

051\_0235 920 R ADOCK 050 UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, J.C. 20655

#### <u>FLORIDA POWER CORPORATION</u> <u>CITY OF ALACHUA</u> <u>CITY OF BUSHNELL</u> <u>CITY OF GAINESVILLE</u> <u>CITY OF KISSIMMEE</u> <u>CITY OF LEESBURG</u> <u>CITY OF NEW SMYRNA BEACH AND UTILITIES COMMISSION. CITY OF NEW SMYRNA BEACH <u>CITY OF OCALA</u> <u>ORLANDO UTILITIES COMMISSION AND CITY OF ORLANDO</u> <u>SEMINOLE ELECTRIC COOPERATIVE, INC.</u> <u>CITY OF TALLAHASSEE</u></u>

#### DOCKET NO. 50-302

#### CRYSTAL RIVER UNIT 3 NUCLEAR GENERATING PLANT

#### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 141 License No. DPR-72

- 1. The Nuclear Regulatory Commission (the Commission) has found chat:
  - A. The application for amendment by Fiorida Power Corporation, et al. (the licensees) dated January 23, 1992, 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.

 Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-72 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appindices A and B, as revised through Amendment No.141, are hereby incorporated in the license. Florida Power Corporation shall operate the facility in accordance with the Technical Specifications.

 This license amendment is effective as of its date of issuance and shall be implemented within 90 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Herbert N. Berkow, Director Project Directorate II-2 Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: May 4, 1992

#### ATTACHMENT TO LICENSE AMENDMENT NO. 141

#### FACILITY OPERATING LICENSE NO. DPR-72

DOCKET NO. 50-302

Replace the following pages of the Appendix "A" Technical Specifications with the attached pages. The revised pages are identified by amendment number and contain vertical lines indicating the area of change. The corresponding overleaf pages are also provided to maintain document completeness.

Remove	Insert
I Ia IV VII VIIIa XII XIIIa XVI 1-6 1-7 3/4 3-42 3/4 3-53 3/4 7-49 thru 3/4 7-53 3/4 7-54* 3/4 11-1 thru 3/4 11-15 3/4 12-1 thru 3/4 12-12 B3/4 3-6 B3/4 7-7 B3/4 7-8	I Ia IV VII VIIIa XII XIIIa XVI 1-6 1-7 3/4 3-42 3/4 3-53 3/4 7-49 3/4 7-54*  B3/4 3-6 B3/4 7-7 B3/4 7-8
B3/4 11-1 thru B3/4 11-4 B3/4 12-1 6-12 6-12a 5-13  6-14 6-14a 6-14b 6-14c 6-17 6-18 6-19 6-21	6-12 6-12a 6-13a 6-13b 6-14a 6-14a 6-14a 6-14a 6-17 6-18 6-19 6-21

\*There are no changes to this page. It is included to maintain document completeness.

DEFINI	TIONS	NUMBER OF TRANSPORTED AND ADDRESS OF TRANSPORTED AND ADDRESS OF TRANSPORTED ADDRESS OF TRANSPORTED ADDRESS OF T
SECTIO	N	PAGE
1.0	DEFINITIONS	
	DEFINED TERMS	1-1
	THERMAL POWER	1-1
	RATED THERMAL POWER	1-1
	OPERATIONAL MODE	1-1
	ACTION	1-1
	OPERABLE - OPERABILITY	1-1
	REPORTABLE EVENT	1-2
	CONTAINMENT INTEGRITY	1-2
	CHANNEL CALIBRATION	1-2
	CHANNEL CHECK	1-2
	CHANNEL FUNCTIONAL TEST	1-3
	CORE ALTERATION	1-3
	SHUTDOWN MARGIN	1-3
	IDENTIFIED LEAKAGE	1-3
	UNIDENTIFIED LEAKAGE	1-4
	PRESSURE BOUNDARY LEAKAGE	1-4
	CONTROLLED LEAKAGE	1-4
	QUADRANT POWER TILT	1-4
	DOSE EQUIVALENT I-131	1-4
	E - AVERAGE DISINTEGRATION ENERGY	1-4

CRYSTAL RIVER - UNIT 3 I

Amendment No. 24,69,90,141,

DEFINI	TIONS	animani da ar a danasin yan gonarranisi da karista angan
SECTIO	N	PAGE
1.0	DEFINITIONS (Continued)	
	STAGGERED TEST BASIS	1 - 5
	FREQUENCY NOTATION	1 - 5
	AXIAL POWER IMBALANCE	1 - 5
	REACTOR PROTECTION SYSTEM RESPONSE TIME	1-5
	ENGINEERED SAFETY FEATURE RESPONSE TIME	1-6
	PHYSICS TESTS	1 - 6
	SOURCE CHECK	1-6
	PROCESS CONTROL PROGRAM (PCP)	1-6
	OFFSITE DOSE CALCULATION MANUAL	1-6
	WASTE GAS SYSTEM	1-6
	PURGE - PURGING	1-7
	VENTING	1-7
	INDEPENDENT VERIFICATION	1-7
	MEMBER(S) OF THE PUBLIC	1-8
	SITE BOUNDARY	1-8
	UNRESTRICTED AREA	1-8
	CORE OPERATING LIMITS REPORT	1-8
	OPERATIONAL MODES (TABLE 1.1)	1-9
	FREQUENCY NOTATION (TABLE 1.2)	1-10

LIMITING	CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS		
SECTION		PAGE	
3/4.2	POWER DISTRIBUTION LIMITS		
3/4.2.1	AXIAL POWER IMBALANCE	3/4	2-1
3/4.2.2	NUCLEAR HEAT FLUX HOT CHANNEL FACTOR - FQ	3/4	2-4
3/4.2.3	NUCLEAR ENTHALPY RISE HOT CHANNEL FACTOR - FNH	3/4	2-6
3/4.2.4	QUADRANT POWER TILT	3/4	2-8
3/4.2.5	DNB PARAMETERS	3/4	2-12
3/4.3	INSTRUMENTATION		
3/4.3.1	REACTOR PROTECTION SYSTEM INSTRUMENTATION	3/4	3-1
3/4.3.2	ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION	3/4	3-9
3/4.3.3	MONITORING INSTRUMENTATION		
	Radiation Monitoring Instrumentation	3/4	3 - 22
	Incore Detectors	3/4	3 - 26
	Seismic Instrumentation	3/4	3-28
	Meteorological Instrumentation	3/4	3-31
	Remote Shutdown Instrumentation	3/4	3-34
	Post-accident Instrumentation	3/4	3-11
	Fire Detection Instrumentation	3/4	3-40
	Waste Gas Decay Tank - Explosive Gas Monitoring Instrumentation	3/4	3-53
	Toxic Gas Systems		
	- Chlorine Detection	3/4	3-55
	- Sulfur Dioxide Detection	3/4	3-56

