

TABLE 3.7.1
PRIMARY CONTAINMENT ISOLATION

Isolation Group	Valve Identification	Number of Power Operated Valves		Maximum Operating Time (sec)	Normal Position	Action on Initiating Signal
		Outboard	Inboard			
1	Main Steam Line Isolation	(4)203-2A,B,C,D	(4)203-1A,B,C,D	3*T*5	0	GC
1	Main Steam Line Drain	220-2	220-1	* 35	C	SC
1	Recirculation Loop Sample (See Note 1)	220-45	220-44	* 5	C	SC
1	Isolation Condenser Vent	1301-20	1301-17	* 5	0	GC
2	Reactor Head Cooling		205-2-4	* 15	C	SC
2	Drywell Floor Drain	2001-106	2001-105	* 20	C	SC
2	Drywell Equipment Drain	2001-6	2001-5	* 20	C	SC
2	Drywell Vents	1601-23	1601-24	* 10	C	SC
2	Drywell Vent Relief		1601-62	* 15	C	SC
2	Drywell Inert & Purge		1601-21	* 10	C	SC
2	Drywell N ₂ Makeup		1601-59	* 15	0	GC
2	Drywell/Torus N ₂ Makeup	1601-57		* 15	0	GC
2	Drywell/Torus Inert	1601-55		* 15	0	GC
2	Torus N ₂ Makeup		1601-58	* 15	C	SC
2	Torus Inert & Purge		1601-56	* 10	0	GC
2	Drywell & Torus Vent from Reactor Building	1601-22		* 10	C	SC
2	Drywell Vent to Standby Gas Treatment	1601-63		* 10	C	SC
2	Torus Vent		1601-60	* 10	C	SC
2	Torus Vent Relief		1601-61	* 15	C	SC
2	Drywell Air Sampling System (See Note 1)	(7)9205A, 9206A, 9207B, 9208B, 8501-1B, 8501-3B, 8501-5B	(7)9205B, 9206B, 9207A, 9208A, 8501-1A, 8501-3A, 8501-5A	* 5	0	GC
2	Torus to Condenser Drain	1599-62	1599-61	* 10	C	SC
2	Drywell Pneumatic Supply	4721	4720	* 10	0	GC
3	Cleanup Demineralizer System	1201-2	1201-1	* 30	0	GC
3	Cleanup demineralizer System	1201-3		* 30	C	SC
3	Shutdown Cooling	(3)1001-2A,B,C	(4) 1001-1A, B; 1001-5A, B	* 40	C	SC
4	HPCI Turbine Steam Supply	2301-4	2301-5	* 25	0	GC
4	HPCI Torus Suction	2301-35	2301-36	* 30	C	SC
5	Isolation Condenser Steam Supply	1301-2	1301-1	* 30	0	GC
5	Isolation Condenser Condensate Return		1301-4	* 30	0	GC
5	Isolation Condenser Condensate Return	1301-3		* 30	C	SC
N/A	Feedwater Check Valves	220-62A,62B	220-58A,58B	N/A	0	Process
N/A	Control Rod Hydraulic Return Check Valves	301-95	301-98	N/A	0	Process
N/A	Reactor Head Cooling Check Valves		205-2-7	N/A	C	Process
N/A	Standby Liquid Control Check Valves	1101-16	1101-15	N/A	C	Process
N/A	Core Spray Injection	(2)1402-24A,24B		N/A	0	N/A
			(2)1402-25A,25B	N/A	C	N/A
N/A	Core Spray Test Return		(2)1402-4A,4B	N/A	C	N/A
N/A	Core Spray Suction		(2)1402-3A,3B	N/A	0	N/A
N/A	LPCI Torus Spray	(2)1501-18A,18B	(2)1501-19A,19B	N/A	C	N/A
N/A	LPCI Test Return	(2)1501-20A,20B	(2)1501-38A,38B	N/A	C	N/A
N/A	LPCI Injection	(2)1501-22A,22B	(2)1501-25A,25B	N/A	C	N/A
N/A	LPCI Drywell Spray	(2)1501-27A,27B	(2)1501-28A,28B	N/A	C	N/A
N/A	LPCI Suction		(4)1501-5A,5B,5C,5D	N/A	0	N/A

Notes: (See Next Page)

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Table 3.7.1 (Cont'd.)

Notes for Table 3.7.1

* Less than or equal to

Note 1; Valve can be reopened after isolation for sampling.

Key: O = Open
 C = Closed
 SC = Stays Closed
 GC = Goes Closed

Note: Isolation groupings are as follows:

GROUP 1: The valves in Group 1 are closed upon any one of the following conditions:

1. Reactor low-low water level
2. Main steam line high radiation
3. Main steam line high flow
4. Main steam line tunnel high temperature
5. Main steam line low pressure

GROUP 2: The actions in Group 2 are initiated by any one of the following conditions:

1. Reactor low water level
2. High drywell pressure

GROUP 3: Reactor low water level alone initiates the following:

1. Cleanup demineralizer system isolation
2. Shutdown cooling system isolation

GROUP 4: Isolation valves in the high pressure coolant injection system (HPCI) are closed upon any one of the following signals:

1. HPCI steam line high flow
2. High temperature in the vicinity of the HPCI steam line
3. Low reactor pressure

GROUP 5: Isolation valves associated with the isolation condenser are closed upon indication of either high isolation condenser steam or condensate flow.

