### September 27, 2006

Mr. J. A. Stall Senior Vice President, Nuclear and Chief Nuclear Officer Florida Power and Light Company P.O. Box 14000 Juno Beach, Florida 33408-0420

SUBJECT: TURKEY POINT NUCLEAR PLANT, UNITS 3 AND 4 - EXEMPTION FROM THE

REQUIREMENTS OF 10 CFR PART 50, APPENDIX R, SUBSECTION III.G.3

(TAC NOS. MC5542 AND MC5543)

Dear Mr. Stall:

The Commission has approved the enclosed exemption from the requirements of Title 10 of the *Code of Federal Regulations*, Part 50, Appendix R, Subsection III.G.3, for fixed suppression in the Mechanical Equipment Room and for detection and fixed suppression on the Control Room Roof at the Turkey Point Nuclear Plant, Units 3 and 4. This action is in response to your application dated December 27, 2004, as supplemented May 23, 2005, January 13, 2006, and July 12, 2006.

The granting of this exemption is contingent upon installation of the proposed area fire detection in the Mechanical Equipment Room, maintaining existing or comparable separation and protection for redundant safe shutdown equipment on the Control Room Roof, the availability of manual fire fighting and associated fire fighting equipment, and maintaining existing or comparable administrative controls for combustibles.

A copy of the exemption is enclosed. The exemption has been forwarded to the Office of the Federal Register for publication.

Sincerely,

/RA/

Brendan T. Moroney, Project Manager Plant Licensing Branch II-2 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket Nos. 50-250 and 50-251

Enclosure: Exemption

cc w/encl: See next page

Mr. J. A. Stall Senior Vice President, Nuclear and Chief Nuclear Officer Florida Power and Light Company P.O. Box 14000 Juno Beach, Florida 33408-0420

SUBJECT: TURKEY POINT NUCLEAR PLANT, UNITS 3 AND 4 - EXEMPTION FROM THE

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# UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION FLORIDA POWER & LIGHT COMPANY TURKEY POINT NUCLEAR PLANT, UNITS 3 AND 4 DOCKET NOS. 50-250 AND 50-251 EXEMPTION

# 1.0 BACKGROUND

The Florida Power & Light Company (FPL, the licensee) is the holder of Facility

Operating License Nos. DPR-31 and DPR-41, which authorize operation of the Turkey Point

Nuclear Plant, Units 3 and 4. The licenses provide, among other things, that the facility is
subject to all rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (NRC, the Commission) now or hereafter in effect.

The facility consists of two pressurized-water reactors located in Miami-Dade County, approximately 25 miles south of Miami, Florida.

# 2.0 REQUEST/ACTION

Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, Appendix R, Subsection III.G.3 addresses fire protection features for assuring alternative or dedicated shutdown capability in the event of a fire, and requires that fire detection and a fixed fire suppression system be installed in the area, room, or zone where equipment or components are relied on for the assured shutdown capability. FPL requests exemption from the requirements of Subsection III.G.3 of 10 CFR 50, Appendix R, for fixed suppression in the Mechanical Equipment Room and for detection and fixed suppression on the Control Room Roof, at Turkey

Point, Units 3 and 4, on the basis that the existing fire barriers at Turkey Point, together with fire protection measures, low combustible loading, and administrative controls in place, satisfy the underlying intent of 10 CFR 50, Appendix R, Subsection III.G.3.

In summary, by letter dated December 27, 2004, as supplemented May 23, 2005, January 13, 2006, and July 12, 2006, FPL requests exemption from the requirements of 10 CFR 50, Appendix R, Subsection III.G.3, for fixed suppression in the Mechanical Equipment Room and for detection and fixed suppression on the Control Room Roof, at Turkey Point, Units 3 and 4.

### 3.0 DISCUSSION

Pursuant to 10 CFR 50.12, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR Part 50 when (1) the exemptions are authorized by law, will not present an undue risk to public health or safety, and are consistent with the common defense and security, and (2) when special circumstances are present.

The underlying purpose of Subsection III.G.3 of 10 CFR 50, Appendix R is to require alternative or dedicated shutdown capability where (a) fire protection of systems necessary for hot shutdown does not meet Subsection III.G.2, or (b) redundant trains of systems necessary for hot shutdown are located in the same fire area and may be subject to damage from fire suppression activities or systems. In addition, III.G.3 requires fire detection and a fixed fire suppression system in the area, room, or zone under consideration.