LIMITING CO	INDEX	
SECTION	A CONTRACTION AND STREAMENTS AND STREAMENTS	
3/4.4	REACTOR COOLANT SYSTEM	- 198
3/4.4.1	REACTOR COOLANT LOOPS AND COOLANT CIRCULATION	
	Hot Standby	1
	Hot Shutdown 3/4 4-	2
	Cold Shutdown	2
\$/4.4.2	RELIEF VALVES SHUTTONING 3/4 4-	2
1/4.4.3	RELIEF VALVES ODED TOWN	3
	Code Salary Val	4
	Power Operation 3/4 'ut	4
	rower operated Relief Valve	

CRYSTAL RIVER - UNIT 3

C

IVa

CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMEN	TS	adorferer statistic C. Index of an
	PAGE	
PLANT SYSTEMS		
STEAM GENERATOR PRESSURE/ TEMPERATURE LIMITATION	3/4	7-13
CLOSED CYCLE COOLING WATER SYSTEM		
Nuclear Services Closed Cycle Cooling System	3/4	7-14
Decay Heat Closed Cycle Cooling Water System	3/4	7-15
SEA WATER SYSTEM		
Nuclear Services Sea Water System	3/4	7-16
Decay Heat Sea Water System	3/4	7 - 17
ULTIMATE HEAT SINK	3/4	7-18
FLOOD PROTECTION	3/4	7-19
CONTROL ROOM EMERGENCY VENTILATION SYSTEM	3/4	7-20
AUXILIARY BUILDING VENTILATION EXHAUST SYSTEM	3/4	7-23
HYDRAULIC SNUBBERS	3/4	7.5
SEALED SOURCE CONTAMINATION	3/4	7-35
FIRE SUPPRESSION SYSTEMS		
Water System	3/4	7-38
Deluge and Sprinkler Systems	3/4	7-41
Halon System	3/4	7-44
Fire Hose Stations	3/4	7-45
PENETRATION FIRE BARRIERS	3/4	7-47
RADIOACTIVE WASTE SYSTEMS		
Waste Gas Decay Tanks	3/4	7-48
Waste Gas Decay Tank - Explosive Gas Mixture	3/4	7-54
	CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMEN  PLANT SYSTEMS  STEAM GENERATOR PRESSURE/TEMPERATURE LIMITATION  CLOSED CYCLE COOLING WATER SYSTEM  Nuclear Services Closed Cycle Cooling System Decay Heat Closed Cycle Cooling Water System SEA WATER SYSTEM  Nuclear Services Sea Water System  Decay Heat Sea Water System  ULTIMATE HEAT SINK  FLOOD PROTECTION  CONTROL ROOM EMERGENCY VENTILATION SYSTEM  AUXILIARY BUILDING VENTILATION EXHAUST SYSTEM  HYDRAULIC SNUBBERS  SEALED SOURCE CONTAMINATION  FIRE SUPPRESSION SYSTEMS  Water System  Deluge and Sprinkler Systems Halon System  Fire Hose Stations  PENETRATION FIRE BARRIERS RADIOACTIVE WASTE SYSTEMS  Waste Gas Decay Tanks	CONDITIONS FOR OPERATION AND SURVETILANCE REQUIREMENTS         PLANT SYSTEMS         STEAM GENERATOR PRESSURE/ TEMPERATURE LIMITATION         STEAM GENERATOR PRESSURE/ TEMPERATURE LIMITATION         Nuclear Services Closed Cycle Cooling System         Add         Decay Heat Closed Cycle Cooling Water System         Nuclear Services Sea Water System         Adv         ULTIMATE HEAT SINK         Sea Water System         Adv         FIGEO PROTECTION         Sea Water Suble Cooling Water System         Adv         FIRE SUPRESSION SYSTEMS

CRYSTAL RIVER - UNIT 3 VII

SECTION			1 J
3/4.8	ELECTRICAL POWER SYSTEMS	ć	AVE
3/4.8.1	A.C. SOURCES		
	Operating	3/4	2-1
	Shutdown	3/4	8-6
/4.8.2	ONSITE POWER DISTRIBUTION SYSTEMS		0-0
	A.C. Distribution - Operating	3/4	8-7
	A.C. Distribution - Shutdown	3/4	2.9
	D.C. Distribution - Operating	3/4	210
	D.C. Distribution - Shutdown	3/4	8-12

 $^{\circ}$   $\sim$   $^{\circ}$ 

LIMITING	CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS	NAMES OF TAXABLE PARTY.
SECTION		PAGE
3/4.9	REFUELING OPERATIONS	
3/4.9.1	BORON CONCENTRATION	3/4 9-1
3/4.9.2	INSTRUMENTATION	3/4 9-2
3/4.9.3	DECAY TIME	3/4 9-3
3/4.9.4	CONTAINMENT PENETRATIONS	3/4 9-4
3/4.9.5	COMMUNICATIONS	3/4 9-5
3/4.9.6	FUEL HANDLING BRIDGE OPERABILITY	3/4 9-6
3/4.9.7	CRANE TRAVEL - SPENT FUEL STORAGE POOL BUILDING	3/4 9-7
3/4.9.8	DECAY HEAT REMOVAL AND COOLANT CIRCULATION	3/4 9-8
	All Water Levels	3/4 9-8
	Low Water Level	3/4 9-8a
3/4.9.9	CONTAINMENT PURGE AND EXHAUST ISOLATION SYSTEM	3/4 9-9
3/4.9.10	WATER LEVEL - REACTOR VESSEL	3/4 9-10
3/4.9.11	STORAGE POOL	3/4 9-11
3/4.9.12	STORAGE POOL VENTILATION	3/4 9-12
3/4.9.13	FUEL ASSEMBLY STORAGE	3/4 9-13
3/4.10	SPECIAL TEST EXCEPTIONS	
3/4.10.1	GROUP HEIGHT, INSERTION AND POWER DISTRIBUTION LIMITS	3/4 10-1
3/4.10.2	PHYSICS TESTS	3/4 10-2
3/4.10.3	NO FLOW TESTS	3/4 10-3
via 10 a	SHUTDOWN MARGIN	3/4 10-4

CRYSTAL RIVER - UNIT 3 VIII

-DELETED-

CRYSTAL RIVER - UNIT 3 VIIIa

-

Ô.