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Isolation Group	Valve Identification	Number of Power Operated Valves		Maximum Operating Time (sec)	Normal Position	Action on Initiating Signal
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1	Main Steam Line Drain	220-2	220-1	* 35	C	SC
1	Recirculation Loop Sample (See Note 1)	220-45	220-44	* 5	C	SC
1	Isolation Condenser Vent	1301-20	1301-17	* 5	O	GC
2	Reactor Head Cooling		205-2-4	* 15	C	SC
2	Drywell Floor Drain	2001-106	2001-105	* 20	C	SC
2	Drywell Equipment Drain	2001-6	2001-5	* 20	C	SC
2	Drywell Vents	1601-23	1601-24	* 10	C	SC
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2	Drywell/Torus Inert	1601-55		* 15	O	GC
2	Torus N ₂ Makeup		1601-58	* 15	C	SC
2	Torus Inert & Purge		1601-56	* 10	O	GC
2	Drywell & Torus Vent from Reactor Building	1601-22		* 10	C	SC
2	Drywell Vent to Standby Gas Treatment	1601-63		* 10	C	SC
2	Torus Vent		1601-60	* 10	C	SC
2	Torus Vent Relief		1601-61	* 15	C	SC
2	Drywell Air Sampling System (See Note 1)	(7)9205A, 9206A, 9207B, 9208B, 8501-1B, 8501-3B, 8501-5B	(7)9205B, 9206B, 9207A, 9208A, 8501-1A, 8501-3A, 8501-5A	* 5	O	GC
2	Torus to Condenser Drain	1599-62	1599-61	* 10	C	SC
2	Drywell Pneumatic Supply	4721	4720	* 10	O	GC
3	Cleanup Demineralizer System	1201-2	1201-1,1A	* 30	O	GC
3	Cleanup demineralizer System	1201-3		* 30	C	SC
3	Shutdown Cooling	(3)1001-2A,B,C	(4) 1001-1A, B, 1001-5A, B	* 40	C	SC
4	HPCI Turbine Steam Supply	2301-4	2301-5	* 25	O	GC
4	HPCI Torus Suction	2301-35	2301-36	* 30	C	SC
5	Isolation Condenser Steam Supply	1301-2	1301-1	* 30	O	GC
5	Isolation Condenser Condensate Return		1301-4	* 30	O	GC
5	Isolation Condenser Condensate Return	1301-3		* 30	C	SC
N/A	Feedwater Check Valves	220-62A,62B	220-58A-58B	N/A	O	Process
N/A	Control Rod Hydraulic Return Check Valves	301-95	301-98	N/A	O	Process
N/A	Reactor Head Cooling Check Valves		205-2-7	N/A	C	Process
N/A	Standby Liquid Control Check Valves	1101-16	1101-15	N/A	C	Process
N/A	Core Spray Injection	(2)1402-24A,24B	(2)1402-25A,25B	N/A	O	N/A
N/A	Core Spray Test Return		(2)1402-4A,4B	N/A	C	N/A
N/A	Core Spray Suction		(2)1402-3A,3B	N/A	O	N/A
N/A	LPCI Torus Spray	(2)1501-18A,18B	(2)1501-19A,19B	N/A	C	N/A
N/A	LPCI Test Return	(2)1501-20A,20B	(2)1501-38A,38B	N/A	C	N/A
N/A	LPCI Injection	(2)1501-22A,22B	(2)1501-25A,25B	N/A	C	N/A
N/A	LPCI Drywell Spray	(2)1501-27A,27B	(2)1501-28A,28B	N/A	C	N/A
N/A	LPCI Suction		(4)1501-5A,5B,5C,5D	N/A	O	N/A

Notes: (See Next Page)

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Note 1; Valve can be reopened after isolation for sampling.

Key: O = Open
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Note: Isolation groupings are as follows:

GROUP 1: The valves in Group 1 are closed upon any one of the following conditions:

1. Reactor low-low water level
2. Main steam line high radiation
3. Main steam line high flow
4. Main steam line tunnel high temperature
5. Main steam line low pressure

GROUP 2: The actions in Group 2 are initiated by any one of the following conditions:

1. Reactor low water level
2. High drywell pressure

GROUP 3: Reactor low water level alone initiates the following:

1. Cleanup demineralizer system isolation
2. Shutdown cooling system isolation

GROUP 4: Isolation valves in the high pressure coolant injection system (HPCI) are closed upon any one of the following signals:

1. HPCI steam line high flow
2. High temperature in the vicinity of the HPCI steam line
3. Low reactor pressure

GROUP 5: Isolation valves associated with the isolation condenser are closed upon indication of either high isolation condenser steam or condensate flow.

ATTACHMENT B

Changes to DPR-19 and DPR-25
Reactor Coolant Activity Limits and
Station Batteries LCOs

Reference: B. Rybak letter to H. R. Denton
dated February 10, 1984.

DPR-19

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DPR-25

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148	3/4.9-5
148	3/4.9-6
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3.6 LIMITING CONDITION FOR OPERATION
(Cont'd.)

4.6 SURVEILLANCE REQUIREMENT
(Cont'd.)

3. Neutron flux monitors and samples shall be installed in the reactor vessel adjacent to the vessel wall at the core midplane level. The monitor and sample program where possible conform to ASTM E 185. The monitors and samples will be removed and tested as outlined in Table 4.6.2 to experimentally verify the calculated values of integrated neutron flux that are used to determine NDTT for Figure 4.6.1.