The staff examined information supplied by the licensee in support of the exemption request and concluded that special circumstances exist in that, with the installation of the fire detection system in the Mechanical Equipment Room proposed by the licensee, the existing fire protection features in and accessible for the specific fire zones (FZs) referenced for Turkey Point Units 3 and 4, and the administrative controls for combustibles, the facility meets the

underlying purpose of 10 CFR 50, Appendix R, Subsection III.G.3. The following evaluation provides the basis for this conclusion.

# 3.1 Background

The NRC approved the alternate shutdown capability proposed by the licensee for Turkey Point, Units 3 and 4, for compliance with the requirements of III.G.3, in a safety evaluation dated April 16, 1984. At that time, the licensee identified three fire areas that could be subject to the condition specified in III.G.3.b, which states, "(w)here redundant trains of systems required for hot shutdown located in the same fire area may be subject to damage from fire suppression activities . . . , fire detection and a fixed fire suppression system shall be installed in the area, room, or zone under consideration." The three affected fire areas were the Control Room, Cable Spreading Room, and North-South Breezeway. To resolve these vulnerabilities, the licensee proposed plant modifications and procedure revisions that the staff found acceptable for compliance with III.G.3.

However, in February 2004, during an NRC triennial fire inspection at Turkey Point, the inspection team reviewed fire protection systems, features, and equipment, and found that all FZs supporting the alternate safe shutdown function for the Control Room (Fire Area MM) do not provide full area fire detection and a fixed suppression system in accordance with the requirements of III.G.3, quoted above, for both reactor units. Specifically, the Mechanical Equipment Room, the Main Control Room, and Control Room Roof are identified in the plant fire protection program report as alternative safe shutdown areas for, and thereby part of, the Control Room. However, the Mechanical Equipment Room does not have full area detection and fixed suppression.

In response to this inspection finding, the licensee declared the detection and suppression inoperable for the Mechanical Equipment Room (and the Control Room Roof, which also fails to provide detection and fixed suppression) and established an hourly fire

watch. An exemption from these detection and suppression requirements is now requested for the Control Room Roof, and an exemption from suppression requirements is requested for the Mechanical Equipment Room. The licensee proposes installation of area detection in the Mechanical Equipment Room.

# 3.2 <u>Existing Fire Protection Features</u>

Fire Area MM is the Unit 3 and 4 Control Room, located at the 42-foot elevation level of the plant. It is a multiple zone area consisting of FZs 106 (the Main Control Room), 106R (the Control Room Roof), and 97 (the Mechanical Equipment Room). FZs 97 and 106R contain redundant trains of air-conditioning equipment that support the habitability and operability of Fire Area MM. The licensee's fire protection program report identifies FZs 97, 106, and 106R as the alternative shutdown capability for Fire Area MM.

FZ 106R is located outdoors at the plant's 58-foot elevation on the control building roof. The flooring is tar and gravel on a concrete base, occupying a section of the roof with an area of approximately 640 square feet. Three heating, ventilating, and air conditioning (HVAC) condensing units for the control room are located here. The licensee's submittal states that motors, cable and raceway protection, and tar material make up its in situ¹ combustible load.

The licensee states that redundant safe shutdown components and circuits in this zone are protected by at least 10 feet of separation or by 25-minute rated Thermo-Lag fire barrier. This is in conformance with an exemption from separation and protection requirements for the control room roof, which the NRC granted on May 4, 1999. The licensee's submittal states that the proposed exemption request does not supersede the exemption from separation and protection requirements granted by the NRC in May 1999.

The submittal describes the suppression capability for this zone as consisting of three

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<sup>&</sup>lt;sup>1</sup>Fixed in place as part of the construction, fabrication, or installation of a plant structure, system, or component.

portable fire extinguishers located near the roof access stairs at the 42-foot elevation on the turbine deck, with an additional three extinguishers located at the 30-foot elevation on the mezzanine level. In addition, a hose station with 75 feet of hose is located on the turbine deck near the roof access stairs and a hose station with 100 feet of hose is located at the mezzanine level near the stairway. The hose in this building is 1.5 inches (minimum), with 1.5 inch (minimum) electrically-safe fog nozzles, and threading compatible with that used by local fire departments. No area detection is provided in FZ 106R.