A CARLEN CARLES

BASES	INDEX			
<u>SECTION</u> 3/4.6 C	ONTAINMENT SYSTEMS	<u>p</u>	AGE	
3/4.6.1	PRIMARY CONTAINMENT.	В	3/4	6-
3/4.6.2	DEPRESSURIZATION AND COOLING SYSTEMS	В	3/4	6-
3/4.6.3	CONTAINMENT ISOLATION VALVE.	В	3/4	6
3/4.6.4	COMBUSTIBLE GAS CONTROL	B	3/4	6-4

BASES		NO WEAK AND A DOCTOR OF MALE AND ADDRESS OF MALE AND ADDRES	
SECTION		PAGE	
3/4.7	ANT SYSTEMS		
3/4.7.1	TURBINE CYCLE	B 3/4	7 - 1
3/4.7.2	STEAM GENERATOR PRESSURE/TEMPERATURE LIMITATION	B 3/4	7 - 3
3/4.7.3	CLOSED CYCLE COOLING WATER SYSTEM	B 3/4	7-3
3/4.7.4	SEA WATER SYSTEM	B 3/4	7-3
3/4.7.5	ULTIMATE HEAT SINK	B 3/4	7-4
3/4.7.6	FLOOD PROTECTION	B 3/4	7-4
3/4.7.7	CONTROL ROOM EMERGENCY VENTILATION SYSTEM	B 3/4	7-4
3/4.7.8	AUXILIARY BUILDING VENTILATION EXHAUST SYSTEM	B 3/4	7 - 5
3/4.7.9	HYDRAULIC SNUBBERS	B 3/4	7-5
3/4.7.10	SEALED SOURCE CONTAMINATION	B 3/4	7-6
3/4.7.11	FIRE SUPPRESSION SYSTEMS	B 3/4	7-6
3/4.7.12	PENETRATION FIRE BARRIERS	B 3/4	7-6
3/4.7.13.	1 WASTE GAS DECAY TANKS	B 3/4	7 - 7
3/4.7.13.	2 DELETED	1.1.1.1	
3/4.7.13.	3 DELETED		
3/4.7.13.	4 DELETED		
3/4.7.13.	5 EXPLOSIVE GAS MIXTURE	B 3/4	7-8

BASES		-		-
SECTION			PhG	æ
3/4.9.6	FUEL HANDLING BRIDGE OPERABILITY	B	3/4	9-2
3/4.9.7	CRANE TRAVEL - SPENT FUEL STORAGE POOL BUTLDING	в	3/4	9-2
3/4.9.8	DECAY HEAT REMOVAL AND COOLANT CIRCULATION	B	3/4	9-2
3/4.9.9	CONTAINMENT FURCE AND EXHAUST ISOLATION SYSTEM	в	3/4	9-2
3/4.9.10	WATER LEVEL - REACTOR VESSEL	B	3/4	9-3
3/4	STORAGE POOL	В	3/4	9-3
3/4.9.12	STORAGE POOL VENTILATION	B	3/4	93
3/4.9.13	FUEL ASSEMBLY STORAGE	B	3/4	9-3
3/4.10	SPECIAL TEST EXCEPTIONS			
3/4.10.1	GROUP HEIGHT, INSERTION AND POWER DISTRIBUTION LIMITS	В	3/4	10-1
3/4.10.2	PHYSICS TESTS	8	3/4	10-1
3/4.10.3	NO FLOW TESTS	B	3/4	10-1

3/4.10.4 SHU	TOWN MARGIN		B 3/4 10-1
--------------	-------------	--	------------

2

XIII

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CRYSTAL RIVER - UNIT 3 XIIIa

Amendment No. 89,141,

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а.		36.	- Mar.	2.3.

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AUMIN.	DIN	MIIN	E U	UNI	RULA

SECTION		PAGE
	Meeting Frequency	6-9
	Quorum	6-9
	Review	6-9
	Audits	6-10
	Authority	6-11
	Records	6-11
6.6	REPORTABLE EVENT ACTION	6-11
6.7	SAFETY LIMIT VIOLATION	6-12
<u>E.8</u>	PROCEDURES	6-12
6.9	REPORTING REQUIREMENTS	
6.9.1	ROUTINE REPORTS	6-13
	Startup Reports	6-13
	Annual Reports	6-14
	Monthly Operating Report	6-15
6.9.2	SPECIAL REPORTS	6-17
6.10	RECORD RETENTION	6-18
6.11	RADIATION PROTECTION PROGRAM	6-19
6.12	HIGH PADIATION AREA	6-19
6.13	ENVIRONMENTAL QUALIFICATION	6-20
6.14	PROCESS CONTROL PROGRAM	6-20
6.15	OFFSITE DOSE CALCULATION MANUAL	6-21
6.16	DELETED	_

CRYSTAL RIVER - UNIT 3 XVI

1

per disintegration (in Me.) for isotopes, other than iodines, with half lives greater than 15 minutes, making up at least 95% of the total noniodine activity in the coolant.

STAGGERED TEST BASIS

1.21 A STAGGERED TEST BASIS shall consist of:

- A test schedule for n systems, subsystems, trains or designated components obtained by dividing the specified test interval into n equal subintervals,
- b. The testing of one system, subsystem, train or designated components \*\* the beginning of each subinterval.

#### FREQUENCY NOTATION

1.22 The FREQUENCY NOTATION specified for the performance of Surveillance Requirements shall correspond to the intervals defined in Table 1.2.

#### AXIAL POWER IMBALANCE

1.23 AXIAL POWER IMBALANCE shall be the THERMAL POWER in the top half of the core expressed as a percentage of RATED THERMAL POWER minus the THERMAL POWER in the bottom half of the core expressed as a percentage of RATED THERMAL POWER.

#### REACTOR PROTECTION SYSTEM RESPONSE TIME

1.24 The REACTOR PROTECTION SYSTEM RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its trip setpoint at the channel sensor until power interruption at the control rod drive breakers.