C. Coolant Chemistry

- 1a. The reactor coolant activity shall be maintained less than 0.2 microcuries per gram DOSE EQUIVALENT I-131 during Reactor Power operation.
- 1b. If the reactor coolant activity is greater than 0.2 microcuries per gram and less than or equal to 4.0 microcuries per gram DOSE EQUIVALENT I-131, for more than 48 continuous hours (one continuous time interval) an orderly shutdown shall be immediately initiated and the unit shall be in cold shutdown within 24 hours.

C. Coolant Chemistry

- 1a. A sample of reactor coolant shall be taken at least every 96 hours and analyzed for DOSE EQUIVALENT I-131 and total activity content.
- 1b. When an isotopic analysis shows reactor coolant activity to be in excess of 0.2 microcuries per gram and less than 4.0 microcuries per gram DOSE EQUIVALENT I-131, additional reactor coolant samples shall be taken and analyzed at least 3 times every 24 hours.

3.6 LIMITING CONDITION FOR OPERATION
(Cont'd.)

- 1c. If a sample of reactor coolant activity is greater than 4.0 microcuries per gram DOSE EQUIVALENT I-131, a second sample shall be taken and analyzed within 8 hours. If the second sample indicates a reactor coolant activity greater than 4.0 microcuries per gram DOSE EQUIVALENT I-131, an orderly shutdown shall be initiated and the unit shall be in cold shutdown within 24 hours. Should the second sample indicate a reactor coolant activity less than or equal to 4.0 microcuries per gram DOSE EQUIVALENT I-131, statement 3.6.C.1b shall apply.

2. The reactor coolant water shall not exceed the following limits with steaming rates less than 100,000 pounds per hour except as specified in 3.6.C.3:

Conductivity 2 micro-mho/cm
Chloride ion 0.1 ppm

3. For reactor startups the maximum value for conductivity shall not exceed 10 micro-mho/cm and the maximum value for chloride ion concentration shall not exceed 0.1 ppm, for the first 24 hours after placing the reactor in the power operating condition.

4.6 SURVEILLANCE REQUIREMENT
(Cont'd.)

- 1c. When reactor coolant activity is greater than 4.0 microcuries per gram DOSE EQUIVALENT I-131, reactor coolant samples shall be taken and analyzed every 8 hours until the reactor is in a cold shutdown condition.

2. During startups and at steaming rates below 100,000 pounds per hour, a sample of reactor coolant shall be taken every four hours and analyzed for conductivity and chloride content.

3. a. With steaming rates greater than or equal to 100,000 pounds per hour, a reactor coolant sample shall be taken at least every 96 hours and when the continuous conductivity monitors indicate abnormal conductivity (other than short-term spikes) and analyzed for conductivity and chloride ion content.

3.6 LIMITING CONDITION FOR OPERATION
(Cont'd.)

4. Except as specified in 3.6.C.3 above, the reactor coolant water shall not exceed the following limits with steaming rates greater than or equal to 100,000 pounds per hour.

Conductivity 5
micro-mho/cm
Chloride ion 0.5 ppm

5. If Specification 3.6.C.1, 3.6.C.2, 3.6.C.3 or 3.6.C.4 is not met, an orderly shutdown shall be initiated.

D. Coolant Leakage

1. Any time irradiated fuel is in the reactor vessel and reactor coolant temperature is above 212°F, reactor coolant leakage into the primary containment from unidentified sources shall not exceed 5 gpm. In addition, the total reactor coolant system leakage into the primary containment shall not exceed 25 gpm. If these

4.6 SURVEILLANCE REQUIREMENT
(Cont'd.)

- b. When the continuous conductivity monitor is inoperable, a reactor coolant sample should be taken at least daily and analyzed for conductivity and chloride ion content.

D. Coolant Leakage

1. Reactor coolant system leakage shall be checked by the sump and air sampling system. Sump flow monitoring and recording shall be performed once per 4 hours. Air sampling shall be performed once per day.

3.6 LIMITING CONDITION FOR OPERATION
(Cont'd.)

conditions cannot be met, an orderly shutdown shall be initiated and the reactor shall be in a Cold Shutdown condition within 24 hours.

2. After completion of the investigation, or containment inspection, specified in 4.6.D.2.a or 4.6.D.2.b, if the leakage is determined to be due to a thru wall pipe crack on the reactor coolant pressure boundary, an orderly shutdown shall be initiated and the reactor shall be in a Cold Shutdown condition within 24 hours.

E. Safety and Relief Valves

1. During reactor power operating conditions and whenever the reactor coolant pressure is greater than 90 psig and temperature greater than 320°F, all nine of the safety valves shall

4.6 SURVEILLANCE REQUIREMENT
(Cont'd.)

2. The following additional leakage limits shall be met until the recirculation piping indications have been resolved.

Whenever the reactor is at operating pressure, the following will apply to unidentified leakage:

- a. If a 1 gpm increase over the previous 4 hours occurs or when leakage equals 3 gpm total, an investigation of the cause of the leakage increase will be performed. This investigation should consist of taking drywell air and water samples, and a review of any previous plant evolutions to the extent necessary to determine the source of leakage.
- b. If leakage equals 4 gpm, a containment inspection will be conducted to determine the source of leakage.

