ATTACHMENT

Re: Turkey Point Unit 3 & 4
Docket Nos. 50-250, 50-251
Proposed License Amendment
Containment Integrity

The proposed changes to the containment integrity specification to allow surveillance testing of PASS valves does not involve significant hazards considerations. The change is similar to example vii, of the examples of amendments that are not considered likely to involve significant hazards considerations as published in the Federal Register on April 6, 1983. This change makes the Turkey Point license conform to current standard technical specifications for these items and the minor changes are clearly in keeping with the regulations.

Based on our review and the above examples, we have determined that this amendment does not involve any significant hazards considerations pursuant to 10 CFR 50.91 (c) in that the amendment does not:

1) involve a significant increase in the probability or consequences of an accident previously evaluated; or

2) create the possibility of a new or different kind of accident from any accident previously evaluated; or

3) involve a significant reduction in a margin of safety.

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TABLE 1.1
OPERATIONAL MODES***

Mode	Reactivity Condition, K_{eff}	% Rated Thermal Power*	Average Coolant Temperature
1. Power Operation	$\geq$0.99	>5%	$\geq$350°F
2. Start-up	$\geq$0.99	$\leq$5%	$\geq$350°F
3. Hot Standby	<0.99	0	$\geq$350°F
4. Hot Shutdown	<0.99	0	350°F > T_{avg} > 200°F
5. Cold Shutdown	<0.99	0	<200°F
6. Refueling**	$\leq$0.90	0	$\leq$140°F

* Excluding decay heat.

** Fuel in the reactor vessel with the vessel head closure bolts less than fully tensioned or with the head removed.

*** **This table shall only be applicable to those specifications that have been modified to reflect Operational Modes in the Applicability section of the LCOs, except as specified in Section 3.0.1 (Note).**

1.5 CONTAINMENT INTEGRITY

CONTAINMENT INTEGRITY shall exist when:

a) All penetrations required to be closed during accident conditions are either:

1) Capable of being closed by an OPERABLE containment automatic isolation valve system, or

2) Closed by manual valves, blind flanges, or deactivated automatic valves secured in their closed positions, except as provided in Specification 3.3.1.

b) The equipment hatch is properly closed.

c) Each air lock is in compliance with the requirements of Specification 3.3.4.

d) The containment leakage rates are within the limits of Specification 4.4.

1.6 PROTECTIVE INSTRUMENTATION LOGIC

1) **Analog Channel**

An analog channel is an arrangement of components and modules as required to generate a single protective action signal when required by a process condition. An analog channel loses its identity where single action signals are combined.

2) **Logic Channel**

A logic channel is a group of relay contact matrices which operate in response to the analog channel signals to generate a protective action signal.

3) **Degree of Redundancy (Ref. Table 3.5-1.)**

Degree of redundancy is defined as the difference between the total number of operable channels and the number of channels which when tripped will cause reactor trip.

1.7 INSTRUMENTATION SURVEILLANCE

1) Channel Check

Channel check is a qualitative determination of acceptable operability by observation of channel behavior during operation. This determination shall include comparison of the channel with other independent channels measuring the same variable or radioactive source check of the Area and Process Radiation Monitoring Systems for channels.

2) Channel Functional Test

A channel functional test consists of injecting a simulated signal into the channel to verify that it is operable, including alarm and/or trip initiating action.

3) Channel Calibration

Channel calibration consists of the adjustment of channel output such that it responds, with acceptable range and accuracy, to known values of the parameter which the channel measures. Calibration shall encompass the entire channel, including alarm or trip, and shall be deemed to include the channel functional test.

1.8 (Deleted)

1.9 (Deleted)

1.10 CORE ALTERATION

CORE ALTERATION shall be the movement or manipulation of any component within the reactor pressure vessel with the vessel head removed and fuel in the vessel. Suspension of CORE ALTERATION shall not preclude completion of movement of a component to a safe conservative position.

1.11 RATED POWER (R.P.)

Rated power is the licensed steady state reactor core thermal power output of 2200 MWt.

1.12 THERMAL POWER

Thermal power is the total core heat transferred from the fuel to the coolant.

1.13 DESIGN POWER

Design power is the steady state reactor thermal output of 2300 MWt.