#### ENGINEERED SAFETY FEATURE RESPONSE TIME

1.25 The ENGINEERED SAFETY FEATURE RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its ESF actuation setpoint at the channel sensor until the FSF equipment is capable of performing its safety function (i.e., the valves travel to their required positions, pump discharge pressures reach their required values, etc.). Times shall include diesel generator starting and sequence loading delays where applicable.

#### PHYSICS TESTS

1.26 PHYSICS TESTS shall be those tests performed to measure the fundamental nuclear characteristics of the reactor core and related instrumentation and 1) described in Chapter 13 of the FSAR, 2) authorized under the provisions of 10 CFR 50.59, or 3) otherwise approved by the Commission.

#### SOURCE CHECK

1.27 A SOURCE CHECK shall be the qualitative assessment of channel response when the channel sensor is exposed to a radioactive source.

#### PROCESS CONTROL PROGRAM (PCP)

1.28 The PROCESS CONTROL PROGRAM shall contain the current formulas, sampling, analyses, test, and determinations to be made to ensure that processing and packaging of solid radioactive wastes based on demonstrated processing of actual or simulated wet solid wastes will be accomplished in such a way as to assure compliance with 10 CFR Parts 20, 61, and 71, State regulations, burial ground requirements, and other requirements governing the disposal of solid radioactive waste.

#### 1.29 DELETED

#### OFFSITE DOSE CALCULATION MANUAL (ODCM)

1.30 The OFFSITE DOSE CALCULATION MANUAL shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring Alarm/Trip Setpoints, and in the conduct of the Environmental Radiological Monitoring Program. The ODCM shall also contain (1) the Radioactive Effluent Controls and Radiological Environmental Monitoring Programs required by Section 6.8.4 and (2) descriptions of the information that should be included in the Annual Radiological Environmental Operating and Semi-annual Radioactive Effluent Release Reports required by Specifications 6.9.1.5c and 6.9.1.5d.

#### WASTE GAS SYSTEM

1.31 A WASTE GAS SYSTEM is any equipment (e.g., tanks, vessels, piping) capable of collecting primary coolant system offgases from the primary system and providing for delay or holdup for the purpose of reducing the total radioactivity prior to release to the environment.

### 1.32 DELETED

#### PURGE - PURGING

1.33 PURGE or PURGING is the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration or other operating condition, in such a manner that replacement air or gas is required to purify the confinement.

#### VENTING

1.34 VENTING is the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration or other operating condition, in such a manner that replacement air or gas is not provided or required during VENTING. Vent, used in system names, does not imply a VENTING process.

#### INDEPENDENT VERIFICATION

1.25 INDEPENDENT VERIFICATION is a separate act of continuing or substantiating that an activity or condition has been completed or entered, in accordance with specified requirements, by an individual net associated with the original determination that the activity or condition was completed or implemented in accordance with specified requirements.

1.36 DELETED

## MEMBER(S) OF THE PUBLIC

1.37 MEMBER(S) OF THE PUBLIC shall include all individuals who by virtue of their occupational status have no formal association with the plant. This category shall include non-employees of the licensee who are permitted to use portions of the site for recreational, occupational, or other purposes not associated with plant functions. This Lategory shall not include non-employees such as vending machine servicemen or postmen who, as part of their r. mal job function, occasionally enter an area that is controlled by the licensee for purposes of protection of individuals from exposure to radiation and radioactive materials.

#### SITE BOUNDARY

1.38 The SITE BOUNDARY shall be that line beyond which the land is not owned. leased, or otherwise controlled by the licensee.

#### UNRESTRICTED AREA

1.39 An UNRESTRICTED AREA shall be any area at or beyond the site boundary, access to which is not controlled by the licensee for purposes of protection of individuals from exposure to rediation and radioactive materials, or any area within the site boundary use for residential quarters or industrial, commercial, institutional, and/or recreational purposes.

#### CORE OPERATING LIMITS REPORT

1.40 The CORE OPERATING LIMITS REPORT is the unit specific accument that provides core operating limits for the current reload cycle. These cycle-specific core operating limits shall be determined for each reload cycle in accordance with Specification 6.9.1.7. Plant operation within these core operating limits is addressed in individual specifications.

TARIE 7 7.11 FIRE DETECTION INSTRUMENTS MINIMUM DETECTORS OPERABLE HEAT/SMOKE DETECTOR LOCATION 1. Control Complex Elevation 108'0" 8. 1. Zone 4 (Plant Battery Room 38) Zone 5 (Plant Battery Room 3A) NA /1 2. 3 NA/1 Zone 6 (Battery Charger Room 3B) Zone 7 (Battery Charger Room 3A) Zone 8 (416DV Switchgear Bus Room 3B) NA/1 4. NA/1 5. . NA/1 6. Zone 9. (4160V Switchgear Bus Room 3A) Zone 10 (Inverter Room 3B) 7. NA/1 Zone 11 (Inverter Room 3A) NA/1 8. NA/1 b. Elevation 120'0" 1. Zone 5 (Control Rod Drive Equipment Room) 2. Zone 7 (480V Switchgear Bus Room 38) NA/2 Zone 8 (480V Switchgear Bus Room 3A) NA/1 3. NA/1 C. Elevation 134'0" Zone 3A (Cable Spreading Room) 1. NA/5 0F Zone 38 (Cable Spreading Room) 2. NA/3 d. Elevation 145'0" Zone 4 (Satellite Instrument Shop and Office)NA/2 . 1. 2. Zone 5 (Control Room) 1/6 Elevation 164'0" e. . Zone 3 (HVAC Equipment Roam) 1. NA/5 Zone 4 (HVAC Emergency Equipment 3B) 2. Zone 5 (HVAC Emergency Equipment 3A) NA/1 3. NA/1 2. Auxiliary Building a. Elevation 119'0" Zone 20 (Emergency Diesel Generator 3B 1. Controls Room) Zone 21 (Emergency Diesel Generator 3A 1/NA 2. Controls Room) Zone 27 (Emergency Diesel Generator Room 38) 5/NA 3. ICRYSTAL RIVER - ZBRET 28 (Emergency Diesel Generator Room 3A) 5/NA 3/4 3-41

Amendmentino. 13

Pages 3/4 3-42 thru 3/4 3-52 are deleted.