E. Safety and Relief Valves

A minimum of 1/2 of all safety valves shall be bench checked or replaced with a bench checked valve each refueling outages. The popping point of the safety valves shall be set as follows:

3.9 LIMITING CONDITION FOR OPERATION

AUXILIARY ELECTRICAL SYSTEMS

Applicability:

Applies to the auxiliary electrical power system.

Objective:

To assure an adequate supply of electrical power during plant operation.

Specification:

- A. The reactor shall not be made critical unless all the following requirements are satisfied:
1. One 345 KV line, associated switchgear, and the reserve auxiliary power transformer capable of carrying power to Unit 2.
 2. The Dresden 2 diesel generator and the Unit 2/3 diesel generator shall be operable.
 3. An additional source of power consisting of one of the following:
 - (a) One other 138 KV line, fully operational and

4.9 SURVEILLANCE REQUIREMENT

AUXILIARY ELECTRICAL SYSTEMS

Applicability:

Applies to the periodic testing requirements of the auxiliary electrical system.

Objective:

Verify the operability of the auxiliary electrical system.

Specification:

- A. Station Batteries
1. Every week the specific gravity, voltage and temperature of the pilot cell and overall battery voltage shall be measured.
 2. Every three months the measurements shall be made of voltage of each cell to nearest 0.01 volt, specific gravity of each cell, and temperature of every fifth cell.
 3. Every refueling outage, the unit's batteries shall be subjected to a rated load discharge test. Determine specific gravity and voltage of each cell after the discharge.

3.9 LIMITING CONDITION FOR OPERATION
(Cont'd.)

4.9 SURVEILLANCE REQUIREMENT
(Cont'd.)

operable, provided that during such seven days the operable diesel generator shall be demonstrated to be operable at least once each day and two off-site lines are available.

3. From and after the date that one of the two 125 or 250V battery systems is made or found to be inoperable, except as specified in 3.9.B.4a or b, Unit shutdown shall be initiated within 2 hours and the unit shall be in cold shutdown in 24 hours unless the failed battery can be sooner made operable.
4. a. Each 125 or 250 volt battery may be inoperable for a maximum of 7 days per refueling cycle for maintenance and testing.
b. If it is determined that a battery need be replaced as a result of maintenance or testing, specific battery may be inoperable for an additional 7 days per refueling cycle.

3.9 LIMITING CONDITION FOR OPERATION
(Cont'd.)

C. Diesel Fuel

There shall be a minimum of 10,000 gallons of diesel fuel supply on site for each diesel.

D. Diesel Generator Operability

Whenever the reactor is in the Cold Shutdown or Refueling modes, a minimum of one diesel generator (either the Dresden 2 diesel generator or the Unit 2/3 diesel generator) shall be operable whenever any work is being done which has the potential for draining the vessel, secondary containment is required, or a core or containment cooling system is required.

4.9 SURVEILLANCE REQUIREMENT
(Cont'd.)

C. Diesel Fuel

Once a month the quantity of diesel fuel available shall be logged.

Once a month a sample of diesel fuel shall be checked for quality.

D. Diesel Generator Operability

1. Each diesel generator shall be manually started and loaded once each month to demonstrate operational readiness. The test shall continue until both the diesel engine and the generator are at equilibrium conditions of temperature while full load output is maintained.
2. During the monthly generator test the diesel starting air compressor shall be checked for operation and its ability to recharge air receivers.
3. During the monthly generator test the diesel fuel oil transfer pumps shall be operated.
4. Additionally, during each refueling outage, a simulated loss of off-site power in

3.9 LIMITING CONDITION FOR OPERATION
(Cont'd.)

4.9 SURVEILLANCE REQUIREMENT
(Cont'd.)

conjunction with an ECCS initiation signal test shall be performed on the 4160 volt emergency bus by:

- (a) Verifying de-energization of the emergency buses and load shedding from the emergency buses.
- (b) Verifying the diesel starts from ambient condition on the auto-start signal, energizes the emergency buses with permanently connected loads, energizes the auto-connected emergency loads through the load sequencer, and operates for greater than or equal to 5 minutes while its generator is loaded with the emergency loads.

3.9 LIMITING CONDITION FOR OPERATION BASES

- A. The general objective of this Specification is to assure an adequate source of electrical power to operate the auxiliaries during plant operation, to operate facilities to cool and lubricate the plant during shutdown, and to operate the engineered safeguards following an accident. There are three sources of electrical energy available; namely, the 138 KV transmission system, the diesel generators, and the 345 KV transmission system through the 4160 volt bus tie.

The d-c supply is required for control and motive power for switchgear and engineered safety features. The electrical power required provides for the maximum availability of power; i.e., one active off-site source and two back-up sources of off-site power and the maximum amount of on-site sources.

- B. Auxiliary power for Unit 2 is supplied from two sources, either the Unit 2 auxiliary transformer or the Unit 2 reserve auxiliary transformer. Both of these transformers are sized to carry 100% of the auxiliary load. If the reserve auxiliary transformer is lost, the unit can continue to run for 7 days since the unit auxiliary transformer is available and both diesel generators are operational. A reduced period is provided since if an accident occurs during this period, the unit would trip and power to the unit auxiliary transformer would be lost and the diesels would be the only source of power.

In the normal mode of operation the 138 KV system is operating and two diesel generators are operational. One diesel generator may be allowed out of service based on the availability of power to the 138 KV switchyard, a source of power available from the 345 KV system through a 4160 volt bus tie and the fact that one diesel carries sufficient engineered safeguards equipment to cover all breaks. Off-site power is quite reliable. In the last 25 years there has only been one instance in which all off-site power was lost at a Commonwealth Edison generating station.