1.30 PURGE - PURGING

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.

1.31 VENTING

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.

1.32 SITE BOUNDARY

The SITE BOUNDARY shall be that line beyond which the land is neither owned, leased nor otherwise controlled by the licensee.

1.33 UNRESTRICTED AREA

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 radiation from radioactive materials, or any area within the SITE BOUNDARY used for residential quarters or for industrial, commercial, institutional and/or recreational purposes.

1.34 MEMBER(S) OF THE PUBLIC

MEMBER(S) OF THE PUBLIC shall include all persons who are not occupationally associated with the plant. This category does not include employees of the licensee, its contractors, vendors or members of the Armed Forces using property located within the SITE BOUNDARY. Also excluded from this category are persons who enter the site to service equipment or to make deliveries. This category does include persons who use portions of the site for recreational, occupational or other purposes not associated with the plant.

1.35 HEAVY LOADS

Any load in excess of the nominal weight of a fuel and control rod assembly and associated handling tool. For the purpose of this specification, HEAVY LOADS will be defined as loads in excess of 2000 pounds.

1.36 OPERATIONAL MODE - MODE

An OPERATIONAL MODE (i.e., MODE) shall correspond to any one inclusive combination of core reactivity condition, power level, and average reactor coolant temperature specified in Table 1.1.

3.0 LIMITING CONDITIONS FOR OPERATION - APPLICABILITY

3.0.1 When a Limiting Condition for Operation is not met, except as provided in the associated ACTION requirements, within 1 hour action shall be initiated to place the unit in a MODE in which the specification does not apply by placing it, as applicable, in:

a) At least HOT STANDBY within the next 6 hours,*

b) At least HOT SHUTDOWN within the following 6 hours, and*

c) At least COLD SHUTDOWN within the subsequent 24 hours.

Where corrective measures are completed that permit operation under the ACTION requirements, the action may be taken in accordance with the specified time limits as measured from the time of failure to meet the Limiting Condition for Operation. Exceptions to these requirements are stated in the individual specifications.

This specification is not applicable in MODE 5 or 6.

3.0.2 Non-compliance with a specification shall exist when the requirements of the Limiting Condition for Operation and associated ACTION requirements are not met within the specified time intervals. If the Limiting Condition for Operation is restored prior to expiration of the specified time intervals, completion of the ACTION requirements is not required.

3.0.3 Compliance with the Limiting Conditions for Operation contained in the succeeding specifications is required during the OPERATIONAL MODES or other conditions specified therein; except that upon failure to meet the Limiting Conditions for Operation, the associated ACTION requirements shall be met.

3.0.4 Entry into an OPERATIONAL MODE or other specified condition shall not be made unless the conditions for the Limiting Condition for Operation are met without reliance on provisions contained in the ACTION requirements. This provision shall not prevent passage through or to OPERATIONAL MODES as required to comply with ACTION requirements. Exceptions to these requirements are stated in the individual specifications.

3.0.5 For purposes of determining if a component is operable for LCO considerations, the component need not be considered inoperable due to inoperability of its normal or emergency power supply if all of its redundant components are operable with their normal or emergency power supplies operable.

*NOTE: Until full conversion to STS, when a LCO action statement requires a unit to be placed in HOT SHUTDOWN within 6 hours, refer to Table 1.1 and place the unit on the required status to meet the HOT STANDBY MODE.

3.3 CONTAINMENT

3.3.1 CONTAINMENT INTEGRITY

Primary CONTAINMENT INTEGRITY shall be maintained.*

APPLICABILITY: MODES 1, 2, 3, and 4

ACTION:

Without primary CONTAINMENT INTEGRITY, restore CONTAINMENT INTEGRITY within 1 hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

*Exception may be taken under Administrative Controls for opening of certain valves and airlocks necessary to perform surveillance or testing requirements.

3.3.2 INTERNAL PRESSURE

The primary containment internal pressure shall not exceed 3 psig or the internal vacuum shall not exceed 2 psig.