Next page is 3/4 3-53

CRYSTAL RI. R - UNIT 3

#### INSTRUMENTATION

#### WASTE GAS DECAY TANK - EXPLOSIVE GAS MONITORING INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

3.3.3.10 The Waste Gar Decay Tanks shall have one hydrogen and one oxygen monitoring channel OPERABLE.

APPLICABILITY: During WASTE GAS SYSTEM operation.

- ACTION: a. With the number of OPERABLE channels less than required above, operation of this system may continue, provided grab samples are collected and analyzed:
  - at least once per 4 hours during degassing operations
  - (2) at least once per 24 hours during other operations
  - b. If the affected channel(s) cannot be returned to OPERABLE status within 30 days, submit a special report to the Commission pursuant to Specification 6.9.2 within 30 days describing the reasons for inoperability and a schedule for corrective action.
  - c. The provisions of 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.3.3.10 The Waste Gas Decay Tank explosive gas monitoring instrumentation shall be demonstrated operable by performing the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST, and CHANNEL CALIBRATION at the frequencies shown in Table 4.3-10.

TABLE 4.3-10

# WASTE GAS SYSTEM EXPLOSIVE GAS MONITORING INSTRUMENTATION

#### SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION	I UNCTIONAL TEST	
1. Hydrogen Monitors	D	Q#	н.	
2. Oxygen Honitors	D	۵*	п	

\* The CHANNEL CALIBRATION shall include the use of standard gas samples containing a nominal:

#### Hydrogen Monitors

a. 1 volume percent hydr .en, balance nitrogen.
 b. 4 volume percent hydrogen, balance nitrogen.

### Oxygen Monitors

c. 1 volume percent oxygen, balance nitrogen.
d. 4 volume percent oxygen, balance nitrogen.

Pages 3/4 7-49 thru 3/4 7-53 are deleted.

Next page is 3/4 7-54

CRYSTAL RIVER - UNIT 3 3/4 7-49

#### PLANT SYSTEMS

WASTE CAS DECAY TANK - EXPLOSIVE GAS MIXTURE

### LIMITING CONDITION FOR OPERATION

3.7.13.5 The concentration of oxygen in any Waste Gas Decay Tank shall be limited to less than or equal to 2% by volume whenever the concentration of hydrogen in that Waste Gas Decay Tank is greater than or equal to 4% by volume.

APPLICABILITY: At all times.

#### ACTION:

Whenever the concentration of hydrogen in any Waste Gas Decay Tank is greater than or equal to 4% by volume, and:

- a. The concentration of oxygen in that Waste Gas Decay Tank is greater than 2% by volume, but less than 4% by volume, without delay begin to reduce the oxygen concentration to within its limit.
- b. The concentration of oxygen in that Waste Gas Decay Tank is greater than or equal to 4% by volume, immediately suspend additions of waste gas to that Waste Gas Decay Tank and without delay begin to reduce the oxygen concentration to within its limit.
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.7.13.5 The concentrations of hydrogen and oxygen in the Waste Gas Decay Tank shall be continuously monitored with the hydrogen and oxygen monitors required OPERABLE by Specification 3.3.3.10 or by sampling in accordance with Specification 3.3.3.10 if the hydrogen and/or oxygen monitors are inoperable.

CRYSTAL RIVER - UNIT 3 3/4 7-54



Same Figure 3-2 Incore Instrumentation Specification Acceptable Minimum QUADRANT POWER TI. T Arrengement

CRYSTAL RIVER - UNIT 3 B 3/4 3-5

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3/4.3 INSTRUMENTATION

#### BASES

3/4.3.3.8 DELETED

3/4.3.3.9 DELETED

#### 3/4.3.3.10 WASTE GAS DECAY TANK - EXPLOSIVE GAS MONITORING INSTRUMENTATION

The OPERABILITY of the Waste Gas Decay Tank explosive gas monitoring instrumentation of the sampling and analysis program required by this specification provides for the monitoring (and controlling) of potentially explosive gas mixtures in the Waste Gas Decay Tanks.

#### 3/4.3.3.11 TOXIC GAS SYSTEMS

The OPERABILITY of the toxic gas systems ensures that sufficient capability is available to promptly detect and initiate protective action in the event of an accidental toxic gas release. This capability is required to protect control room personnel and is consistent with guidance provided in Regulatory Guide 1.78, "Assumptions for Evaluating the Habitability of a Nuclear Power Plant During a Postulated Chemical Release", June 1974 and Regulatory Guide 1.95, "Protection of Nuclear Power Plant Control Room Operators Against an Accidental Chlorine Release", Remission 1, January 1977.

The chlorine detection system is designed so that a chlorine concentration of 5 ppm by volume is not exceeded in the control room within 2 minutes after detection.

The sulfur dioxide detection system is designed so that a sulfur dioxide concentration of 40 ppm by volume is not exceeded in the control room within 2 minutes after detection.

CRYSTAL RIVER - UNIT 3

B 3/4 3-6

Amendment No. 69, 775, 141,

PLANT SYSTEMS

#### BASES

#### 3/4.7.13.1 WASTE GAS DECAY TANKS

Restricting the quantity of radioactivity contained in each waste gas decay tank provides assurance that in the event of a simultaneous uncontrolled release of all of the tanks' contents, the resulting total body exposure to an individual at the nearest exclusion area boundary will not exceed 0.5 rem. This is consistent with FSAR accident analyses.

3/4.7.13.2 DELETED

CRYSTAL RIVER - UNIT 3 B 3/4 7-7 Amendment No. 89, 141,

PLANT SYSTEMS

#### BASES

3/4.7.13.3 DELETED

3/4.7.13.4 DELETED

#### 3/4.7.13.5 EXPLOSIVE GAS MIXTURE

This specification is provided to ensure that the concentration of potentially explosive gas mixtures contained in the Waste Gas Decay Tanks is maintained below the flammability limits of hydrogen and oxygen. Maintaining the concentration of hydrogen and oxygen below their flammability limits provides assurance that the releases of radioactive materials will be controlled in conformance with the requirements of General Design Criterion 60 of Appendix A to 10 CFR Part 50.

#### AUDITS (Continued)

- The OFFSITE DOSE CALCULATION MANUAL and implementing procedures at least once per 24 months.
- The PROCESS CONTROL PROGRAM and implementing procedures for solidification of radioactive wastes at least once per 24 months.
- k. The performance of activities required by the Cality Assurance Program for effluent and environmental monitoring at least once per 12 months.
- Any other area of facility operation considered appropriate by the NGPC or the Executive Vice President.