Two battery chargers are supplied for each of the 125 volt batteries, while for the 250 volt system a battery charger is supplied for each battery and a third battery charger acts as a shared unit. Thus, on loss of a battery charger, another battery charger is available. Since an alternate charger is available, one battery charger per unit for the 125 volt and one battery charger overall for the 250 volt battery system can be out of service for thirty days. The system becomes inoperable whenever there is a loss of the battery or loss of both chargers for that system and a battery voltage of 105 volts for the 125 or 210 volts for the 250 volt batteries.

3.6 LIMITING CONDITION FOR OPERATION
(Cont'd.)

4.6 SURVEILLANCE REQUIREMENT
(Cont'd.)

3. Neutron flux monitors and samples shall be installed in the reactor vessel adjacent to the vessel wall at the core midplane level. The monitor and sample program where possible conform to ASTM E 185. The monitors and samples will be removed and tested as outlined in Table 4.6.2 to experimentally verify the calculated values of integrated neutron flux that are used to determine NDTT for Figure 4.6.1.

C. Coolant Chemistry

- 1a. The reactor coolant activity shall be maintained less than 0.2 microcuries per gram DOSE EQUIVALENT I-131 during Reactor Power operation.
- 1b. If the reactor coolant activity is greater than 0.2 microcuries per gram and less than or equal to 4.0 microcuries per gram DOSE EQUIVALENT I-131, for more than 48 continuous hours (one continuous time interval) an orderly shutdown shall be immediately initiated and the unit shall be in cold shutdown within 24 hours.

C. Coolant Chemistry

- 1a. A sample of reactor coolant shall be taken at least every 96 hours and analyzed for DOSE EQUIVALENT I-131 and total activity content.
- 1b. When an isotopic analysis shows reactor coolant activity to be in excess of 0.2 microcuries per gram and less than 4.0 microcuries per gram DOSE EQUIVALENT I-131, additional reactor coolant samples shall be taken and analyzed at least 3 times every 24 hours.

3.6 LIMITING CONDITION FOR OPERATION
(Cont'd.)

1c. If a sample of reactor coolant activity is greater than 4.0 microcuries per gram DOSE EQUIVALENT I-131, a second sample shall be taken and analyzed within 8 hours. If the second sample indicates a reactor coolant activity greater than 4.0 microcuries per gram DOSE EQUIVALENT I-131, an orderly shutdown shall be initiated and the unit shall be in cold shutdown within 24 hours. Should the second sample indicate a reactor coolant activity less than or equal to 4.0 microcuries per gram DOSE EQUIVALENT I-131, statement 3.6.C.1b shall apply.

2. The reactor coolant water shall not exceed the following limits with steaming rates less than 100,000 pounds per hour except as specified in 3.6.C.3:

Conductivity 2 micro-mho/cm
Chloride ion 0.1 ppm

3. For reactor startups the maximum value for conductivity shall not exceed 10 micro-mho/cm and the maximum value for chloride ion concentration shall not exceed 0.1 ppm, for the first 24 hours after placing the reactor in the power operating condition.

4.6 SURVEILLANCE REQUIREMENT
(Cont'd.)

1c. When reactor coolant activity is greater than 4.0 microcuries per gram DOSE EQUIVALENT I-131, reactor coolant samples shall be taken and analyzed every 8 hours until the reactor is in a cold shutdown condition.

2. During startups and at steaming rates below 100,000 pounds per hour, a sample of reactor coolant shall be taken every four hours and analyzed for conductivity and chloride content.

3. a. With steaming rates greater than or equal to 100,000 pounds per hour, a reactor coolant sample shall be taken at least every 96 hours and when the continuous conductivity monitors indicate abnormal conductivity (other than short-term spikes) and analyzed for conductivity and chloride ion content.

3.6 LIMITING CONDITION FOR OPERATION
(Cont'd.)

4.6 SURVEILLANCE REQUIREMENT
(Cont'd.)

4. Except as specified in 3.6.C.3 above, the reactor coolant water shall not exceed the following limits with steaming rates greater than or equal to 100,000 pounds per hour.

Conductivity 5
micro-mho/cm
Chloride ion 0.5 ppm

5. If Specification 3.6.C.1, 3.6.C.2, 3.6.C.3 or 3.6.C.4 is not met, an orderly shutdown shall be initiated.

D. Coolant Leakage

1. Any time irradiated fuel is in the reactor vessel and reactor coolant temperature is above 212°F, reactor coolant leakage into the primary containment from unidentified sources shall not exceed 5 gpm. In addition, the total reactor coolant system leakage into the primary containment shall not exceed 25 gpm. If these

- b. When the continuous conductivity monitor is inoperable, a reactor coolant sample should be taken at least daily and analyzed for conductivity and chloride ion content.

D. Coolant Leakage

1. Reactor coolant system leakage shall be checked by the sump and air sampling system. Sump flow monitoring and recording shall be performed once per 4 hours. Air sampling shall be performed once per day.

3.6 LIMITING CONDITION FOR OPERATION
 (Cont'd.)

conditions cannot be met, an orderly shutdown shall be initiated and the reactor shall be in a Cold Shutdown condition within 24 hours.

2. The primary containment sump sampling system and an air sampling system shall be operable during power operation. If either a sump water sample or a containment air sample cannot be obtained for any reason, reactor operation is permissible only during the succeeding seven days unless the system is made operable during this period.