FZ 97 is an enclosed room located adjacent to the Cable Spreading Room at the 30-foot elevation, just below the Main Control Room. It has 377 square feet of floor area and houses the safety-related emergency recirculating filter unit and the air handling supply fans for the main control room. The licensee's submittal identifies cable insulation, charcoal, and motors as the in situ combustible loading for this zone. The walls, floor, and ceiling are concrete block or reinforced concrete, providing 3-hour rated fire barrier protection.

An ionization smoke detector is installed in FZ 97 inside the air-handling exhaust downstream of the motors and charcoal filter. If actuated, the detector initiates an alarm in the Control Room to alert operators to summon the fire brigade to respond with manual (not fixed) fire suppression. No full area detection is provided in FZ 97. No fixed suppression is provided.

The submittal identifies nearby suppression capabilities for this zone consisting of four portable fire extinguishers located at the 30-foot elevation on the mezzanine level. In addition, a hose station is located on the mezzanine level outside the cable spreading room with 100 feet of hose. Area detection and a Halon suppression system are also provided in the cable spreading room adjacent to FZ 97.

### 3.3 Evaluation

The 2001 fire hazards analysis (FHA) in the Turkey Point Fire Protection Program Report describes each fire area, including details (i.e., listings of essential equipment,

combustible loadings, fire boundaries and barriers, detection capability, suppression systems, and venting capability) for each FZ in the fire area. The NRC staff reviewed these details for FZs 106R and 97 to determine what fire protection features were relied on to assure the defense-in-depth elements of adequate fire suppression and detection. In situ combustible loading must be considered in determining the level of suppression and detection needed. The staff's evaluation of in situ combustible loadings for each FZ is discussed below.

For transient combustibles, Turkey Point has implemented administrative controls through programs and procedures such as the Transient Combustible Permit Program and designated Transient Combustible Control Areas. Associated procedures include such controls as visual posting of transient fire loads, labeling of storage containers, and required attendance while certain types of combustibles are located in the specific FZ. During plant activities, these controls also ensure that restrictions are placed on fire loading added and/or that appropriate fire suppression is available during temporary increases in combustible loading. They also control the location and duration of hot work. These administrative controls for the transport and storage of combustible material apply throughout the plant, including FZs 106R and 97, and are based on the in situ combustible load and ignition sources in the zone (identified in the FHA), the types and amounts of combustibles introduced into the area, how the transient combustibles are stored, and on the potential for spillage (which is minimized by procedure).

### 3.3.1 FZ 106R – Control Room Roof

The safe shutdown equipment in this FZ consists of three HVAC condensing units for the control room. Fire protection features include an absence of significant fire loading, separation and fire barriers to protect redundant trains of equipment, nearby suppression capabilities, and an open air configuration.

The in situ combustible load for this zone is identified in the licensee's submittal as motors, cable and raceway protection, and tar and gravel roofing materials. However, the staff

found that the FHA list of in situ combustibles for this FZ (on page 9.6A-230 (Rev. 8) of the Updated Final Safety Analysis Report (UFSAR)) excludes the tar roofing material. Therefore, as stated in its July 12, 2006, letter, the licensee intends to revise this page of the FHA to include the combustible tar material in the list of combustibles. In addition, the licensee estimated the potential heat load contribution from the tar material, using the specific heat value for petroleum-based materials (i.e., 20,000 British Thermal Units (BTU) per pound), as 52,000 BTU per square foot. The FHA considers a significant combustible load for outdoor areas to be greater than the equivalent of 200 gallons of combustible liquid, or 68 million BTU. Therefore, with approximately 640 square feet of floor area in this zone, the revised heat load estimate would be 34 million BTU, which is not a significant combustible load. However, since it is not a negligible quantity, the FHA heat load characterization for this FZ on UFSAR page 9.6A-230 will also be revised accordingly. This revision to the FHA will not significantly affect the results of the FHA, but will provide completeness and consistency with the description in the licensee's submittal. The FHA page revisions will be handled under the licensee's normal process for UFSAR updates. The licensee's evaluation and supporting calculations confirmed the staff's expectation that the roofing material is not a significant fire load. This, together with the licensee's actions to include the roofing material in the FHA, resolved the staff's concern.

