

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-237

DRESDEN STATION UNIT NO. 2

AMENDMENT TO PROVISIONAL OPERATING LICENSE

Amendment No. 55  
License No. DPR-19

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by the Commonwealth Edison Company (the licensee) dated September 18, 1980, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changing paragraphs 3.B, 3.J and adding paragraph 3.K of Provisional Operating License No. DPR-19 to read as follows:

3.B Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. 55, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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3.J Systems Integrity

The licensee shall implement a program to reduce leakage from systems outside containment that could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. This program shall include the following:

1. Provisions establishing preventive maintenance and periodic visual inspection requirements, and
2. Leak test requirements for each system at a frequency not to exceed refueling cycle intervals.

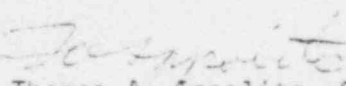
3.K Iodine Monitoring

The licensee shall implement a program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program shall include the following:

1. Training of personnel;
2. Procedures for monitoring, and
3. Provisions for maintenance of sampling and analysis equipment.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

  
Thomas A. Ippolito, Chief  
Operating Reactors Branch #2  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: February 6, 1981

ATTACHMENT TO LICENSE AMENDMENT NO. 55  
PROVISIONAL OPERATING LICENSE NO. DPR-19  
DOCKET NO. 50-237

Revise the Appendix "A" Technical Specifications as follows:

<u>Remove</u>	<u>Replace</u>
44	44
-	44a
45	45

TABLE 4.2.1 (cont)

<u>Instrument Channel</u>	<u>Instrument Functional Test (2)</u>	<u>Calibration (2)</u>	<u>Instrument Check (2)</u>
<u>ISOLATION CONDENSER ISOLATION</u>			
1. Steam Line High Flow	(1)	Once/3 Months	None
2. Condensate Line High Flow	(1)	Once/3 Months	None
<u>HPCI ISOLATION</u>			
1. Steam Line High Flow	(1)	Once/3 Months	None
2. Steam Line Area High Temperature	Refueling Outage	Refueling Outage	None
3. Low Reactor Pressure	(1)	Once/3 Months	None
<u>REACTOR BUILDING VENTILATION SYSTEM VIOLATION AND STANDBY GAS TREATMENT SYSTEM INITIATION</u>			
1. Ventilation Exhaust Duct Radiation Monitors	(1)	Once/3 Months	Once/Day
2. Refueling Floor Radiation Monitors	(1)	Once/3 Months	Once/Day
<u>STEAM JET-AIR EJECTOR OFF-GAS ISOLATION</u>			
1. Radiation Monitors	(1) (3)	Once/3 Months (4)	Once/Day
<u>CONTAINMENT MONITORING</u>			
1. Pressure			
a. -5 in. Hg to +5 psig Indicator	None	Once/3 Months	Once/Day
b. 0 to 75 psig Indicator	None	Once/3 Months	None
2. Temperature	None	Refueling Outage	Once/Day
3. Drywell-Torus Differential Pressure (5)(6) (0-3 psid)	None	Once/6 Months (two channels operable) Once/Month (one channel operable)	None
4. Torus Water Level (5)(6)	None	Once/6 Months	
a. +25 in. Wide Range Indicator			
b. 18 in. Sight Glass			
<u>SAFETY/RELIEF VALVE MONITORING</u>			
1. Safety/Relief Valve Position Indicator (Acoustic Monitor) (8)	(7)	None	Once Per 31 Days

TABLE 4.2.1 (cont)

DPR-19

<u>Instrument Channel</u>	<u>Instrument Functional Test (2)</u>	<u>Calibration (2)</u>	<u>Instrument Check (2)</u>
2. Safety/Relief Valve Position Indicator (Temperature Monitor) (8)	None	Once every 18 months	Once Per 31 Days
3. Safety Valve Position Indicator (Acoustic Monitor) (8)	(7)	None	Once Per 31 Days
4. Safety Valve Position Indicator (Temperature Monitor) (8)	None	Once every 18 months	Once Per 31 Days

