

**PROPOSAL FOR
DEFINITIONS TO BE USED IN THE
SCRAMS WITH LOSS OF NORMAL HEAT REMOVAL PI**

Definitions

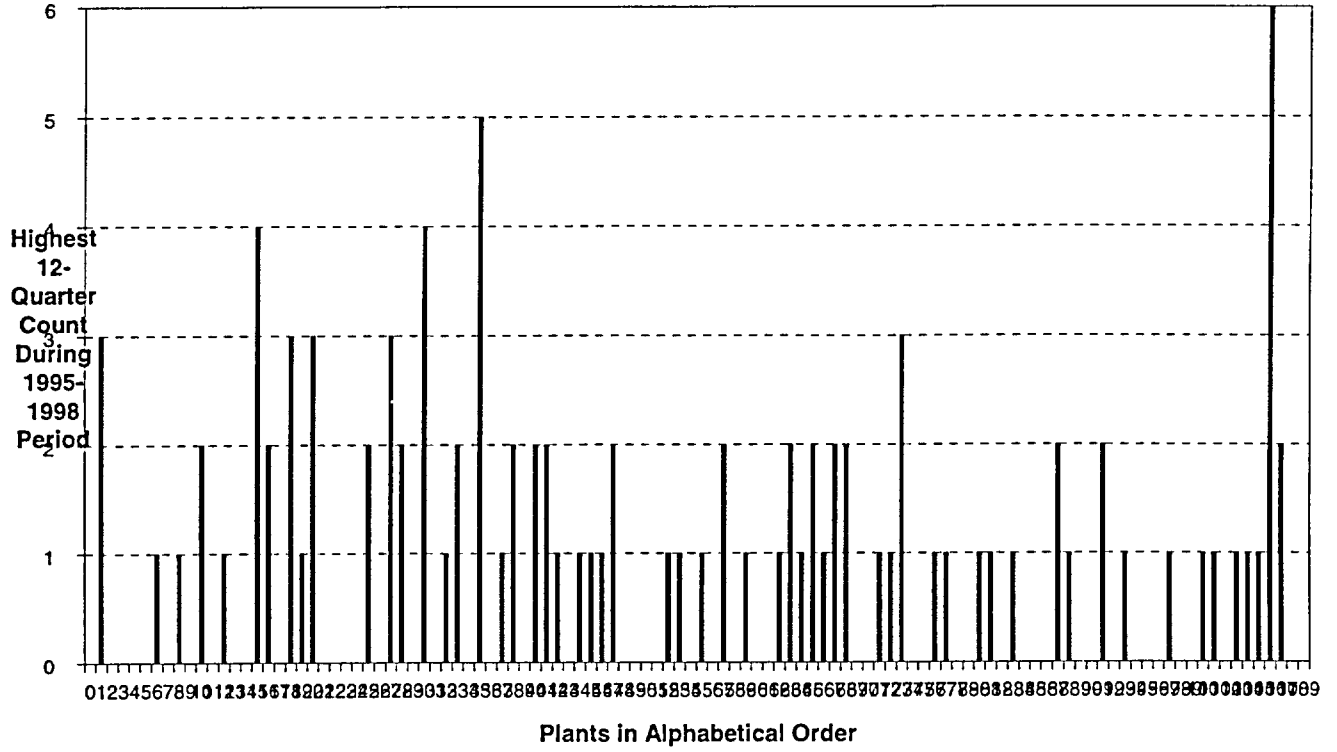
Loss of the normal heat removal path comprises the following:

1. Scrams caused by the complete loss of all main feedwater flow
2. Scrams caused by, concurrent with, or followed by any of the following:
 - complete closure of at least one main steam isolation valve in each main steam line
 - decrease in condenser vacuum that prevents the removal of decay heat
 - failure of turbine bypass capacity that results in insufficient bypass capacity remaining to maintain reactor temperature and pressure
3. Scrams in which all sources of main feedwater flow are lost following the scram and none of them are easily recoverable. Feedwater pump trips that are initiated by design features as part of the expected plant response to uncomplicated reactor scrams (i.e., closure of feedwater regulating valves at Westinghouse plants) are not included in the indicator.

