11 (dotted line, triangles) shows a very low catch percentage, remaining near 0% throughout. Series 12 (dash-dot line, diamonds) shows a moderate catch percentage, increasing to about 40% by haul 10. Series 13 (solid line, circles) shows a high catch percentage, reaching about 90% by haul 10. Series 14 (dashed line, squares) shows a moderate catch percentage, increasing to about 60% by haul 10. Series 15 (dotted line, triangles) shows a very low catch percentage, remaining near 0% throughout. Series 16 (dash-dot line, diamonds) shows a moderate catch percentage, increasing to about 40% by haul 10. Series 17 (solid line, circles) shows a high catch percentage, reaching about 90% by haul 10. Series 18 (dashed line, squares) shows a moderate catch percentage, increasing to about 60% by haul 10. Series 19 (dotted line, triangles) shows a very low catch percentage, remaining near 0% throughout. Series 20 (dash-dot line, diamonds) shows a moderate catch percentage, increasing to about 40% by haul 10.

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