NOTES:

1. Initially once per month until exposure hours (M as defined on Figure 4.1.1) is  $2.0 \times 10^5$ ; thereafter, according to Figure 4.1.1 with an interval not less than one month nor more than three months. The compilation of instrument failure rate data may include data obtained from other Boiling Water Reactors for which the same design instrument operates in an environment similar to that of Dresden Unit 3.
2. Function test calibrations and instrument checks are not required when these instruments are not required to be operable or are tripped. Functional tests shall be performed before each startup with a required frequency not to exceed once per week. Calibrations shall be performed during each startup or during controlled shutdowns with a required frequency not to exceed once per week. Instrument checks shall be performed at least once per week. Instrument checks shall be performed at least once per day during those periods when the instruments are required to be operable.
3. This instrumentation is excepted from the functional test definition. The functional test will consist of injecting a simulated electrical signal into the measurement channel. See Note 4.
4. These instrument channels will be calibrated using simulated electrical signals once every three months. In addition, calibration including the sensors will be performed during each refueling outage.
5. A minimum of two channels is required.
6. From and after the date that one of these parameters (...either drywell-torus differential pressure or torus water level indication) is reduced to one indication, continued operation is not permissible beyond thirty days, unless such instrumentation is sooner made operable. In the event that all indications of these parameters (...either drywell-torus differential pressure or torus water level) is disabled and such indication cannot be restored in six (6) hours, an orderly shutdown shall be initiated and the reactor shall be in a cold shutdown condition in twenty four hours.

NOTES:

7. Functional tests will be conducted before startup at the end of each refueling outage or after maintenance is performed on a particular Safety/Relief Valve.
8. If the number of position indicators is reduced to one indication on one or more valves, continued operation is permissible; however, if the reactor is in a shutdown condition, it may not be started up until all position indication is restored. In the event that all position indication is lost on one or more valves and such indication cannot be returned in thirty days, an orderly shutdown shall be initiated, and the reactor shall be depressurized to less than 90 psig in 24 hours.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-249

DRESDEN STATION UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 48  
License No. DPR-25

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Commonwealth Edison Company (the licensee) dated September 18, 1980, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public;  
and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changing paragraphs 3.B and 3.I and adding paragraph 3.K of Facility Operating License No. DPR-25 to read as follows:
  - 3.B Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. 48, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3.I Systems Integrity

The licensee shall implement a program to reduce leakage from systems outside containment that could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. This program shall include the following:

1. Provisions establishing preventive maintenance and periodic visual inspection requirements, and
2. Leak test requirements for each system at a frequency not to exceed refueling cycle intervals.

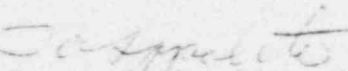
3.K Iodine Monitoring

The licensee shall implement a program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program shall include the following:

1. Training of personnel;
2. Procedures for monitoring, and
3. Provisions for maintenance of sampling and analysis equipment.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

  
Thomas A. Ippolito, Chief  
Operating Reactors Branch #2  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: February 6, 1981



ATTACHMENT TO LICENSE AMENDMENT NO. 48

FACILITY OPERATING LICENSE NO. DPR-25

DOCKET NO. 50-249

Revise the Appendix "A" Technical Specifications as follows:

<u>Remove</u>	<u>Replace</u>
44	44
-	44a
45	45

TABLE 4.2.1 (cont)