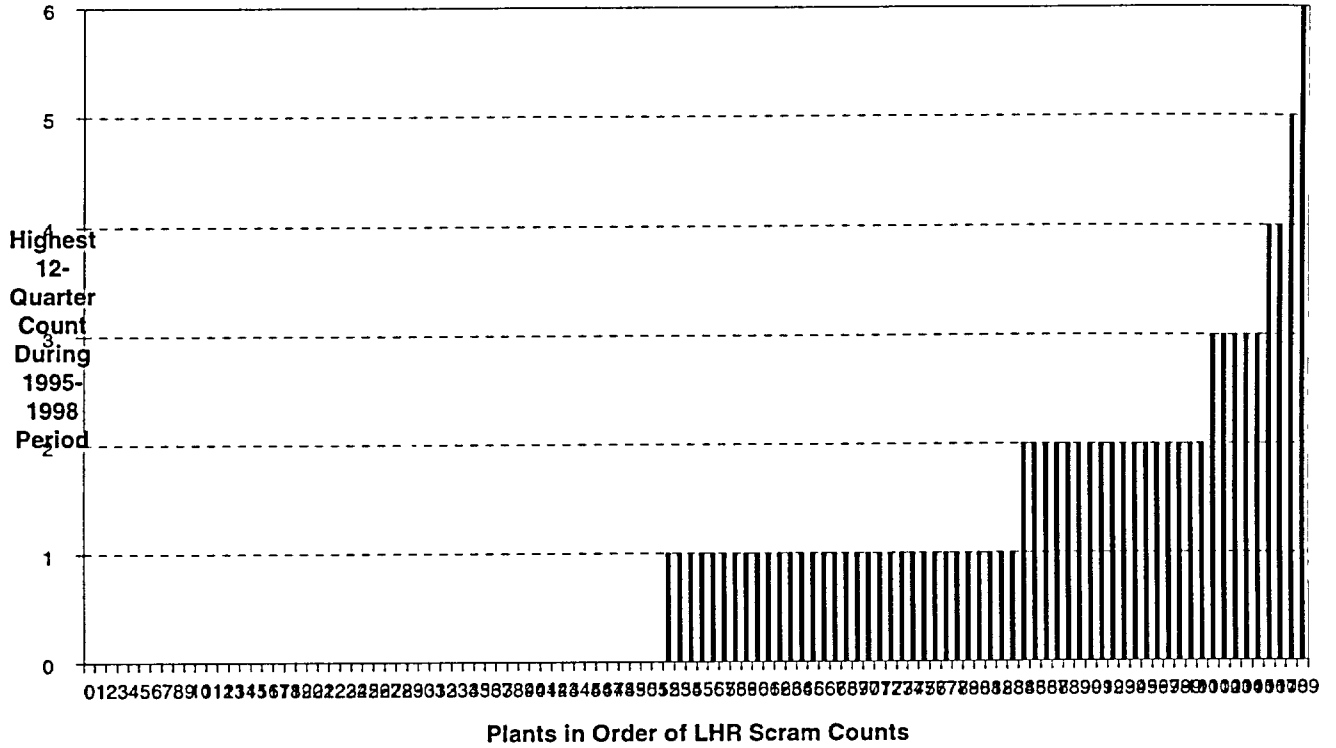
Easily recoverable means that the equipment function can be promptly restored from the control room by a qualified operator taking an uncomplicated action (a single action or a few simple actions) without diagnosis or repair (i.e., the restoration actions are virtually certain to be successful during accident conditions). Note that under stressful, chaotic conditions, otherwise simple multiple actions may not be accomplished with the virtual certainty called for by the guidance. In addition, some manual operations of systems designed to operate automatically, such as manual control of the HPCI turbine to establish and control injection flow, are not virtually certain to be successful. A feedwater pump (motor- or turbine-driven) that has tripped on high level is considered to be easily recoverable if no operator errors or malfunctions of associated hardware, software, logic circuits, or power supplies occur prior to, concurrent with, or after the scram.