#### AUTHORITY

6.5.2.10 The NGRC shall report to and advise the Executive Vice President on those areas of responsibility specified in Sections 6.5.2.8 and 6.5.2.9.

#### RECORDS

a.:

- 6.5.2.11 Records of NGRC activities shall be prepared, approved and distributed as indicated below:
  - Minutes of each NGRC meeting shall be prepared, suproved and forwarded to the Executive Vice President within 14 days following each meeting.
  - Reports of reviews encompassed by Section 6.5.2.8 above, shall be forwarded to the Executive Vice President within 14 days following completion of the review.
  - c. Audit reports encompassed by Section 6.5.2.9 above, shall be forwarded to the Executive Vice President and to the management | positions responsible for the areas audited within 30 days after completion of the audit.

#### 6.6 REPORTABLE EVENT ACTION

- 6.6.1 The following actions shall be taken for REPORTABLE EVENTS:
  - a. The Commission shall be notified and a report submitted pursuant to the requirements of Section 50.73 to 10 CFR 50, and
  - D. Each REPORTABLE EVENT shall be reviewed by the PRC and submitted to the NGRC and the Vice President, Nuclear Operations.

CRYSTAL RIVER - UNIT 3

6-11

Amendment No. 5,25,87,89, P., 111

#### 6.7 SAFETY LIMIT VIOLATION

- 6.7.1 The following actions shall be taken in the event a Safety Limit is violated:
  - a. The facility shall be placed in at least HOT STANDBY within one hour.
  - b. The Safety Limit violation shall be reported to the Commission, the Vice President, Nuclear Operations, and to the NGRC within 24 hours.
  - c. A Safety Limit Violation Report shall be prepared. The report shall be reviewed by the PRC. This report shall describe (1) applicable circumstances preceding the violation, (2) effects of the violation upon facility components, systems or structures and (3) corrective action taken to prevent recurrence.
  - d. The Safety Limit Violation Report shall be submitted to the Commission, the NGRC and the Vice President, Nuclear Operations within 14 days of the violation. A separate Licensee Event Report need not be submitted if the Safety Limit Violation Report meets the requirements of 10 CFR 50.73 (b) in addition to the requirement above.

#### 6.8 PROCEDURES AND PROGRAMS

6.8.1 SCOPE

Written procedures shall be established, implemented and maintained covering the activities referenced below:

- a. The applicable procedures recommended in Appendix "A" of Regulatory Guide 1.33, November, 1972.
- b. Refueling operations.
- c. Surveillance and test activities of safety related equipment.
- d. Security Plan implementation.
- e. Emergency Plan implementation.
- f. Fire Protection Plan implementation.
- g. Systems Integrity Program implementation.
- h. Iodine Monitoring Program implementation.
- i. PROCESS CONTROL PROGRAM implementatio.

CRYSTAL RIVER - UNIT 3

Amendment No. 141,

- 6.8 PROCEDURES AND PRO RAMS (Continued)
  - j. OFFSITE DOSE CALCULATION MANUAL implementation.
  - Quality Assurance Program for effluent and environmental monitoring.
- 6.8.2 REVIEW PROCESS
- 6.8.2.1 Each procedure and administrative policy of 6.8.1 above, and changes thereto, shall be reviewed and approved prior to implementation as follows:
  - a. The Emergency Plan, Security Plan, Fire Protection Plan and implementing procedures, Administrative Instructions and those test procedures associated with plant modifications that affect nuclear safety shall be reviewed and approved by the PRC and the Director, Nuclear Plant Operations prior to implementation.
  - b. For all other procedures, the review cycle shall consist of: an intradepartmental review by a Qualified Reviewer, and interdisciplinary review by Qualified Reviewer(s) in interfacing departments, as specified in administrative procedures, and approval by the responsible Superintendent or Manager, as specified by administrative procedures. The PRC shall then review the 10 CFR 50.59 evaluation within 14 days of approval.
- 6.8.2.2 The training and qualification of Qualified Reviewers shall be governed by administrative procedures, with final certification by the Director, Nuclear Plant Operations. Recertification will be required on a periodic basis and upon transfer between departments. As a minimum, all Qualified Reviewers shall meet the requirements of ANSI N18.1-1971, Sections 4.2, 4.3, 4.4, or 4.6, or the equivalent.
- 6.8.2.3 Each procedure and administrative policy of 6.8.1 shall be reviewed on a periodic basis as set forth in administrative procedures.

CRYSTAL RIVER - UNIT 3

#### 6.8 PROCEDURES AND PROGRAMS (Continued)

- 6.8.3 Temporary changes to procedures of 6.8.1 above may be made provided:
  - a. The intent of the original procedure is not altered.
  - b. The change is approved by two members of the plant management staff, at least one of whom holds a Senior Reactor Operator's License.
  - c. The change is documented and subsequently reviewed and approved within 14 days of implementation, in accordance with the requirements of Specification 6.8.2
- 6.8.4 The following programs shall be established, implemented, and maintained:
  - a. Radioactive Effluent Controls Program

A program shall be provided conforming with 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to MEMBERS OF THE PUBLIC from radioactive effluents as low as reasonably achievable. The program (1) shall be contained in the ODCM, (2) shall be implemented by operating procedures, and (3) shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

- Limitations on the operability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM,
- Limitations on the concentrations of radioactive material released in liquid effluents to UNRESTRICTED AREAS conforming to 10 CFR Part 20, Appendix B, Table II, Column 2,
- Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.106 and with the methodology and parameters in the ODCM.
- 4) Limitations on the annual and quarterly doses or dose commitment to a MEMBER OF THE PUBLIC from radioactive materials in liquid effluents released from the unit to UNRESTRICTED AREAS conforming to Appendix I to 10 CFR Part 50,
- 5) Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days.