DPR-25

<u>Instrument Channel</u>	<u>Instrument Functional Test (2)</u>	<u>Calibration (2)</u>	<u>Instrument Check (2)</u>
<u>ISOLATION CONDENSER ISOLATION</u>			
1. Steam Line High Flow	(1)	Once/3 Months	None
2. Condensate Line High Flow	(1)	Once/3 Months	None
<u>HPCI ISOLATION</u>			
1. Steam Line High Flow	(1)	Once/3 Months	None
2. Steam Line Area High Temperature	Refueling Outage	Refueling Outage	None
3. Low Reactor Pressure	(1)	Once/3 Months	None
<u>REACTOR BUILDING VENTILATION SYSTEM VIOLATION AND STANDBY GAS TREATMENT SYSTEM INITIATION</u>			
1. Ventilation Exhaust Duct Radiation Monitors	(1)	Once/3 Months	Once/Day
2. Refueling Floor Radiation Monitors	(1)	Once/3 Months	Once/Day
<u>STEAM JET-AIR EJECTOR OFF-GAS ISOLATION</u>			
1. Radiation Monitors	(1) (3)	Once/3 Months (4)	Once/Day
<u>CONTAINMENT MONITORING</u>			
1. Pressure			
a. -5 in. Hg to +5 psig Indicator	None	Once/3 Months	Once/Day
b. 0 to 75 psig Indicator	None	Once/3 Months	None
2. Temperature	None	Refueling Outage	Once/Day
3. Drywell-Torus Differential Pressure (5)(6) (0-3 psid)	None	Once/6 Months (two channels operable) Once/Month (one channel operable)	None
4. Torus Water Level (5)(6)	None	Once/6 Months	
a. +25 in. Wide Range Indicator			
b. 18 in. Sight Glass			
<u>SAFETY/RELIEF VALVE MONITORING</u>			
1. Safety/Relief Valve Position Indicator (Acoustic Monitor) (8)	(7)	None	Once Per 31 Days

TABLE 4.2.1 (cont)

DPR-25

<u>Instrument Channel</u>	<u>Instrument Functional Test (2)</u>	<u>Calibration (2)</u>	<u>Instrument Check (2)</u>
2. Safety/Relief Valve Position Indicator (Temperature Monitor) (8)	None	Once every 18 months	Once Per 31 Days
3. Safety Valve Position Indicator (Acoustic Monitor) (8)	(7)	None	Once Per 31 Days
4. Safety Valve Position Indicator (Temperature Monitor) (8)	None	Once every 18 months	Once Per 31 Days

NOTES:

- Initially once per month until exposure hours (M as defined on Figure 4.1.1) is  $2.0 \times 10^5$ ; thereafter, according to Figure 4.1.1 with an interval not less than one month nor more than three months. The compilation of instrument failure rate data may include data obtained from other Boiling Water Reactors for which the same design instrument operates in an environment similar to that of Dresden Unit 3.
- Function test calibrations and instrument checks are not required when these instruments are not required to be operable or are tripped. Functional tests shall be performed before each startup with a required frequency not to exceed once per week. Calibrations shall be performed during each startup or during controlled shutdowns with a required frequency not to exceed once per week. Instrument checks shall be performed at least once per week. Instrument checks shall be performed at least once per day during those periods when the instruments are required to be operable.
- This instrumentation is excepted from the functional test definition. The functional test will consist of injecting a simulated electrical signal into the measurement channel. See Note 4.
- These instrument channels will be calibrated using simulated electrical signals once every three months. In addition, calibration including the sensors will be performed during each refueling outage.
- A minimum of two channels is required.
- From and after the date that one of these parameters (...either drywell-torus differential pressure or torus water level indication) is reduced to one indication, continued operation is not permissible beyond thirty days, unless such instrumentation is sooner made operable. In the event that all indications of these parameters (...either drywell-torus differential pressure or torus water level) is disabled and such indication cannot be restored in six (6) hours, an orderly shutdown shall be initiated and the reactor shall be in a cold shutdown condition in twenty four hours.