Diagnosis is defined as the investigation or analysis to determine the cause of a condition. For purposes of the performance indicators, such an investigation is not considered to be diagnostic if the information readily available to the operator on the front panels is sufficient (1) to identify the problem and the actions necessary to correct the condition, and (2) his/her first action to restore the function is successful.

Scrams with Loss of Normal Heat Removal



Scrams with Loss of Normal Heat Removal



X_AXIS PL_NAME	DOCKET	PERIOD1	PERIOD2	PERIOD3	PERIOD4	PERIOD5	HIGHEST
0							
1 ARKANSAS 1	313	3	3	2	2	2	3
2 ARKANSAS 2	368	0	0	0	0	0	0
3 BEAVER VALLEY 1	334	0	0	0	0	0	0
4 BEAVER VALLEY 2	412	0	0	0	0	0	0
5 BIG ROCK POINT	155	0	0	0	0	0	0
6 BRAIDWOOD 1	456	1	1	0	0	0	1
7 BRAIDWOOD 2	457	0	0	0	0	0	0
8 BROWNS FERRY 2	260	1	1	1	1	1	1
9 BROWNS FERRY 3	296	0	0	0	0	0	0
10 BRUNSWICK 1	325	2	2	2	0	0	2
11 BRUNSWICK 2	324	0	0	0	0	0	0
12 BYRON 1	454	1	1	1	1	1	1
13 BYRON 2	455	0	0	0	0	0	0
14 CALLAWAY	483	0	0	0	0	0	0
15 CALVERT CLIFFS 1	317	4	4	3	3	1	4
16 CALVERT CLIFFS 2	318	2	1	1	2	2	2
17 CATAWBA 1	413	0	0	0	0	0	0
18 CATAWBA 2	414	3	3	2	2	2	3
19 CLINTON 1	461	1	1	1	1	1	1
20 COMANCHE PEAK 1	445	3	3	2	2	2	3
21 COMANCHE PEAK 2	446	0	0	0	0	0	0
22 COOK 1	315	0	0	0	0	0	0
23 COOK 2	316	0	0	0	0	0	0
24 COOPER STATION	298	0	0	0	0	0	0
25 CRYSTAL RIVER 3	302	0	1	1	2	2	2
26 DAVIS-BESSE	346	0	0	0	0	0	0
27 DIABLO CANYON 1	275	3	3	3	3	1	3
28 DIABLO CANYON 2	323	2	2	2	1	2	2
29 DRESDEN 2	237	0	0	0	0	0	0
30 DRESDEN 3	249	4	3	3	3	2	4
31 DUANE ARNOLD	331	0	0	0	0	0	0
32 FARLEY 1	348	0	0	0	1	1	1
33 FARLEY 2	364	2	2	0	0	0	2
34 FERMI 2	341	0	0	0	0	0	0
35 FITZPATRICK	333	5	5	5	5	5	5
36 FORT CALHOUN	285	0	0	0	0	0	0
37 GINNA	244	1	1	1	0	0	1
38 GRAND GULF	416	2	2	2	0	0	2
39 HADDAM NECK	213	0	0	0	0	0	0
40 HARRIS	400	2	2	2	2	2	2
41 HATCH 1	321	2	2	2	2	2	2
42 HATCH 2	366	1	1	1	1	1	1
43 HOPE CREEK	354	0	0	0	0	0	0
44 INDIAN POINT 2	247	1	1	0	0	0	1
45 INDIAN POINT 3	286	1	1	0	1	1	1
46 KEWAUNEE	305	0	1	1	1	1	1
47 LASALLE 1	373	2	2	2	1	1	2
48 LASALLE 2	374	0	0	0	0	0	0