E. Safety and Relief Valves

1. During reactor power operating conditions and whenever the reactor coolant pressure is greater than 90 psig and temperature greater than 320°F. all nine of the safety valves shall be operable. The solenoid activated pressure valves shall be operable as required by Specification 3.5.D.

4.6 SURVEILLANCE REQUIREMENT
 (Cont'd.)

2. The primary containment sump sampling and air sampling system operability will be observed daily as part of 4.6.D.2.

E. Safety and Relief Valves

A minimum of 1/2 of all safety valves shall be bench checked or replaced with a bench checked valve each refueling outages. The popping point of the safety valves shall be set as follows:

<u>Number of Valves</u>	<u>Set Point (Psig)</u>
1	1135*
2	1240
2	1250
2	1260
2	1260

The allowable set point error for each valve is plus or minus 1% (FSAR Table 4.5.2:1)

3.9 LIMITING CONDITION FOR OPERATION

AUXILIARY ELECTRICAL SYSTEMS

Applicability:

Applies to the auxiliary electrical power system.

Objective:

To assure an adequate supply of electrical power during plant operation.

Specification:

- A. The reactor shall not be made critical unless all the following requirements are satisfied:
1. One 345 KV line, associated switchgear, and the reserve auxiliary power transformer capable of carrying power to Unit 3.
 2. The Dresden 3 diesel generator and the Unit 2/3 diesel generator shall be operable.
 3. An additional source of power consisting of one of the following:
 - (a) One other 345 KV line, fully operational and

4.9 SURVEILLANCE REQUIREMENT

AUXILIARY ELECTRICAL SYSTEMS

Applicability:

Applies to the periodic testing requirements of the auxiliary electrical system.

Objective:

Verify the operability of the auxiliary electrical system.

Specification:

- A. Station Batteries
1. Every week the specific gravity, voltage and temperature of the pilot cell and overall battery voltage shall be measured.
 2. Every three months the measurements shall be made of voltage of each cell to nearest 0.01 volt, specific gravity of each cell, and temperature of every fifth cell.
 3. Every refueling outage, the unit's batteries shall be subjected to a rated load discharge test. Determine specific gravity and voltage of each cell after the discharge.

3.9 LIMITING CONDITION FOR OPERATION
(Cont'd.)

operable, provided that during such seven days the operable diesel generator shall be demonstrated to be operable at least once each day and two off-site lines are available.

3. From and after the date that one of the two 125 or 250V battery systems is made or found to be inoperable, except as specified in 3.9.B.4a or b, Unit shutdown shall be initiated within 2 hours and the unit shall be in cold shutdown in 24 hours unless the failed battery can be sooner made operable.
4. a. Each 125 or 250 volt battery may be inoperable for a maximum of 7 days per refueling cycle for maintenance and testing.
- b. If it is determined that a battery need be replaced as a result of maintenance or testing, specific battery may be inoperable for an additional 7 days per refueling cycle.

4.9 SURVEILLANCE REQUIREMENT
(Cont'd.)

3.9 LIMITING CONDITION FOR OPERATION
(Cont'd.)

C. Diesel Fuel

There shall be a minimum of 10,000 gallons of diesel fuel supply on site for each diesel.

D. Diesel Generator Operability

Whenever the reactor is in the Cold Shutdown or Refueling modes, a minimum of one diesel generator (either the Dresden 3 diesel generator or the Unit 2/3 diesel generator) shall be operable whenever any work is being done which has the potential for draining the vessel, secondary containment is required, or a core or containment cooling system is required.

4.9 SURVEILLANCE REQUIREMENT
(Cont'd.)

C. Diesel Fuel

Once a month the quantity of diesel fuel available shall be logged.

Once a month a sample of diesel fuel shall be checked for quality.

D. Diesel Generator Operability

1. Each diesel generator shall be manually started and loaded once each month to demonstrate operational readiness. The test shall continue until both the diesel engine and the generator are at equilibrium conditions of temperature while full load output is maintained.
2. During the monthly generator test the diesel starting air compressor shall be checked for operation and its ability to recharge air receivers.
3. During the monthly generator test the diesel fuel oil transfer pumps shall be operated.
4. Additionally, during each refueling outage, a simulated loss of off-site power in

3.9 LIMITING CONDITION FOR OPERATION
(Cont'd.)

4.9 SURVEILLANCE REQUIREMENT
(Cont'd.)

conjunction with an ECCS initiation signal test shall be performed on the 4160 volt emergency bus by:

- (a) Verifying de-energization of the emergency buses and load shedding from the emergency buses.
- (b) Verifying the diesel starts from ambient condition on the auto-start signal; energizes the emergency buses with permanently connected loads, energizes the auto-connected emergency loads through the load sequencer, and operates for greater than or equal to 5 minutes while its generator is loaded with the emergency loads.

3.9 LIMITING CONDITION FOR OPERATION BASES

- A. The general objective of this Specification is to assure an adequate source of electrical power to operate the auxiliaries during plant operation, to operate facilities to cool and lubricate the plant during shutdown, and to operate the engineered safeguards following an accident. There are three sources of electrical energy available; namely, the 345 KV transmission system, the diesel generators, and the 138 KV transmission system through the 4160 volt bus tie.

The d-c supply is required for control and motive power for switchgear and engineered safety features. The electrical power required provides for the maximum availability of power; i.e., one active off-site source and two back-up sources of off-site power and the maximum amount of on-site sources.