NOTES:

7. Functional tests will be conducted before startup at the end of each refueling outage or after maintenance is performed on a particular Safety/Relief Valve.
8. If the number of position indicators is reduced to one indication on one or more valves, continued operation is permissible; however, if the reactor is in a shutdown condition, it may not be started up until all position indication is restored. In the event that all position indication is lost on one or more valves and such indication cannot be returned in thirty days, an orderly shutdown shall be initiated, and the reactor shall be depressurized to less than 90 psig in 24 hours.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

COMMONWEALTH EDISON COMPANY

AND

IOWA-ILLINOIS GAS AND ELECTRIC COMPANY

DOCKET NO. 50-254

QUAD CITIES STATION UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 62  
License No. DPR-29

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by the Commonwealth Edison Company (the licensee) dated September 18, 1980, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changing paragraphs 3.B and 3.G and adding paragraph 3.J of Facility Operating License No. DPR-29 to read as follows:

3.B Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 62, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3.G Systems Integrity

The licensee shall implement a program to reduce leakage from systems outside containment that would or could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. This program shall include the following:

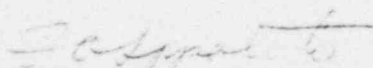
1. Provisions establishing preventive maintenance and periodic visual inspection requirements, and
2. Leak test requirements for each system at a frequency not to exceed refueling cycle intervals.

3.J Iodine Monitoring

The licensee shall implement a program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program shall include the following:

1. Training of personnel;
  2. Procedures for monitoring, and
  3. Provisions for maintenance of sampling and analysis equipment.
3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

  
Thomas A. Ippolito, Chief  
Operating Reactors Branch #2  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: February 6, 1981

ATTACHMENT TO LICENSE AMENDMENT NO. 62

FACILITY OPERATING LICENSE NO. DPR-29

DOCKET NO. 50-254

Revise the Appendix "A" Technical Specifications as follows:

<u>Remove</u>	<u>Replace</u>
3.2/4/2-15	3.2/4.2-15
3.2/4.2-15a	3.2/4.2-15a
3.2/4.2-18	3.2/4.2-18

QUAD-CITIES

DPR-29

TABLE 3.24

POSTACCIDENT MONITORING INSTRUMENTATION REQUIREMENTS<sup>2)</sup>

Minimum Number of Operable Channels <sup>(1) (3)</sup>	Parameter	Instrument Readout		Range
		Location	Number Provided	
1	Reactor pressure	901-5	1	0-1500 psig
			2	0-1200 psig
1	Reactor water level	901-3	2	-243 inches-+57 inches
1	Torus water temperature	901-21	2	0-200° F
1	Torus air temperature	901-21	2	0-600° F
2 <sup>(4)</sup>	Torus water level, indicator	901-3	1	-25 inches - + 25 inches
			1	18 inch range
1	Torus pressure	901-3	1	-5 inches Hg to 5 psig
1	Drywell pressure	901-3	1	-5 inches Hg to 5 psig 0 to 75 psig
2	Drywell temperature	901-21	6	0-600° F
2	Neutron monitoring	901-5	4	0.1-10 <sup>8</sup> CPS
2 <sup>(4)</sup>	Torus to drywell differential pressure		2	0-3 psid
2/valve <sup>(5)</sup>	Main Steam RV position, acoustic monitor	901-21	1 per valve	NA
			1 per valve	0-600° F
2/valve <sup>(5)</sup>	Main Steam SV position, acoustic monitor	901-21	1 per valve	NA
			1 per valve	0-600° F



QUAD-CITIES  
DPR-29

Notes

1. Instrument channels required during power operation to monitor postaccident conditions.
2. Provisions are made for local sampling and monitoring of drywell atmosphere.
3. In the event any of the instrumentation becomes inoperable for more than 7 days during reactor operation, initiate an orderly shutdown and be in the cold shutdown condition within 24 hours.
4. From and after the date that one of these parameters is reduced to one indication, continued operation is not permissible beyond thirty days, unless such instrumentation is sooner made operable. In the event that all indication of these parameters is disabled and such indication cannot be restored in six (6) hours, an orderly shutdown shall be initiated and the reactor shall be in a cold shutdown condition in twenty four (24) hours.
5. If the number of position indicators is reduced to one indication on one or more valves, continued operation is permissible; however, if the reactor is in a shutdown condition, it may not be started up until all position indication is restored. In the event that all position indication is lost on one or more valves and such indication cannot be restored in 30 days, an orderly shutdown shall be initiated, and the reactor shall be depressurized to less than 90 psig in 24 hours.