49 LIMERICK 1	352	0	0	0	0	0	0
50 LIMERICK 2	353	0	0	0	0	0	0
51 MAINE YANKEE	309	0	0	0	0	0	0
52 MCGUIRE 1	369	1	1	1	1	1	1
53 MCGUIRE 2	370	1	1	1	1	1	1
54 MILLSTONE 1	245	0	0	0	0	0	0
55 MILLSTONE 2	336	1	1	1	0	0	1
56 MILLSTONE 3	423	0	0	0	0	0	0
57 MONTICELLO	263	1	1	1	2	2	2
58 NINE MILE PT. 1	220	0	0	0	0	0	0
59 NINE MILE PT. 2	410	1	1	0	0	0	1
60 NORTH ANNA 1	338	0	0	0	0	0	0
61 NORTH ANNA 2	339	0	0	0	0	0	0
62 OCONEE 1	269	1	1	1	1	1	1
63 OCONEE 2	270	0	0	1	1	2	2
64 OCONEE 3	287	1	1	1	1	1	1
65 OYSTER CREEK	219	1	2	2	2	2	2
66 PALISADES	255	1	1	0	0	0	1
67 PALO VERDE 1	528	2	2	2	2	0	2
68 PALO VERDE 2	529	2	2	2	1	1	2
69 PALO VERDE 3	530	0	0	0	0	0	0
70 PEACH BOTTOM 2	277	0	0	0	0	0	0
71 PEACH BOTTOM 3	278	1	0	0	0	0	1
72 PERRY	440	1	1	1	1	1	1
73 PILGRIM	293	3	3	3	3	3	3
74 POINT BEACH 1	266	0	0	0	0	0	0
75 POINT BEACH 2	301	0	0	0	0	0	0
76 PRAIRIE ISLAND 1	282	0	0	1	1	1	1
77 PRAIRIE ISLAND 2	306	1	1	1	1	1	1
78 QUAD CITIES 1	254	0	0	0	0	0	0
79 QUAD CITIES 2	265	0	0	0	0	0	0
80 RIVER BEND	458	1	1	1	1	1	1
81 ROBINSON 2	261	0	0	0	0	1	1
82 SALEM 1	272	0	0	0	0	0	0
83 SALEM 2	311	1	1	1	1	1	1
84 SAN ONOFRE 2	361	0	0	0	0	0	0
85 SAN ONOFRE 3	362	0	0	0	0	0	0
86 SEABROOK	443	0	0	0	0	0	0
87 SEQUOYAH 1	327	2	2	2	2	2	2
88 SEQUOYAH 2	328	1	1	1	1	0	1
89 SOUTH TEXAS 1	498	0	0	0	0	0	0
90 SOUTH TEXAS 2	499	0	0	0	0	0	0
91 ST. LUCIE 1	335	1	2	2	1	1	2
92 ST. LUCIE 2	389	0	0	0	0	0	0
93 SUMMER	395	1	1	1	1	1	1
94 SURRY 1	280	0	0	0	0	0	0
95 SURRY 2	281	0	0	0	0	0	0
96 SUSQUEHANNA 1	387	0	0	0	0	0	0
97 SUSQUEHANNA 2	388	1	1	1	1	1	1
98 THREE MILE ISL 1	289	0	0	0	0	0	0

99 TURKEY POINT 3	250	0	0	0	0	0	0
100 TURKEY POINT 4	251	1	1	1	1	1	1
101 VERMONT YANKEE	271	0	0	1	1	1	1
102 VOGTLE 1	424	0	0	0	0	0	0
103 VOGTLE 2	425	0	0	0	1	1	1
104 WASH. NUCLEAR 2	397	0	1	1	1	1	1
105 WATERFORD 3	382	1	1	0	0	0	1
106 WATTS BAR 1	390	6	6	6	6	6	6
107 WOLF CREEK	482	2	1	1	1	1	2
108 ZION 1	295	0	0	0	0	0	0
109 ZION 2	304	0	0	0	0	0	0
0 TOTAL		86	87	78	74	69	100