APPLICABILITY: MODES 1, 2, 3, and 4

ACTION:

With the above limits exceeded, restore the internal pressure or vacuum to within limits within 1 hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

3.3.3 CONTAINMENT ISOLATION VALVES

The containment isolation valves for Phase "A" containment isolation, Phase "B" containment isolation, and containment ventilation isolation shall be OPERABLE with the isolation times of each power operated or automatic valves within the limits established for testing in accordance with Section XI of ASME Boiler and Pressure Vessel code and applicable Addenda as required by 10 CFR 50.55a(g), except where specific written relief has been granted by the Commission pursuant to 10 CFR 50.55a(g)(6)(i).

APPLICABILITY: MODES 1, 2, 3, and 4

ACTION:

With one or more of the isolation valve(s) specified above inoperable, maintain at least one isolation valve OPERABLE in each affected penetration that is open and:

a) Restore the inoperable valve(s) to OPERABLE status within 4 hours, or

b) Isolate each affected penetration within 4 hours by use of at least one deactivated automatic containment isolation valve secured in the isolation position, or

c) Isolate each affected penetration within 4 hours by use of at least one closed manual containment isolation valve or blind flange, or

d) Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

3.3.4 CONTAINMENT AIR LOCKS

Each containment air lock shall be OPERABLE with:

a) Both doors closed except 1) when the air lock is being used for normal transit entry and exit through the containment or 2) during the performance of surveillance and/or testing requirements, then at least one air lock door shall be closed, and

b) An overall air lock leakage rate in compliance with Specifications 4.4.1 and/or 4.4.2 as applicable.

APPLICABILITY: MODES 1, 2, 3, and 4

ACTION:

a) With one containment air lock door inoperable:

   1) Maintain at least the OPERABLE air lock door closed and either restore the inoperable air lock door to OPERABLE status within 24 hours or lock the OPERABLE air lock door closed;

   2) Operation may then continue until performance of the next required overall air lock leakage test provided that the operable air lock door is verified to be locked closed at least once per 31 days;

   3) Otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours; and

   4) The provisions of Specification 3.0.4 are not applicable.

b) With the containment air lock inoperable, except as the result of an inoperable air lock door, maintain at least one air lock door closed; restore the inoperable air lock to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

2. EMERGENCY CONTAINMENT COOLING SYSTEMS

a. The reactor shall not be made critical, except for low power physics tests unless the following conditions are met:

1. Three emergency containment cooling units are operable.

2. Two containment spray pumps are operable.

3. All valves and piping associated with the above components, and required for post accident operation, are operable.

b. During power operation, the requirements of 3.4.2a may be modified to allow one of the following components to be inoperable (including associated valves and piping) at any one time. If the system is not restored to meet the requirements of 3.4.2a within the time period specified, the reactor shall be placed in the HOT SHUTDOWN condition. If the requirements of 3.4.2a are not satisfied within an additional 48 hours, the reactor shall be placed in the COLD SHUTDOWN condition. Specification 3.0.1 applies to 3.4.2.b.

3.10 REFUELING OPERATIONS

3.10.1 CONTAINMENT BUILDING PENETRATIONS

The containment building penetrations shall be in the following status:

a) The equipment door closed and held in place by a minimum of four bolts,

b) A minimum of one door in each air lock is closed, and

c) Each penetrations providing direct access from the containment atmosphere to the outside atmosphere shall be either*:

1) Closed by an isolation valve, blind flange, or manual valve, or

2) Be capable of being closed by an OPERABLE automatic containment ventilation isolation valve.

*Exception may be taken under Administrative Controls for opening of certain valves and airlocks necessary to perform surveillance or testing requirements.

APPLICABILITY: During CORE ALTERATIONS or movement of irradiated fuel within the containment.

ACTION:

With the requirements of the above specification not satisfied, immediately suspend all operations involving CORE ALTERATIONS or movement of irradiated fuel in the containment building.

3.10.2 CONTAINMENT VENTILATION ISOLATION SYSTEM

The Containment Ventilation Isolation System shall be OPERABLE.

APPLICABILITY: During CORE ALTERATIONS or movement of irradiated fuel within the containment.

ACTION:

a) With the Containment Ventilation Isolation System inoperable, close each of the Containment Ventilation System penetrations providing direct access from the containment atmosphere to the outside atmosphere.

b) The provisions of Specifications 3.0.1 and 3.0.4 are not applicable.