The licensee's December 27, 2004, submittal states that "redundant safe shutdown components and circuits are protected by at least 10 feet of separation or by 25-minute Thermo-Lag fire rated barrier" for FZ 106R. The licensee further states that "this exemption request does not supersede the exemption from separation and protection requirements granted by the NRC in May 4, 1999." These issues refer to an earlier review of an exemption request for this FZ which relates to this review.

In 1998, the staff denied the licensee's exemption request for FZ 106R from the requirements of III.G.2.a, based on the uncertainty of the combustibility and fire classification of

the roof. In 1999, the staff granted the licensee an exemption for FZ 106R from the requirements of III.G.2.a, based on raceway protection and separation consistent with that described in Section 3.2 above. Also, based on the licensee's evaluation of the construction of the roof flooring composite (e.g., the type and amount of tar material used, the specifications of gravel applied over the tar material to improve its fire protection performance, and its similarity to other Class A² roofing configurations), the staff concluded there was reasonable assurance that the level of fire safety provided by the roof is equivalent to a Class A design.

The licensee now seeks an exemption from III.G.3 for this FZ since it functions as a component of Fire Area MM, which provides an alternate shutdown capability in accordance with III.G.3. The staff's conclusion in 1999 was based on the licensee's comparative evaluation and the existing separation and protection configuration. However, the exemption request currently under review applies to III.G.3, which does not impose separation and protection requirements for safety-related equipment in the area.

Because the composite tar and gravel flooring in FZ 106R was not tested by the Underwriters Laboratories (UL) and, therefore, is not listed by UL, and the licensee has performed no separate combustible loading analysis on this unique flooring, the licensee's comparative evaluation in 1999 requires the additional defense-in-depth element of the separation and protection (or comparable) configuration, described in Section 3.2 above, to provide reasonable assurance that the control room roof will provide an adequate level of fire safety for post-fire safe shutdown.

Primary suppression for this FZ is supplied by eleven nearby portable fire extinguishers.

The licensee's submittal identifies six extinguishers in FZs 105 and 117 (described in Section

<sup>&</sup>lt;sup>2</sup>According to the Underwriters Laboratories, Inc., Roofing Materials and Systems Directory, Class A includes roof coverings which are effective against severe fire exposures. Under such exposures roof coverings of this class are not readily flammable and do not carry or communicate fire; afford a fairly high degree of fire protection to the roof deck; do not slip from position; possess no flying brand hazard; and do not require frequent repairs in order to maintain their fire resisting properties.

3.2). The staff found that the FHA (on page 9.6A-230 of the UFSAR) also identifies the five fire extinguishers in the Control Room for primary suppression in this zone. Therefore, operators responding to a fire in this zone, from the Control Room or from nearby areas, can minimize their response times by using those extinguishers that are most accessible. The licensee stated in its July 12, 2006, letter that it intends to revise this page of the FHA to include all eleven extinguishers.

Secondary suppression is provided by nearby hose stations. The nearest hose station, which is located at the 42-foot elevation (the turbine deck) just outside the roof access stairway, has 75 feet of hose for additional suppression capability, providing stream access to all points in FZ 106R located on the 58-foot elevation.

The combination of the primary and secondary sources of suppression provide reasonable assurance of adequate suppression capability, given the open air configuration and absence of any significant combustible and ignition source loading in this zone.

# 3.3.2 FZ 97 – Mechanical Equipment Room

The safe shutdown equipment in this FZ consists of the emergency recirculating filter unit and the air handling supply fans for the control room. Fire protection features in FZ 97 include nearby suppression capabilities, a component-specific detector, administrative controls for combustibles, ventilation capability, and rated fire barriers for the walls, floor, and ceiling.

In situ combustible loadings are identified in the FHA as cable insulation, oil (motor), pipe insulation, and charcoal. Cable insulation was quantified as 252 pounds (lbs), for a potential heat load of 3.3 million BTU, and Charcoal as 250 lbs, with a potential heat load of 4.5 million BTU. Oil and pipe insulation are present in such small quantities that they contribute a negligible heat load. The staff, therefore, concludes that the combustible and ignition source loading in this zone is not significant.