QUAD-CITIES  
DPR-29

TABLE 4.2-2

POSTACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

Minimum Number of Operable Channels*	Parameter	Instrument Readout Location Unit 1	Calibration	Instrument Check
1	Reactor pressure	901-5	Once every 3 months	Once per day
1	Reactor water level	901-3	Once every 3 months	Once per day
1	Torus water temperature	901-21	Once every 3 months	Once per day
1	Torus air temperature	901-21	Once every 3 months	Once per day
2	Torus water level (indicator)	901-3	Once every 3 months	Once per day
			N/A	None
1	Torus pressure	901-3	Once every 3 months	Once per day
1	Drywell pressure	901-3	Once every 3 months	Once per day
2	Drywell temperature	901-21	Once every 3 months	Once per day
2	Neutron monitoring	901-5	Once every 3 months	Once per day
2	Torus to drywell differential pressure		Once every 6 months	None
2/valve	Main Steam RV Position acoustic monitor	901-21	**	Once per 31 days
			Once every 18 months	Once per 31 days
2/valve	Main Steam SV Position, acoustic monitor	901-21	**	Once per 31 days
			Once every 18 months	Once per 31 days
2/valve	Main Steam RV Position, temperature monitor	901-21	Once every 18 months	Once per 31 days
			Once every 18 months	Once per 31 days
2/valve	Main Steam SV Position, temperature monitor	901-21	Once every 18 months	Once per 31 days
			Once every 18 months	Once per 31 days

\*Instrument channels required during power operation to monitor postaccident conditions.

\*\*Functional tests will be conducted before startup at the end of each refueling outage or after maintenance is performed on a particular safety or relief valve.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

COMMONWEALTH EDISON COMPANY

AND

IOWA-ILLINOIS GAS AND ELECTRIC COMPANY

DOCKET NO. 50-265

QUAD CITIES UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 56  
License No. DPR-30

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by the Commonwealth Edison Company (the licensee) dated September 18, 1980, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changing paragraph 3.B and adding paragraphs 3.H and 3.I of Facility Operating License No. DPR-30 to read as follows:

3.B Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 56, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3.H Systems Integrity

The licensee shall implement a program to reduce leakage from systems outside containment that would or could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. This program shall include the following:

1. Provisions establishing preventive maintenance and periodic visual inspection requirements, and
2. Leak test requirements for each system at a frequency not to exceed refueling cycle intervals.

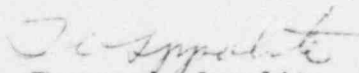
3.I Iodine Monitoring

The licensee shall implement a program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program shall include the following:

1. Training of personnel;
2. Procedures for monitoring, and
3. Provisions for maintenance of sampling and analysis equipment.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

  
Thomas A. Ippolito, Chief  
Operating Reactors Branch #2  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: February 6, 1981

ATTACHMENT TO LICENSE AMENDMENT NO. 56

FACILITY OPERATING LICENSE NO. DPR-30

DOCKET NO. 50-265

Revise the Appendix "A" Technical Specifications as follows:

<u>Remove</u>	<u>Replace</u>
3.2/4.2-15	3.2/4.2-15
3.2/4.2-15a	3.2/4.2-15a
3.2/4.2-18	3.2/4.2-18