3.10.3 INSTRUMENTATION

As a minimum, two Source Range Neutron Flux Monitors shall be OPERABLE, each with continuous visual indication in the control room and one with audible indication in the containment.

APPLICABILITY: MODE 6

ACTION:

a) With one of the above required monitors inoperable or not operating, immediately suspend all operations involving CORE ALTERATIONS or positive reactivity changes.

b) With both of the above required monitors inoperable or not operating, determine the boron concentration of the Reactor Coolant System at least once per 12 hours.

3.10.4 RADIATION MONITORING

The containment radiation monitors which initiate containment and control room ventilation isolation shall be OPERABLE.

APPLICABILITY: During CORE ALTERATIONS or movement of irradiated fuel within the containment.

ACTION:

a) With one or both radiation monitors inoperable, operation may continue provided the containment ventilation isolation valves are maintained closed.

b) With one or both radiation monitors inoperable, within 1 hour isolate the Control Room Ventilation System and initiate operation of the Control Room Ventilation System in the recirculation mode.

3.10.5 DECAY TIME

The reactor shall be subcritical for at least 100 hours.

APPLICABILITY: During movement of irradiation fuel in the reactor vessel.

ACTION:

With the reactor subcritical for less than 100 hours, suspend all operations involving movement of irradiated fuel in the reactor vessel.

3.10.6 COMMUNICATIONS

Direct communications shall be maintained between the control room and personnel at the refueling station.

APPLICABILITY: During CORE ALTERATIONS.

ACTION:

When direct communications between the control room and personnel at the refueling station cannot be maintained, suspend all CORE ALTERATIONS.

3.10.7 RESIDUAL HEAT REMOVAL AND COOLANT CIRCULATION

3.10.7.1 HIGH WATER LEVEL

At least one residual heat removal (RHR) loop shall be OPERABLE and in operation.*

APPLICABILITY: MODE 6, when the water level above the top of the reactor vessel flange is greater than or equal to 23 feet.

ACTION:

With no RHR loop OPERABLE and in operation, suspend all operations involving an increase in the reactor decay heat load or a reduction in boron concentration of the Reactor Coolant System and immediately initiate corrective action to return the required RHR loop to OPERABLE and operating status as soon as possible. Close all containment penetrations providing direct access from the containment atmosphere to the outside atmosphere within 4 hours.

*The RHR loop may be removed from operation for up to 1 hour per 8-hour period during the performance of CORE ALTERATIONS in the vicinity of the reactor vessel hot legs.

3.10.7.2 LOW WATER LEVEL

Two independent residual heat removal (RHR) loops shall be OPERABLE, and at least one RHR loop shall be in operation.

APPLICABILITY: MODE 6, when the water level above the top of the reactor vessel flange is less than 23 feet.

ACTION:

a) With less than the required RHR loops OPERABLE, immediately initiate corrective action to return the required RHR loops to OPERABLE status, or to establish greater than or equal to 23 feet of water above the reactor vessel flange, as soon as possible.

b) With no RHR loop in operation, suspend all operations involving a reduction in boron concentration of the Reactor Coolant System and immediately initiate corrective action to return the required RHR loop to operation. Close all containment penetrations providing direct access from the containment atmosphere to the outside atmosphere within 4 hours.

3.10.8 BORON CONCENTRATION

The boron concentration of all filled portions of the Reactor Coolant System and the refueling canal shall be sufficient to ensure that the more restrictive of the following reactivity conditions is met; either:

a) A K_{eff} of 0.90 or less, or

b) A boron concentration of greater than or equal to 1950 ppm.**

APPLICABILITY: MODE 6*

ACTION:

With the requirements of the above specification not satisfied, immediately suspend all operations involving CORE ALTERATIONS or positive reactivity changes and initiate and continue boration at greater than or equal to 45 gpm of a solution containing greater than or equal to 1950 ppm boron or its equivalent until K_{eff} is reduced to less than or equal to 0.90 or the boron concentration is restored to greater than or equal to 1950 ppm, whichever is the more restrictive.

*The reactor shall be maintained in MODE 6 whenever fuel is in the reactor vessel with the vessel head closure bolts less than fully tensioned or with the head removed.