The walls, floor, and ceiling are concrete block or reinforced concrete, providing 3-hour

rated fire barrier protection.

Although no full area detection is provided in FZ 97, the licensee proposes to install area detection to satisfy the detection requirements of III.G.3. New ionization detectors that meet the requirements of the latest edition of National Fire Protection Association Standard 72 will be installed outside of any direct, forced-air flow paths in FZ 97. If actuated, the detectors will initiate an alarm in the Main Control Room to alert operators to summon the fire brigade to respond with manual fire suppression. An existing ionization smoke detector is located inside the air handling duct work downstream of the motors and charcoal filter, also with a Main Control Room alarm. With the installation of area detection as described above, the detection provided in FZ 97 will be acceptable for compliance with III.G.3.

No fixed suppression is located in this zone. However, four nearby portable fire extinguishers (described in Section 3.2) provide an adequate primary suppression capability for the combustible and ignition source loading in this zone, with the hose station at the 30-foot elevation (the mezzanine level) as a secondary means of suppression with 100 feet of hose providing stream access to all points in FZ 97. The primary and secondary sources of suppression provide reasonable assurance of adequate suppression capability, given the installation of detection, as described above, and the absence of any significant combustible and ignition source loading in this zone.

The staff asked the licensee to provide information on whether a fire that caused failure of the safety-related equipment in either FZ 97 or 106R, resulting in loss of Main Control Room HVAC equipment, would challenge the safe shutdown capability of the plant. The licensee responded that, with no reduction in the Main Control Room heat load, the rise in Main Control Room temperature for this scenario, although not analyzed for these FZs specifically, is expected to be consistent with or bounded by the rate of temperature increase during a complete loss of HVAC for other individual rooms in the Control Building, including the

Computer Room, which results in bulk ambient temperatures that remain below 104° F during the first hour of the event without compensatory cooling. Therefore, there is reasonable assurance that a minimum of greater than 30 minutes would be available before a loss of Control Room habitability. If the Control Room is evacuated, the plant is shut down from the Alternate Shutdown Panel. Each unit has an Alternate Shutdown Panel, located in the Unit's "B" Switchgear Room, with adequate controls to bring the plant to hot standby. A minimum of greater than 30 minutes is sufficient time for operators to either shut down the plant from the Main Control Room or to evacuate the Main Control Room due to high temperature and safely shut down the plant from the Alternate Shutdown Panel.

### 3.3.3 Risk Analysis

Because the combustibles and ignition source loading are not significant for this zone and the suppression capability more than adequate, no risk analysis was performed by the licensee for lack of detection and fixed suppression. However, the NRC's Turkey Point Triennial Fire Inspection Report, dated March 2004 (ADAMS Accession No. ML040890083), states that the NRC staff analyzed the safety significance of the lack of detection and fixed suppression using NRC Inspection Manual Chapter 609, "Significance Determination Process," Appendix F. The staff concluded that the condition had very low safety significance.

### 3.3.4 Defense-in-Depth

Section II of 10 CFR 50, Appendix R, states that a licensee's fire protection program shall extend the concept of defense-in-depth to fire protection with the following objectives:

- To prevent fires from starting,
- To detect rapidly, control, and extinguish promptly those fires that do occur, and
- To provide protection for structures, systems and components important to safety so that a fire that is not promptly extinguished by the fire suppression activities will not prevent the safe shutdown of the plant.

Regulatory Guide 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," also identifies factors to be considered when evaluating defense-in-depth for a risk-informed change. The staff has evaluated the elements of defense-in-depth used for fire protection at Turkey Point Nuclear Plant that are applicable to the FZs under review. For FZ 106R, based on a configuration of separation and fire barrier protection of redundant trains of safety-related equipment, the absence of significant fire loading, adequate primary and secondary suppression capabilities, the open-air configuration, implementation of transient combustibles controls, and sufficient time for operators to respond to a fire in this zone, the staff finds that fixed suppression and detection are not necessary to ensure safe shutdown of the plant and meet the underlying intent of the rule (Subsection III.G.3 to 10 CFR 50, Appendix R). For FZ 97, based on fire barrier protection in the walls, floor and ceiling; existing (and installation of proposed) fire detection, adequate primary and secondary suppression capabilities, implementation of transient combustibles controls, sufficient time for operators to respond to a fire in this zone, and the absence of significant fire loading, the staff finds that fixed suppression is not necessary to ensure safe shutdown of the plant and meet the underlying intent of the rule. Therefore, based on the staff's analysis, defense-in-depth is maintained.