- B. Auxiliary power for Unit 3 is supplied from two sources, either the Unit 3 auxiliary transformer or the Unit 3 reserve auxiliary transformer. Both of these transformers are sized to carry 100% of the auxiliary load. If the reserve auxiliary transformer is lost, the unit can continue to run for 7 days since the unit auxiliary transformer is available and both diesel generators are operational. A reduced period is provided since if an accident occurs during this period, the unit would trip and power to the unit auxiliary transformer would be lost and the diesels would be the only source of power.

In the normal mode of operation the 345 KV system is operating and two diesel generators are operational. One diesel generator may be allowed out of service based on the availability of power to the 345 KV switchyard, a source of power available from the 138 KV system through a 4160 volt bus tie and the fact that one diesel carries sufficient engineered safeguards equipment to cover all breaks. Off-site power is quite reliable. In the last 25 years there has only been one instance in which all off-site power was lost at a Commonwealth Edison generating station.

Two battery chargers are supplied for each of the 125 volt batteries, while for the 250 volt system a battery charger is supplied for each battery and a third battery charger acts as a shared unit. Thus, on loss of a battery charger, another battery charger is available. Since an alternate charger is available, one battery charger per unit for the 125 volt and one battery charger overall for the 250 volt battery system can be out of service for thirty days. The system becomes inoperable whenever there is a loss of the battery or loss of both chargers for that system and a battery voltage of 105 volts for the 125 or 210 volts for the 250 volt batteries.

ATTACHMENT C

Proposed Change to DPR-25

Reference: B. Rybak letter to H. R. Denton
dated March 19, 1984.

Revised page: Sheet 2 of 5 of Figure 3.5-1

8980N

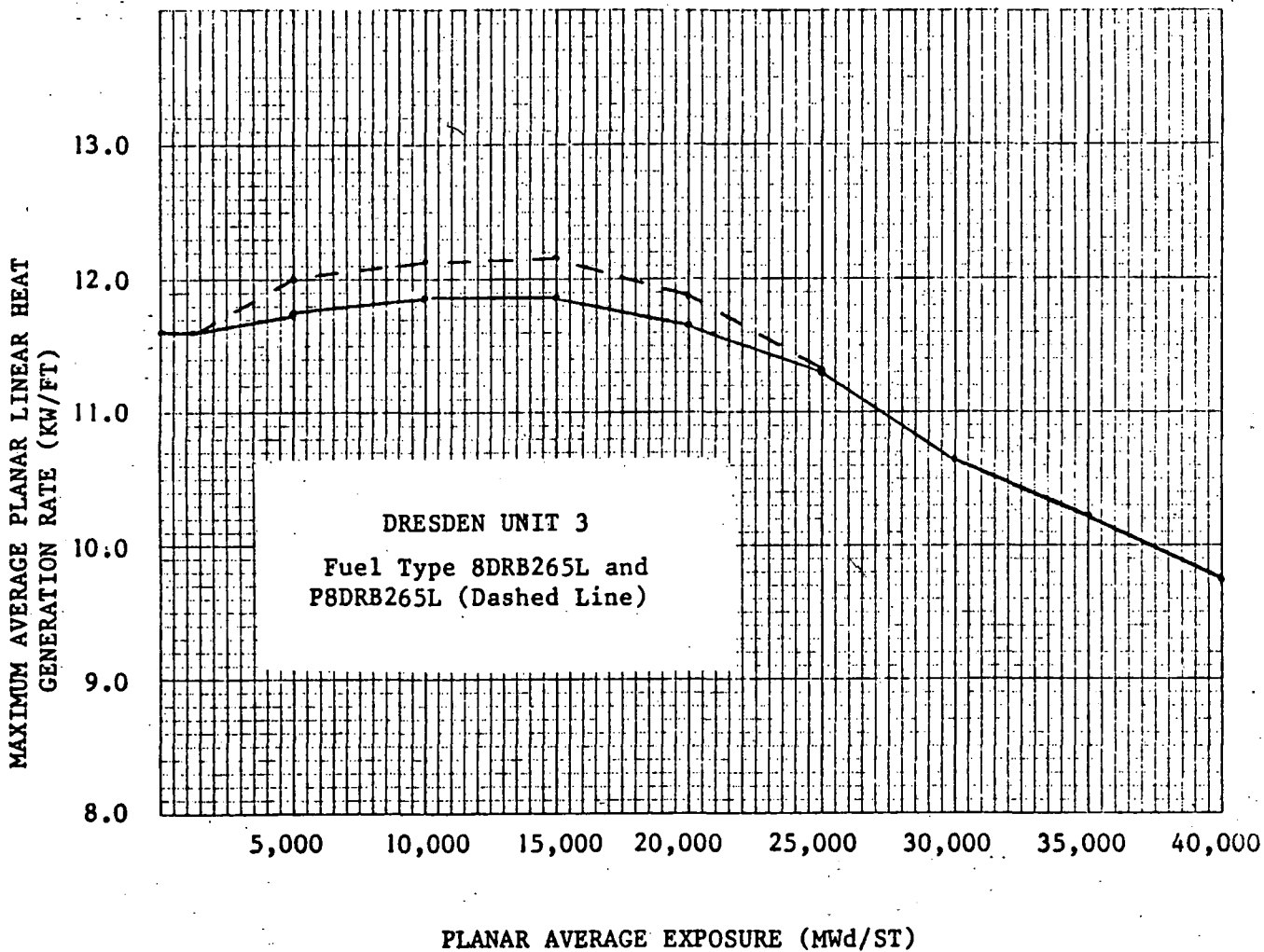


Figure 3.5-1
(Sheet 2 of 5)

Maximum Average Planar
Linear Heat Generation Rate (MAPLHGR)
Vs. Planar Average Exposure

ATTACHMENT D

Proposed Change to DPR-19 and DPR-25

Reference: B. Rybak letter to H. R. Denton dated
May 2, 1983.