**The boron concentration of the reactor Coolant System and the refueling canal shall be determined by chemical analysis at least once per 72 hours.

3.10.9 CRANE TRAVEL-SPENT FUEL STORAGE AREAS

HEAVY LOADS shall be prohibited from travel over fuel assemblies in the storage pool.*

*Exception may be taken for the temporary construction crane to be used for the re-rack operation which may be carried over irradiated fuel to facilitate installation of the crane. Lift rigs which meet the design and operational requirements of NUREG 0612 "Control of Heavy Loads at Nuclear Power Plants" will be used while performing this installation.

APPLICABILITY: With fuel assemblies in the storage pool.

ACTION:

a) With the requirements of the above specification not satisfied, place the crane load in a safe condition.

b) The provisions of Specification 3.0.1 and 3.0.4 are not applicable.

3.12 CASK HANDLING

Applicability: Applies to limitations during cask handling.

Objective: To minimize the possibility of an accident during cask handling operations that would affect the health and safety of the public.

Specifications: During cask handling operations:

(1) The spent fuel cask shall not be moved into the spent fuel pit until all the spent fuel in the pit has decayed for a minimum of 1525 hours. **

(2) Only a single element cask may be moved into the spent fuel pit.

(3) A fuel assembly shall not be removed from the spent fuel pit in a shipping cask unti it has decayed for a minimum of one hundred and twenty (120) days.*

(4) HEAVY LOADS shall be prohibited from travel over irradiated fuel assemblies in the spent fuel pool. (Refer to T.S.3.10.9)

*The Region 10 fuel which was in the Unit 3 reactor during the period of April 19, 1981 through April 24, 1981 may be removed from the Unit 3 spent fuel pit in a shipping cask after a minimum decay period of ninety-five (95) days.

** The spent fuel cask can be moved into the Unit 4 spent fuel pit after a minimum decay of 1000 hours until the new two-region high density spent fuel racks are installed.

B3.0 BASES - LIMITING CONDITIONS FOR OPERATION

The specifications of this section provide the general requirements applicable to each of the Limiting Conditions for Operation within Section 3. In the event of a disagreement between the requirements stated in these Technical Specifications and those stated in an applicable Federal Regulation or Act, the requirements stated in the applicable Federal Regulation or Act shall take precedence and shall be met.

B3.0.1 The specification delineates the measures to be taken for those circumstances not directly provided for in the ACTION statements and whose occurrence would violate the intent of a specification. For example, Specification 3.4.2.a requires two containment spray pumps to be OPERABLE and provides explicit ACTION requirements if one spray pump is inoperable. Under the requirements of Specification 3.0.1, if both the required containment spray pumps are inoperable, within 1 hour, measures must be initiated to place the unit in at least HOT STANDBY within the next 6 hours, in at least HOT SHUTDOWN within the following 6 hours, and in COLD SHUTDOWN within the subsequent 24 hours. It is acceptable to initiate and complete a reduction in OPERATIONAL MODES in a shorter time interval than required in the ACTION statement and to add the unused portion of this allowable out-of-service time to that provided for operation in subsequent lower OPERATION MODE(S). Stated allowable out-of-service times are applicable regardless of the OPERATIONAL MODE(S) in which the inoperability is discovered but the times provided for achieving a mode reduction are not applicable if the inoperability is discovered in a mode lower than the applicable mode. For example, if one containment spray pump was discovered to be inoperable while in STARTUP, the ACTION Statement would allow up to 109 hours to achieve COLD SHUTDOWN. If HOT STANDBY is attained in 16 hours rather than the allowed 31 hours, 93 hours would still be available before the plant would be required to be in COLD SHUTDOWN. However, if this system was discovered to be inoperable while in HOT STANDBY, the 6 hours provided to achieve HOT STANDBY would not be additive to the time available to achieve COLD SHUTDOWN so that the total allowable time is reduced from 109 hours to 103 hours.

B3.0.2 This specification defines those conditions necessary to constitute compliance with the terms of an individual Limiting Condition for Operation and associated ACTION requirements.

B3.0.3 This specification defines the applicability of each specification in terms of defined OPERATIONAL MODES or other specified conditions and is provided to delineate specifically when each specification is applicable.