CRYSTAL RIVER - UNIT 3

6-13

Amendment No. 5,9,87, 90,141,

- 6.8.4a Radioactive Effluent Controls Program (Continued)
  - 6) Limitations on the operability and use of the liquid and gaseous effluent treatment systems to ensure that the appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a 31-day period would exceed 2 percent of the guidelines for the annual dose or dose commitment conforming to Appendix I to 10 CFR Part 50,
  - 7) Limitations on the dose rate resulting from radioactive material released in gaseous effluents to areas beyrod the SITE BOUNDARY conforming to the doses associated with FR Part 20, Appendix B, Table II, Column 1,
  - Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from the unit to areas beyond the SITE BOUNDARY conforming to Appendix I to 10 CFR Part 50,
  - 9) Limitations on the annual and quarterly doses to a MEMBER OF THE PUBLIC from Iodine-131, Iodine-133, tritium, and all rac o-nuclides in particulate form with half-lives greater that b days in gaseous effluents released from a unit to areas beyond the SITE BOUNDARY conforming to Appendix I to 10 CFR Part 50, and
  - Limitations on the annua? dose or dose commitment to any MEMBER OF THE PUBLIC due to releases of radioactivity and to radiation from uranium fuel cycle sources conforming to 40 CFR Part 190.
  - b. Radiological Environmental Monitoring Program

A program shall be provided to monitor the radiation and radionuclides in the environs of the plant. The program shall provide (1) representative measurements of radioactivity in the highest potential exposure pathways, and (2) verification of the accuracy of the effluent monitoring program and modeling of environmental exposure pathways. The program shall (1) be contained in the ODCM, (2) conform to the guidance of Appendix I to 10 CFR Part 50, and (3) include the following:

 Monitoring, sampling, analysis, and reporting of radiation and radionuclides in the environment in accordance with the methodology and parameters in the ODCM.

CRYSTAL RIVER - UNIT 3

#### 6.8.4b Radiological Environmental Monitoring Program (Continued)

- 2) A Land Use Census to ensure that changes in the use of areas at and beyond the SITE BOUNDARY are identified and that modifications to the monitoring program are made if required by the results of this census, and
- 2) Participation in an Interlaboratory Comparison Program to ensure that independent checks on the precision and accuracy of the measurements of radioactive materials in environmental sample matrices are performed as part of the quality assurance program for environmental monitoring.

#### REPORTING REQUIREMENTS 6.9

#### ROUTINE REPORTS

6.9.1 In addition to the applicable reporting requirements of Title 10. Code of Federal Regulations, the following reports shall be submitted to the Director of the Regional Office of Inspection and Enforcement unless otherwise noted.

#### STARTUP REPORTS

- 6.9.1.1 A summary report of plant startup and power escalation testing will be submitted following (1) receipt of an operating license, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the plant.
- 6.9.1.2 The startup report shall address each of the tests identified in the FSAR and shall include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described. Any additional specific details requested in license conditions based on other commitments shall be included in this report.
- 6.9.1.3 Startup reports shall be submitted within (1) 90 days following completion of the startup test program, (2) 90 days following resumption or commencement of commercial power operation, or (3) 9 months following initial criticality, whichever is earliest. If the Startup Report does not cover all three events, (i.e., initial criticality, completion of startup test program, and the resumption or commencement of commercial power operation), supplementary reports shall be submitted at least every three months until all three events have been completed.

CRYSTAL RIVER - UNIT 3 6-13b

Amendment No. 141.

#### ANNUAL AND SEMIANNUS' REPORTS

6.9.1.4 Annual reports covering the activities of the unit as described below for the previous calendar year shall be submitted prior to March 1 of each year. The initial report shall be submitted prior to March 1 of the year following initial criticality.

- 6.9.1.5 Reports required on an annual basis shall include:
  - a. A tabulation of the number of station, utility, and other personnel (including contractors) receiving exposures greater than 100 mrem/yr. and their associated man-rem exposure according to work and job functions, e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance (describe maintenance), waste processing, and refueling. The dose assignments to various duty functions may be estimated based on pocket dosimeter, TLD, or film badge measurements. Small exposures totaling less than 20 percent of the individual total dose need not be accounted for. In the aggregate, at least 80 percent of the total whole body dose received from external sources should be assigned to specific major work functions.
  - b. A list of the reactor vessel material surveillance capsules installed in the reactor at the end of the report period and a summary of any withdrawals or insertions of capsules during the report period. In supplying this information, the ownership of each capsule shall be indicated and the irradiation location in the vessel of each capsule which was inserted during the report period shall be identified.
  - c. Annual Radiological Environmental Operating Report

The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted before May 1 of each year. The report shall include summaries, interpretations, and analysis of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in (1) the ODCM and (2) Sections IV.B.2, IV.B.3, and IV.C of Appendix I to 10 CFR Part 50.

<sup>1</sup>This tabulation supplements the requirements of 20.407 of 10 CFR Part 20.

#### ANNUAL AND SEMIANNUAL REPORTS (Continued)

d. Semiannual Radioactive Effluent Release Report

The Semiannual Radioactive Effluent Release Report covering the operation of the unit during the previous 6 months of operation shall be submitted within 60 days after January 1 and July 1 of each year. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit. The material provided shall be (1) consistent with the objectives outlined in the ODCM and PCP and (2) in conformance with 10 CFR 50.36a and Section IV.B.1 of Appendix I to 10 CFR Part 50.

e. A list of all challenges to the Pressurizer Power Operated Relief Valve (PORV) and pressurizer safety valves for the report period.

#### SPECIAL REPORTS

- 6.9.2 Special reports shall be submitted to the Director of the Office of Inspection and Enforcement, Region II, within the time period specified for each report. These reports shall be submitted covering the activities identified below. A separate Licensee Event Report, when required by 10 CFR 50.73 (a), need not be submitted if the Special Report meets the requirements of 10 CFR 50.73 (b) in addition to the requirement. If the applicable referenced Specification.
  - a. ECCS Actuation, Specification 3.5.2 and 3.5.3.
  - b. Inoperable Seismic Monitoring Instrumentation, Specification 3.3.3.3.
  - c. Inoperable Meteorological Monitoring Instrumentation, Specification 3.3.3.4.
  - d. Seismic event analysis, Specification 4.3.3.3.2.
  - . Inoperable Fire Detection Monitoring Instrumentation, Specification 3.3.3.7.
  - f. Specific Activity, Specification 3.4.8.
  - g. Results of Steam Generator Tube Inspection. Specification 4.4.5.5.b.
  - h. Inoperable Fire Suppression System, Specification 3.7.11.1., 3.7.11.2, 3.7.11.3, and 3.7.11.4.
  - i. DELETED
  - j. DELETED
  - k. DELETED
  - 1. DELETED
  - m. DELETED
  - N. DELETED
  - O. DELETED

CRYSTAL RIVER - UNIT 3

6-17

#### SPECIAL REPORTS (Continued)

- D. DELETED
- Inoperable explosive gas monitoring instrumentation, Specification 3.3.3.10.