X_AXIS PL_NAME	DOCKET	HIGHEST
0		
1 ARKANSAS 2	368	0
2 BEAVER VALLEY 1	334	0
3 BEAVER VALLEY 2	412	0
4 BIG ROCK POINT	155	0
5 BRAIDWOOD 2	457	0
6 BROWNS FERRY 3	296	0
7 BRUNSWICK 2	324	0
8 BYRON 2	455	0
9 CALLAWAY	483	0
10 CATAWBA 1	413	0
11 COMANCHE PEAK 2	446	0
12 COOK 1	315	0
13 COOK 2	316	0
14 COOPER STATION	298	0
15 DAVIS-BESSE	346	0
16 DRESDEN 2	237	0
17 DUANE ARNOLD	331	0
18 FERMI 2	341	0
19 FORT CALHOUN	285	0
20 HADDAM NECK	213	0
21 HOPE CREEK	354	0
22 LASALLE 2	374	0
23 LIMERICK 1	352	0
24 LIMERICK 2	353	0
25 MAINE YANKEE	309	0
26 MILLSTONE 1	245	0
27 MILLSTONE 3	423	0
28 NINE MILE PT. 1	220	0
29 NORTH ANNA 1	338	0
30 NORTH ANNA 2	339	0
31 PALO VERDE 3	530	0
32 PEACH BOTTOM 2	277	0
33 POINT BEACH 1	266	0
34 POINT BEACH 2	301	0

35 QUAD CITIES 1	254	0
36 QUAD CITIES 2	265	0
37 SALEM 1	272	0
38 SAN ONOFRE 2	361	0
39 SAN ONOFRE 3	362	0
40 SEABROOK	443	0
41 SOUTH TEXAS 1	498	0
42 SOUTH TEXAS 2	499	0
43 ST. LUCIE 2	389	0
44 SURRY 1	280	0
45 SURRY 2	281	0
46 SUSQUEHANNA 1	387	0
47 THREE MILE ISL 1	289	0
48 TURKEY POINT 3	250	0
49 VOGTLE 1	424	0
50 ZION 1	295	0
51 ZION 2	304	0
52 BRAIDWOOD 1	456	1
53 BROWNS FERRY 2	260	1
54 BYRON 1	454	1
55 CLINTON 1	461	1
56 FARLEY 1	348	1
57 GINNA	244	1
58 HATCH 2	366	1
59 INDIAN POINT 2	247	1
60 INDIAN POINT 3	286	1
61 KEWAUNEE	305	1
62 MCGUIRE 1	369	1
63 MCGUIRE 2	370	1
64 MILLSTONE 2	336	1
65 NINE MILE PT. 2	410	1
66 OCONEE 1	269	1
67 OCONEE 3	287	1
68 PALISADES	255	1
69 PEACH BOTTOM 3	278	1
70 PERRY	440	1
71 PRAIRIE ISLAND 1	282	1
72 PRAIRIE ISLAND 2	306	1
73 RIVER BEND	458	1
74 ROBINSON 2	261	1
75 SALEM 2	311	1
76 SEQUOYAH 2	328	1
77 SUMMER	395	1
78 SUSQUEHANNA 2	388	1
79 TURKEY POINT 4	251	1
80 VERMONT YANKEE	271	1
81 VOGTLE 2	425	1
82 WASH. NUCLEAR 2	397	1
83 WATERFORD 3	382	1
84 BRUNSWICK 1	325	2

85 CALVERT CLIFFS 2	318	2
86 CRYSTAL RIVER 3	302	2
87 DIABLO CANYON 2	323	2
88 FARLEY 2	364	2
89 GRAND GULF	416	2
90 HARRIS	400	2
91 HATCH 1	321	2
92 LASALLE 1	373	2
93 MONTICELLO	263	2
94 OCONEE 2	270	2
95 OYSTER CREEK	219	2
96 PALO VERDE 1	528	2
97 PALO VERDE 2	529	2
98 SEQUOYAH 1	327	2
99 ST. LUCIE 1	335	2
100 WOLF CREEK	482	2
101 ARKANSAS 1	313	3
102 CATAWBA 2	414	3
103 COMANCHE PEAK 1	445	3
104 DIABLO CANYON 1	275	3
105 PILGRIM	293	3
106 CALVERT CLIFFS 1	317	4
107 DRESDEN 3	249	4
108 FITZPATRICK	333	5
109 WATTS BAR 1	390	6