B3.0.4 This specification provides that entry into an OPERATIONAL MODE or other specified applicability condition must be made with: (1) the full complement of required systems, equipment, or components OPERABLE and (2) all other parameters as specified in the Limiting Conditions for Operation being met without regard for allowable deviations and out-of-service provisions contained in the ACTION statements.

The intent of this provision is to ensure that facility operation is not initiated with either required equipment or systems inoperable or other specified limits being exceeded.

Exceptions to this provision have been provided for a limited number of specifications when startup with inoperable equipment would not affect plant safety. These exceptions are stated in the ACTION statements of the appropriate specifications.

B3.0.5 This specification delineates what additional conditions must be satisfied to permit operation to continue, consistent with the ACTION statements for power sources, when a normal or emergency power source is not OPERABLE. It specifically prohibits operation when one division is inoperable because its normal or emergency power source is inoperable and a system, subsystem, train, component or device in another division is inoperable for another reason.

The provisions of this specification permit the ACTION statements associated with individual systems, subsystems, trains, components or devices to be consistent with the ACTION statements of the associated electrical power source. It allows operation to be governed by the time limits of the ACTION statement associated with the Limiting Condition for Operation for the normal or emergency power source, not the individual ACTION statements for each system, subsystem, train, component or device that is determined to be inoperable solely because of the inoperability of its normal or emergency power source.

For example, Specification 3.7.1 requires in part that two emergency diesel generators be OPERABLE. The ACTION statement provides for an out-of-service time when one emergency diesel generator is not OPERABLE. If the definition of OPERABLE were applied without consideration of Specification 3.0.5, all systems, subsystems, trains, components and devices supplied by the inoperable emergency power source would also be inoperable. This would dictate invoking the applicable ACTION statements for each of the applicable Limiting Conditions for Operation. However, the provisions of Specification 3.0.5 permit the time limits for continued operation to be consistent with the ACTION statement for the inoperable emergency diesel generator instead, provided the other specified conditions are satisfied. In this case, this would mean that the corresponding normal power source must be OPERABLE, and all redundant systems, subsystems, trains, components and devices must be OPERABLE, or otherwise satisfy Specification 3.0.5 (i.e., be capable of performing their design function and have at least one normal or one emergency power source OPERABLE). If they are not satisfied, shutdown is required in accordance with this specification.

In cold shutdown or refueling condition, Specification 3.0.5 is not applicable, and thus the individual ACTION statements for each applicable Limiting Condition for Operation in these conditions must be adhered to.

B3.3 BASES - CONTAINMENT

B.3.3.1 CONTAINMENT INTEGRITY

Primary CONTAINMENT INTEGRITY ensures that the release of radioactive materials from the containment atmosphere will be restricted to those leakage paths and associated leak rates assumed in the safety analyses. This restriction, in conjunction with the leakage rate limitation, will limit the SITE BOUNDARY radiation doses to within the dose guideline values of 10 CFR Part 100 during the accident conditions.

B3.3.2 INTERNAL PRESSURE

The containment design pressure of 59 psig would not be exceeded if the internal pressure before a major LOCA was as much as 5 psig. The containment is designed to withstand an internal vacuum of 2.5 psig.

B3.3.3 CONTAINMENT ISOLATION VALVES

The OPERABILITY of the containment isolation valves ensures that the containment atmosphere will be isolated from the outside environment in the event of a release of radioactive material to the containment atmosphere or pressurization of the containment. Containment isolation within the time limits specified for those isolation valves designed to close automatically ensures that the release of radioactive material to the environment will be consistent with the assumptions used in the analyses for a LOCA.

B3.3.4 CONTAINMENT AIR LOCKS

The limitations on closure and leak rate for the containment air locks are required to met the restrictions on CONTAINMENT INTEGRITY and containment leak rate. Surveillance testing of the air lock seals provides assurance that the overall air lock leakage will not become excessive due to seal damage during the intervals between air lock leakage tests.

B3.10 BASES - REFUELING OPERATIONS

B3.10.1 CONTAINMENT BUILDING PENETRATIONS

The requirements on containment building penetration closure and OPERABILITY ensure that a release of radioactive material within containment will be restricted from leakage to the environment. The OPERABILITY and closure restrictions are sufficient to restrict radioactive material release from a fuel element rupture based upon the lack of containment pressurization potential while in the REFUELING MODE.