#### 6.10 RECORD RETENTION

- 6.10.1 The following records shall be retained for at least five years:
  - Records and logs of facility operation covering time intervals at each power level.
  - Records and logs of principal maintenance activities, inspections, repair and replacement of principal items of equipment related to nuclear safety.
  - c. All REPORTABLE EVENTS submitted to the Commission.
  - d. Records of surveillance activities, inspections and calibrations required by these Technical Specifications.
  - e. Records of reactor tests and experiments.
  - f. Records of changes made to Operating Procedures.
  - g. Records of radioactive shipments.
  - Records of sealed source and fission detector leak tests and results.
  - Records of annual physical inventory of all sealed source material of record.
- 6.10.2 The following records shall be retained for the duration of the Facility Operating License:
  - a. Records and drawing changes reflecting facility design modifications made to systems and equipment described in the Final Safety Analysis Report.
  - Records of new and irradiated fuel inventory, fuel transfers and assembly burnup histories.
  - c. Records of facility radiation and contamination surveys.
  - Records of radiation exposure for all individuals entering radiation control areas.

- Records of gaseous and liquid radioactive material released to the environs.
- Records of transient or operational cycles for those facility components identified in Table 5.7.-1.
- g. Records of training and qualification for current members of the plant staff.
- Records of inservice inspections performed pursuant to these Technical Specifications.
- i. Records of Quality Assurance activities required by the QA Manual.
- Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 LFR 50.59.
- k. Records of meetings of the PRC and NGRC.
- Records for Environmental Qualification which are covered under the provisions of paragraph 6.13.
- m. Records of analytical results required by the Operational Radiological Environmental Monitoring Program.
- n. Records of reviews performed for changes made to the OFFSITE DOSE CALCULATION MANUAL and the PPOCESS CONTROL PROGRAM.

#### 6.11 RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Fart 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

#### 6.12 HIGH RADIATION AREA

- 6.12.1 In lieu of the "control device" or "alarm signal" required by paragraph 20.203(c) (2) of 10 CFR 20 a High Radiation Area in which the intensity of radiation is greater than 100 mrem/hr but less than 1000 mrem/hr shall be barricaded and conspicuously posted as a High Radiation Area and entrance thereto shall be controlled by issuance of a Radiation Work Permit and any individual or group of individuals permitted to enter such areas shall be provided with one or more of the following:
  - a. A radiation monitoring device which continuously indicates the radiation dose rate in the area, or
  - b. An integrating alarming dosimeter which alarms when a preset integrated dose or dose rate is received. Entry into such areas with this alarming dosimeter may be made after the dose rate levels in the area have been established and personnel have been made knowledgeable of them, or

CRYSTAL RIVER - UNIT 3

0rder dated 70/24/80 Amendment No. 9,89, 92/,728,141,

# 3.12 HIGH RADIATION AREA (Continued)

- c.) An individual qualified in Health Physics Procedures with a radiation dose rate monitoring device, who is responsible for providing positive control over the activities in the area and who performs periodic radiation surveillance at the frequency specified by the Radiation Work permit.
- 6.12.2 A High Radiation Area in which the intensity of radiation is greater than 1000 mrem/hr shall be subject to the provisions of 6.12.1 above, and in addition locked doors shall be provided to prevent unauthorized entry into such area. The keys shall be maintained under the administrative control of the Health Physics Supervisor with one key assigned to the administrative control of Shift Supervisor on duty.

Individual areas that are accessible to personnel, with radiation levels such that a major portion of the body could receive in one hour a dose in excess of 1000 mrem,\*\* and that are located within large areas such as the Reactor Building where no enclosure exists for purposes of locking and no enclosure can be reasonably constructed around the individual area, shall be roped off and conspicuously posted, and a flashing light shall be activated as a warning device.

#### 5.13 ENVIRONMENTAL QUALIFICATION

- 6.13.1 By no later than June 30, 1982, all safety-related electrical equipment in the facility shall be qualified in accordance with the provisions of Division of Operating Reactors "Guidelines for Evaluating Environmental Qualification of Class IE Electrical Equipment in Operating Reactors" (DOR Guidelines) or NUREG-0588 "Interim Staff Position on Environmental Qualification of Safety-Related Electrical Equipment," December, 1979. Copies of these documents are attached to Order for Modification of License DPR-72 dated October 24, 1980.
- 6.13.2 By no later than December 1, 1980, complete and auditable records must be available and maintained at a central location which describe the environmental qualification method used for all safety-related electrical equipment in sufficient detail to document the degree of compliance with the DOR Guidelines or NUREG-0588. Thereafter, such records should be updated and maintained current as equipment is replaced, further tested, or otherwise further qualified.

\*\*Measurement made at 18" from source of radioactivity.

CRYSTAL RIVER - UNIT 3

6-20

Ørder die. 10/24/80 Amendment No. 89,70, 126

#### 6.14 PROCESS CONTROL PROGRAM (PCP)

Changes to the PCP:

- a. Shall be documented and records of reviews performed shall be retained as required by Specification 6.10.3n. This documentation shall contain:
  - Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s), and
  - A determination that the change will maintain the overall conformance of the solidified waste product to existing requirements of Federal, State, or other applicable regulations.
- b. Shall become effective after review and acceptance by the PRC and the approval of the Director, Nuclear Plant Operations.

#### 6.15 OFFSITE DOSE CALCULATION MANUAL (ODCM)

Changes to the ODCM:

- a. Shall be documented and records of reviews performed shall be retained as required by Specification 6.10.3n. This documentation shall contain:
  - Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s), and
  - 2) A determination that the change will maintain the level of radioactive effluent control required by 10 CFR 20.106, 40 CFR Part 190, 10 CFR 50.36a, and Appendix I to 10 CFR Part 50 and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations.
- b. Shall become effective after review and acceptance by the PRC and the approval of the Director, Nuclear Plant Operations.
- c. Shall be submitted to the Commission in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Semiannual Radioactive Effluent Release Report for the period of the report in which any change to the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the are. of the page that was changed, and shall indicate the date (e.g., month/year) the change was implemented.

6.16 DELETED

CRYSTAL RIVER - UNIT 3

Amendment No. 69,70, 141,