DPR-19

Old Page No.

60
178

New Page No.

3/4.3-13
6-26

DPR-25

Old Page No.

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178

New Page No.

3/4.3-13
6-26

3.3 LIMITING CONDITION FOR OPERATION
(Cont'd.)

F. If Specifications 3.3.A through D above are not met, an orderly shutdown shall be initiated and the reactor shall be in the Cold Shutdown condition within 24 hours.

G. Economic Generation Control System

Operation of the unit with the Economic Generation Control system with automatic flow control shall be permissible only the range of 65-100% of rated core flow, with reactor power above 20%.

4.3 SURVEILLANCE REQUIREMENT
(Cont'd.)

F. (N/A)

G. Economic Generation Control System (EGCS)

Prior to entering EGCS and once per shift while operating in EGCS, the EGCS operating parameters will be reviewed for acceptability.

TABLE 6.6.1
SPECIAL REPORTS

<u>AREA</u>	<u>SPECIFICATION REFERENCE</u>	<u>SUBMITTAL DATE</u>
a. Response time of safety related instruments (2)	1.0.E (Dres. 1)	Annual Report
b. Main steam isolation valve and feedwater power operated isolation valves closure times (2)	3.7.B.1.c (Dres. 1)	Annual Report
c. Primary Coolant leakage to Drywell (4)	4.6.D Bases	5 years (1)
d. In-Service Inspection Evaluation (4)	Table 4.6.1	5 years (1)
e. Evaluation of Economic Generation Control System (EGCS) operation (4)	3.3.G Bases	Upon completion of initial testing
f. Failed Fuel Detection (4)	3.2 Bases	5 years (1)
g. Main Steam Line Leakage to Steam Tunnel (4)	4.6.D Bases	5 years (1)
h. In-service Inspection Development (4)	4.6.1 Bases	5 years (1)
i. In-Service Inspection of Sensitized Stainless Steel Components (3)	4.6.F	4 years (1)
j. Secondary Containment Leak Rate Test (4)	3.7.C.1	within 90 days after completion of each test
k. High off-gas discharge rate (2)	3.8.A.4 (Dresden 1)	within 24 hours of occurrence
l. Radioactive Source Leak Testing (5)	3.8.F	Annual Report

NOTES:

- The report shall be submitted within the period of time listed based on the commercial service date as the starting point.
- Dresden 1 only
- Dresden 2 only
- Dresden 2 and 3 only.
- The report is required only if the tests reveal the presence of 0.005 microcuries or more of removable contamination.

3.3 LIMITING CONDITION FOR OPERATION
(Cont'd.)

F. If Specifications 3.3.A through D above are not met, an orderly shutdown shall be initiated and the reactor shall be in the Cold Shutdown condition within 24 hours.

G. Economic Generation Control System

Operation of the unit with the Economic Generation Control system with automatic flow control shall be permissible only the range of 65-100% of rated core flow, with reactor power above 20%.

4.3' SURVEILLANCE REQUIREMENT
(Cont'd.)

F. (N/A)

G. Economic Generation Control System (EGCS)

Prior to entering EGCS and once per shift while operating in EGCS, the EGCS operating parameters will be reviewed for acceptability.

TABLE 6.6.1
SPECIAL REPORTS

<u>AREA</u>	<u>SPECIFICATION REFERENCE</u>	<u>SUBMITTAL DATE</u>
a. Response time of safety related instruments (2)	1.0.E (Dres. 1)	Annual Report
b. Main steam isolation valve and feedwater power operated isolation valves closure times (2)	3.7.B.1.c (Dres. 1)	Annual Report
c. Primary Coolant leakage to Drywell (4)	4.6.D Bases	5 years (1)
d. In-Service Inspection Evaluation (4)	Table 4.6.1	5 years (1)
e. Evaluation of Economic Generation Control System (EGCS) operation (4)	3.3.G Bases	Upon completion of initial testing
f. Failed Fuel Detection (4)	3.2 Bases	5 years (1)
g. Main Steam Line Leakage to Steam Tunnel (4)	4.6.D Bases	5 years (1)
h. In-service Inspection Development (4)	4.6.1 Bases	5 years (1)
i. In-Service Inspection of Sensitized Stainless Steel Components (3)	4.6.F	4 years (1)
j. Secondary Containment Leak Rate Test (4)	3.7.C.1	within 90 days after completion of each test
k. High off-gas discharge rate (2)	3.8.A.4 (Dresden 1)	within 24 hours of occurrence
l. Radioactive Source Leak Testing (5)	3.8.F	Annual Report

NOTES:

1. The report shall be submitted in the period of time listed based on the commercial service date as the starting point.
2. Dresden 1 only
3. Dresden 2 only
4. Dresden 2 and 3 only.
5. The report is required only if the tests reveal the presence of 0.005 microcuries or more of removable contamination.