B3.10.2 CONTAINMENT VENTILATION ISOLATION SYSTEM

The OPERABILITY of this system ensures that the containment vent and purge penetrations will be automatically isolated upon detection of high radiation levels within the containment. The OPERABILITY of this system is required to restrict the release of radioactive material from the containment atmosphere to the environment.

B3.10.3 INSTRUMENTATION

The OPERABILITY of the Source Range Neutron Flux Monitors ensures that redundant monitoring capability is available to detect changes in the reactivity condition of the core.

B3.10.4 RADIATION MONITORING

The Operability of the containment radiation monitors ensures continuous monitoring of radiation levels to provide immediate indication of an unsafe condition.

B3.10.5 DECAY TIME

The minimum requirement for reactor subcriticality prior to movement of irradiated fuel assemblies in the reactor vessel ensures that sufficient time has lapsed to allow the radiation decay of the short-lived fission products. This decay time is consistent with the assumptions used in the safety analyses.

B3.10.6 COMMUNICATIONS

The requirements for communications capability ensures that refueling station personnel can be promptly informed of significant changes in the facility status or core reactivity conditions during CORE ALTERATIONS.

B3.10.7 RESIDUAL HEAT REMOVAL AND COOLANT CIRCULATION

The requirement that at least one residual heat removal (RHR) loop be in operation ensures that: (1) sufficient cooling capacity is available to remove decay heat and maintain the water in the reactor vessel below 140°F as required during the REFUELING MODE, and (2) sufficient coolant circulation is maintained through the core to minimize the effect of a boron dilution incident and prevent boron stratification.

The requirement to have two RHR loops operable when there is less than 23 feet of water above the reactor vessel flange ensures that a single failure of the operating RHR loop will not result in a complete loss of residual heat removal capability. With the reactor vessel head removed and at least 23 feet of water above the reactor pressure vessel flange, a large heat sink is available for core cooling. Thus, in the event of a failure of the operating RHR loop, adequate time is provided to initiate emergency procedures to cool the core.

B3.10.8 BORON CONCENTRATION

The limitations on reactivity conditions during REFUELING ensure that: (1) the reactor will remain subcritical during CORE ALTERATIONS, and (2) a boron concentration is maintained for reactivity control in the water volume having direct access to the reactor vessel. These limitations are consistent with the initial conditions assumed for the boron dilution incident in the safety analyses. The boron concentration value of 1950 ppm was sufficient to maintain the reactor subcritical by at least 10% $\Delta k/k$ in the cold condition with all rods inserted, and also maintained the core subcritical with no control rods inserted, for the first core design.(1) The required boron concentration may increase depending on the subsequent core designs.

B3.10.9 CRANE TRAVEL - SPENT FUEL STORAGE AREAS

The restriction on movement of HEAVY LOADS over other fuel assemblies* in the storage pool ensures that in the event this load is dropped: (1) the activity release will be limited to that contained in a single fuel assembly, and (2) any possible distortion of fuel in the storage racks will not result in a critical array. This assumption is consistent with the activity release assumed in the safety analyses.

*Exception may be taken for the temporary construction crane to be used for the re-rack operation which may be carried over irradiated fuel to facilitate installation of the crane. Lift rigs which meet the design and operational requirements of NUREG 0612 "Control of Heavy Loads at Nuclear Power Plants" will be used while performing this installation.

STATE OF FLORIDA)
) ss.
COUNTY OF DADE)

J. W. Williams, Jr. being first duly sworn, deposes and says:

That he is a Group Vice President of Florida Power & Light Company, the Licensee herein;

That he has executed the foregoing document; that the statements made in this document are true and correct to the best of his knowledge, information, and belief, and that he is authorized to execute the document on behalf of said Licensee.

J. W. Williams, Jr.

Subscribed and sworn to before me this

28 day of JANUARY, 1985.

NOTARY PUBLIC, in and for the County of Dade, State of Florida

NOTARY PUBLIC STATE OF FLORIDA
MY COMMISSION EXP. FEB 14,1988
BONDED THRU GENERAL INS. UND.

My Commission expires: 2/14/88