QUAD-CITIES

DPR-30

TABLE 3.24

POSTACCIDENT MONITORING INSTRUMENTATION REQUIREMENTS<sup>27)</sup>

Minimum Number of Operable Channels <sup>(1) (3)</sup>	Parameter	Instrument Readout		Range
		Location Bolt 2	Number Provided	
1	Reactor pressure	902-5	1	0-1500 psig
			2	0-1200 psig
1	Reactor water level	902-3	2	-243 inches-+57 inches
1	Torus water temperature	902-21	2	0-200° F
1	Torus air temperature	902-21	2	0-600° F
2 <sup>(4)</sup>	Torus water level, indicator	902-3	1	-25 inches - +25 inches
			1	18 inch range
1	Torus pressure	902-3	1	-6 inches Hg to 5 psig
1	Drywell pressure	902-3	1	-6 inches Hg to 5 psig 0 to 75 psig
2	Drywell temperature	902-21	6	0-600° F
2	Neutron monitoring	902-5	4	0.1-10 <sup>6</sup> CPS
2 <sup>(4)</sup>	Torus to drywell differential pressure		2	0-3 psid
2/valve <sup>(5)</sup>	Main Steam RV position, acoustic monitor	902-21	1 per valve	NA
			1 per valve	0-600° F
2/valve <sup>(5)</sup>	Main Steam SV position, acoustic monitor	902-21	1 per valve	NA
			1 per valve	0-600° F

QUAD-CITIES  
DPR-30

Notes

1. Instruments channels required during power operation to monitor postaccident conditions.
2. Provisions are made for local sampling and monitoring of drywell atmosphere.
3. In the event any of the instrumentation becomes inoperable for more than 7 days during reactor operation, initiate an orderly shutdown and be in the cold shutdown condition within 24 hours.
4. From and after the date that one of these parameters is reduced to one indication, continued operation is not permissible beyond thirty days, unless such instrumentation is sooner made operable. In the event that all indication of these parameters is disabled and such indication cannot be restored in six (6) hours, an orderly shutdown shall be initiated and the reactor shall be in a cold shutdown condition in twenty four (24) hours.
5. If the number of position indicators is reduced to one indication on one or more valves, continued operation is permissible; however, if the reactor is in a shutdown condition, it may not be started up until all position indication is restored. In the event that all position indication is lost on one or more valves and such indication cannot be restored in 30 days, an orderly shutdown shall be initiated, and the reactor shall be depressurized to less than 90 psig in 24 hours.

QUAD-CITIES  
DIR-30

TABLE 4.2.2

POSTACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

Minimum Number of Operable Channels*	Parameter	Instrument Readout Location Unit 2	Calibration	Instrument Check
1	Reactor pressure	902-5	Once every 3 months	Once per day
1	Reactor water level	902-3	Once every 3 months	Once per day
1	Torus water temperature	902-21	Once every 3 months	Once per day
1	Torus air temperature	902-21	Once every 3 months	Once per day
2	Torus water level (indicator)	902-3	Once every 3 months	Once per day
			N/A	None
1	Torus pressure	902-3	Once every 3 months	Once per day
1	Drywell pressure	902-3	Once every 3 months	Once per day
2	Drywell temperature	902-21	Once every 3 months	Once per day
2	Neutron monitoring	902-5	Once every 3 months	Once per day
2	Torus to drywell differential pressure		Once every 6 months	None
2/valve	Main Steam RV Position acoustic monitor	902-21	**	Once per 31 days
			Once every 18 months	Once per 31 days
2/valve	Main Steam SV Position, acoustic monitor	902-21	**	Once per 31 days
			Once every 18 months	Once per 31 days
2/valve	Main Steam RV Position, temperature monitor	902-21	**	Once per 31 days
			Once every 18 months	Once per 31 days
2/valve	Main Steam SV Position, temperature monitor	902-21	**	Once per 31 days
			Once every 18 months	Once per 31 days

\*Instrument channels required during power operation to monitor postaccident conditions.

\*\*Functional tests will be conducted before startup at the end of each refueling outage or after maintenance is performed on a particular safety or relief valve.