# Special Circumstances

Special circumstances, in accordance with 10 CFR 50.12(a)(2)(ii), are present whenever application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule. The underlying purpose of 10 CFR 50, Appendix R, Subsection III.G.3. is to assure alternative or dedicated shutdown capability in the event of a fire. Based on the evaluation presented in Section 3.3, the staff finds that fixed suppression and detection in FZ 106R and fixed

suppression in FZ 97 are not necessary to ensure safe shutdown of the plant and meet the underlying intent of the rule. For FZ 106R, the combination of the primary and secondary sources of suppression provide reasonable assurance of adequate suppression capability, given the open air configuration and absence of any significant combustible and ignition source loading in this zone. For FZ 97, the primary and secondary sources of suppression provide reasonable assurance of adequate suppression capability, given the proposed installation of detection, as described above, and the absence of any significant combustible and ignition source loading in this zone. Also, for a fire in either zone, there would be adequate time to evacuate the Control Room, if necessary, and shut down the plant from the Alternate Shutdown Panel. Therefore, since the underlying purpose of 10 CFR 50, Appendix R, Subsection II.G.3 is achieved, the special circumstances required by 10 CFR 50.12 for the granting of an exemption from 10 CFR 50 exist.

### Authorized by Law

This exemption would waive the requirements of Subsection III.G.3 of 10 CFR 50, Appendix R, for fixed suppression in the Mechanical Equipment Room and for fixed suppression and detection on the Control Room Roof, at Turkey Point, Units 3 and 4. As stated above, 10 CFR 50.12 allows the NRC to grant exemptions from the requirements of 10 CFR Part 50. The NRC staff has determined that granting of the licensee's proposed exemption is permissible under the Atomic Energy Act of 1954, as amended, and the Commission's regulations. Therefore, the exemption is authorized by law.

### No Undue Risk to Public Health and Safety

The underlying purpose of 10 CFR 50, Appendix R, Subsection III.G.3. is to assure alternative or dedicated shutdown capability in the event of a fire. As noted above, the staff finds that the proposed exemption utilizes the existing fire barriers at Turkey Point, together with fire protection measures, low combustible loading, and administrative controls in place, to

satisfy the underlying intent of 10 CFR 50, Appendix R, Subsection III.G.3. Thus, no new accident precursors are created by the proposed exemption, and the probability of postulated accidents is not increased. Similarly, the consequences of postulated accidents are not increased. Therefore, there is no undue risk [since risk is probability x consequences] to public health and safety.

## Consistent with Common Defense and Security

The proposed exemption would waive the requirements of Subsection III.G.3 of 10 CFR 50, Appendix R, for fixed suppression in the Mechanical Equipment Room and for fixed suppression and detection on the Control Room Roof, at Turkey Point, Units 3 and 4. This change in fire protection requirements has no relation to security issues. Therefore, the common defense and security are not impacted by this exemption.

### 4.0 <u>CONCLUSION</u>

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), special circumstances are present such that application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule. In addition, the Commission has determined that the exemption is authorized by law, will not present an undue risk to the public health and safety, and is consistent with the common defense and security. Therefore, the Commission hereby grants FPL an exemption from the requirements of 10 CFR 50, Appendix R, Section III.G.3, to provide area detection and a fixed fire suppression system in FZ 106R and to provide a fixed fire suppression system in FZ 97 for the Turkey Point Nuclear Plant, Units 3 and 4, subject to the installation of proposed area fire detection in FZ 97 (discussed in Section 3.3.2 above). The granting of this exemption is contingent upon installation of the proposed area fire detection in FZ 97, maintaining existing or comparable separation and protection for redundant safe shutdown equipment in FZ 106R, the availability of manual fire fighting and associated fire

fighting equipment, and maintaining existing or comparable administrative controls for combustibles.

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this exemption will not have a significant effect on the quality of the human environment (71 FR 56188, dated September 26, 2006).

This exemption is effective upon issuance.

Dated at Rockville, Maryland, this 27th day of September 2006.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Catherine Haney, Director Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation