# NUCLEAR REGULATORY COMMISSION JAMES A. FITZPATRICK NUCLEAR POWER PLANT

# **DOCKET NO. 50-333**

#### [NRC-2010-0095]

#### **EXEMPTION**

# 1.0 BACKGROUND

Entergy Nuclear Operations, Inc. (the licensee) is the holder of Facility Operating
License No. DPR-59, which authorizes operation of the James A. FitzPatrick Nuclear Power
Plant (JAFNPP). The license provides, among other things, that the facility is subject to all
rules, regulations, and orders of the Nuclear Regulatory Commission (NRC, the Commission)
now or hereafter in effect.

The facility consists of a boiling-water reactor located in Oswego County in New York State.

# 2.0 REQUEST/ACTION

Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, Section 50.48, requires that nuclear power plants that were licensed before January 1, 1979, satisfy the requirements of 10 CFR Part 50, Appendix R, "Fire Protection Program for Nuclear Power Facilities Operating Prior to January 1, 1979," Section III.G, "Fire protection of safe shutdown capability." JAFNPP was licensed to operate prior to January 1, 1979. As such, the licensee's Fire Protection Program (FPP) must provide the established level of protection as intended by 10 CFR Part 50, Appendix R, and Section III.G.

By letter dated February 18, 2009, "Request for Exemption from 10 CFR 50 Appendix R Section III.G.2 Requirements Based on Manual Actions," (Agencywide Documents Access and Management System (ADAMS) Accession No. ML090860980), as supplemented by letter dated

March 30, 2009, "James A. FitzPatrick Nuclear Power Plant-Response to Request for Information Required for Acceptance Review Regarding: Request for Exemption" (ADAMS Accession No. ML091320387), the licensee requested an exemption for the JAFNPP from certain technical requirements of 10 CFR Part 50, Appendix R, Section III.G.2 (III.G.2) for the use of an operator manual action (OMA) in lieu of meeting the circuit separation and protection requirements contained in III.G.2 for Fire Area 10 at the plant.

In response to the NRC staff's requests for additional information (RAI), the licensee provided supplemental information by letters dated November 17, 2009, (ADAMS Accession No. ML093270075), December 11, 2009, (ADAMS Accession No. ML093520408), and January 19, 2010 (ADAMS Accession No. ML100210195).

# 3.0 <u>DISCUSSION</u>

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 licensee has stated that special circumstances are present in that the application of the regulation in this particular circumstance is not necessary to achieve the underlying purpose of the rule, which is consistent with the language included in 10 CFR 50.12(a)(2)(ii).

In accordance with 10 CFR 50.48(b), nuclear power plants licensed before January 1, 1979, are required to meet Section III.G, of 10 CFR Part 50, Appendix R. The underlying purpose of 10 CFR Part 50, Appendix R, and Section III.G is to ensure that the ability to achieve and maintain safe shutdown is preserved following a fire event. The regulation intends for licensees to accomplish this by extending the concept of defense-in-depth to:

- 1) prevent fires from starting;
- 2) rapidly detect, control, and extinguish promptly those fires that do occur;
- 3) 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.

The stated purpose of 10 CFR Part 50, Appendix R, Section III.G.2 (III.G.2) is to ensure that one of the redundant trains necessary to achieve and maintain hot shutdown conditions remains free of fire damage in the event of a fire. III.G.2 requires one of the following means to ensure that a redundant train of safe shutdown cables and equipment is free of fire damage, where redundant trains are located in the same fire area outside of primary containment:

- a. Separation of cables and equipment by a fire barrier having a 3-hour rating;
- Separation of cables and equipment by a horizontal distance of more that 20 feet with no intervening combustibles or fire hazards and with fire detectors and an automatic fire suppression system installed in the fire area; or
- c. Enclosure of cables and equipment of one redundant train in a fire barrier having a 1-hour rating and with fire detectors and an automatic fire suppression system installed in the fire area.

Entergy has requested an exemption from the requirements of III.G.2 for JAFNPP to the extent that one of the redundant trains of systems necessary to achieve and maintain hot shutdown is not maintained free of fire damage in accordance with one of the required means, for a fire occurring in Fire Area 10 in the Reactor Building. In their November 17, 2009, response to the NRC's RAI-02 the licensee specifically stated that, "JAFNPP does not comply with any of the methods provided and relies on an OMA to operate the SRVs from the Local SRV Control Panel for a fire in Fire Area 10. In addition, Fire Area 10 does not have a full area automatic suppression system." In summary, JAFNPP does not meet the requirements of

III.G.2 for a fire in Fire Area 10 and an OMA may be necessary to achieve and maintain hot shutdown capability. The licensee also stated in their November 17, 2009, letter that the only credible fire scenario that would result in loss of the redundant cables involved a fire in one of the motor control cabinets (MCCs), which are located nominally 6 feet, measured horizontally, from the stack of trays containing the control cables. In addition to the horizontal offset, the bottom tray in the stack is located approximately 9 feet, measured vertically, above the MCCs.

For a fire in Fire Area 10, JAFNPP assumes the High-Pressure Coolant Injection (HPCI) and Reactor Core Injection Cooling (RCIC)) systems are both lost in addition to one side of the control and power cables for the main steam safety relief valves (SRVs) (the "A" division cables for the SRV X1 solenoids) which would be used with the Automatic Depressurization System (ADS) in conjunction with either Core Spray (CS) or Residual Heat Removal – Low-Pressure Coolant Injection (RHR-LPCI) to achieve and maintain hot shutdown. Control cables for all these systems are located in the same cable tray. The operation of these SRVs is necessary in the event of a fire in this area. In the event that the safe shutdown equipment including the redundant trains of SRVs are lost due to a fire in Fire Area 10, the licensee has indicated that the implementation of the OMA procedure will provide the necessary assurance that safe shutdown capability is maintained. The OMA procedure directs operators to operate an alternative SRV panel located in Fire Area 8, which is located adjacent to Fire Area 10.

The licensee has described in their initial request, and subsequent documents, elements of their fire protection program that provide their justification that the concept of defense-indepth that is in place in Fire Area 10 is consistent with that intended by the regulation. To accomplish this, the licensee provides various forms of protection in order to maintain the concept of defense-in-depth. The licensee's approach is discussed below.

#### 3.1 Fire Prevention

The licensee has stated that it has an administrative controls program in place to strictly control ignition sources and transient combustibles for Fire Area 10. Controls are also in place to ensure fire barrier breaches are tracked and that compensatory measures are established in accordance with the Technical Requirements Manual (TRM). In addition to these administrative programs, the licensee has also stated that there are no in situ combustible materials, aside from the contents of the MCCs and the cables within the same stack of cable trays, within the immediate vicinity of the hot shutdown control cables in Fire Area 10. The cables meet the requirements of Institute of Electrical and Electronics Engineers (IEEE)-383, "Standard for Qualifying Class 1E Electric Cable and Field Splices for Nuclear Power Generating Stations," or they are equivalent to the same, and they are thermoset, therefore self-ignited cable fires and flame propagation are not expected.

# 3.2 Detection, Control and Extinguishment

The licensee has stated that Fire Area 10 is separated from other fire areas including Fire Areas 8 and 9, by 3-hour rated fire barriers or water spray curtains (installed in accordance with National Fire Protection Association (NFPA) 13: Standard for the Installation of Sprinkler Systems - 1982 Edition), which provides assurance that a fire in Fire Area 10 will not propagate beyond the boundaries of the fire area. Fire rated barriers installed to separate Fire Area 10 from surrounding fire areas meet the design requirements of a 3-hour fire rated barrier when tested in accordance with the American Society for Testing and Materials (ASTM) Standard E119, "Standard Test Methods for Fire Tests of Building Construction and Material," and deviations from these designs have been evaluated by the licensee and found to be acceptable with regard to providing an equivalent level of protection to what is intended by the standards.

In addition, the licensee has indicated that an ionization smoke detection system (installed in accordance with NFPA 72E: National Fire Alarm Code - 1978 Edition) is installed throughout the entire Reactor Building with the exception of the 369'-6" elevation and below the removable hatchway cover on the 300' elevation. The lack of coverage in these two areas is not expected to impact the staff conclusions because, as noted in their response to RAI-05 in their November 17, 2009, letter, the licensee stated that for the 300' elevation "the deviation was determined to be acceptable based on the other fire protection features and the low combustible loading in the area." The 369'-6" elevation is above the 272' elevation and a postulated fire event on the 369'-6" elevation would not be expected to impact equipment on lower elevations in the Reactor Building. The installed smoke detection systems on lower elevations of the Reactor Building are installed to detect and alert operators of a fire event allowing prompt commencement of fire brigade operations for fires that could affect the redundant train cables.

The Reactor Building has manual hose stations installed in accordance with NFPA 14 - 1978 Edition and portable fire extinguishers installed in accordance with NFPA 10 – 1990 Edition, which will enable for fire brigade to effectively perform their operations. The licensee has also stated that all of the automatic and manual fire protection features discussed above are tested and maintained in accordance with the guidance provided in the respective NFPA standards and the TRM.

#### 3.3 Preservation of Safe Shutdown Capability

The licensee has indicated that the postulated fire event for Fire Area 10 that could affect safe shutdown capability would be from one of the MCCs, which are located minimally 6 feet, measured horizontally, from the stack of trays containing the control cables of concern and that the bottom of the stack is located approximately 9 feet, measured vertically, above the MCCs. A fire in the MCCs would likely either remain within the MCC enclosure or be detected

and extinguished before any cable damage in the overhead cable trays could occur. For fires that propagate beyond the MCC enclosure, the heat and smoke would be dissipated and stratified due to the large volume and high ceiling of the space making the exposure of cables to elevated temperatures even less likely. JAFNPP contends that these fire scenarios would be detected early and that the fire brigade would respond with manual fire suppression to minimize the impact of the fire.

The licensee also considered the possibility of self ignited cable fires however, the licensee deemed this unlikely. Self ignited cable fires are not postulated due to the fire retardant properties of the thermoset cables themselves (IEEE-383 qualified, or equivalent) and the absence of power cables in the same cable tray stack as described in 2009 Updated Final Safety Analysis Report, Section 8.5-3.

For a fire in Fire Area 10, JAFNPP assumes the HPCI and RCIC systems are both lost in addition to one side of the control and power cables for the main steam safety relief valves (SRVs) (the "A" division cables for the SRV X1 solenoids) which would be used with the ADS in conjunction with either CS or RHR-LPCI to achieve and maintain hot shutdown. JAFNPP credits the ADS in conjunction with either RHR-LPCI or the CS system to achieve and maintain hot shutdown for a fire occurring in Fire Area 10, but procedurally directs operators to perform an OMA to operate the SRVs from outside the control room. The OMA is comprised of traveling to a Local SRV Panel and a sequence of manipulations of the SRV X2 solenoids at the panel.

JAFNPP has indicated that the redundant control cables for the SRVs are routed through Fire Areas 8 and 9 and that the redundant SRV power cables are routed through Fire Areas 8, 9, and 17. The cables for the "B" division cables that serve the SRV X2 solenoids for redundant initiation of reactor depressurization utilizing the ADS in conjunction with a low

pressure emergency core cooling system (i.e. CS or RHR-LPCI) are located outside Fire Area 10. The manual operation of the SRV X2 solenoids at the local SRV Control Panel 02ADS-071 in Fire Area 8 is necessary in the event of a fire in Fire Area 10. According to the licensee's February 18, 2009, letter, this panel was installed as part of a modification to comply with 10 CFR Part 50, Appendix R, Section III.G.3 (III.G.3). As such, this panel is maintained in accordance with the JAFNPP approved fire protection program.

Since the control cables associated with the operation of the SRVs from the Control Room (at Panel 09-4 for the X1 solenoids) are assumed lost for a fire in Fire Area 10, the safe shutdown procedures also direct the operators to isolate the electric lift function of the X1 solenoids from the Relay Room (to prevent spurious operation) and that an operator be dispatched to the Local SRV Control Panel (02ADS-071) located in Fire Area 8 to operate the SRVs as directed by the shift manager. For a fire in Fire Area 10, plant shutdown is performed from the Control Room which JAFNPP considers a normal plant shutdown, except for operation of the SRVs from the Local Control Panel in Fire Area 8, which is considered the OMA. The OMA for bypassing the SRV X1 solenoids and for SRV operation at the Local Control Panel are necessary to achieve and maintain hot shutdown conditions for the postulated fire event in Fire Area 10.

# Bases for Establishing Feasibility and Reliability

The licensee's analysis addresses factors such as environmental concerns, equipment functionality and accessibility, available indications, communications, portable equipment, personnel protection equipment, procedures and training, staffing and demonstrations. In its February 18, 2009, letter, the licensee stated that environmental considerations such as radiation levels, emergency lighting, temperature and humidity conditions and smoke and toxic

gases were evaluated and found to not represent a negative impact on the operators' abilities to complete the OMA.

The licensee's analysis demonstrates that there are no components present in Fire Area 8 or Fire Area 10 that, due to fire damage, would result in an increased radiological hazard in the area of the Local SRV Panel where the action is to be completed. Since the Local SRV Panel is part of JAFNPP's alternate shutdown strategy, there is adequate emergency lighting provided along the path between the Control Room and the panel to ensure that operators can perform the actions and there are two travel paths, both independent of Fire Area 10, available to access the panel. Additionally, since Fire Area 8 is separated from Fire Area 10 by water curtains (installed in accordance with NFPA 13 – 1982 Edition guidance) or 3-hour fire rated barriers, fires would be contained within Fire Area 10. Any smoke and products of combustion that may propagate into Fire Area 8 would be dissipated due to the large volume and high ceiling of the Reactor Building areas. For these reasons, no personnel protective equipment is relied upon when performing this action.

The licensee has also stated that the Local SRV Panel is located at the floor level in an open area of the plant that is normally accessible and that while the panel is locked at all times, all shift operators carry keys to access the panel. Aside from these keys, no other tools or equipment are required to perform the action. Once operators access the panel, they manipulate a breaker to energize the panel and then each SRV can be operated by a switch when requested by the Shift Manager. The OMA procedure also contains steps for the operators to place the electric lift function of the X1 solenoids in "BYPASS" to prevent spurious operation prior to dispatching an operator to the Local SRV Panel to operate the SRVs as directed by the Shift Manager. Operators are in constant communication with the Control Room

throughout the procedure via a headset and dedicated shutdown communication system that is maintained at the Local SRV Panel.

The steps necessary to achieve and maintain safe shutdown for a fire in Fire Area 10 are contained in Abnormal Operating Procedure (AOP)-28, "Operation During Plant Fires," Attachment 5 and AOP-43, "Plant Shutdown From Outside the Control Room." The procedure AOP-28 is structured such that each fire area has an individual attachment to provide operators the necessary information to achieve and maintain safe shutdown during a fire. The licensee has also stated that operators receive training on AOP-28 and AOP-43, during initial training and annually thereafter and that operations staff also perform annual walkthroughs of the safe shutdown procedures. Additionally, only one operator is required to complete the action at the Local SRV Panel aside from a control room operator who places the electric lift function of the X1 solenoids in "BYPASS" to prevent spurious operation.

A scenario involving initiating shutdown with decay heat removal by ADS in conjunction with CS or RHR-LPCI and Control Room abandonment represents a more challenging scenario than the postulated scenario involving a fire event in Fire Area 10 because Control Room abandonment is not necessary. The licensee has stated that the scenario involving Control Room abandonment would result in a 30-minute time to achieve hot shutdown conditions but since the Control Room is not abandoned for a fire in Fire Area 10, a 15-minute time for the operator to get to the local panel in Fire Area 8 and perform the requested OMA, as directed by the Shift Manager, is conservative especially given the 15-minute safety margin.

#### Feasibility

JAFNPP indicates that the OMA included in this review has been evaluated and found to be feasible and reliable. The OMA is feasible because there is adequate time available for the operator to perform the required manual action to achieve and maintain hot shutdown after a

single fire. The licensee's analysis demonstrates that, for the expected scenario, the OMA can be diagnosed and executed in 15 minutes while the available time to complete it is 30 minutes. The licensee's analysis also demonstrates that various factors, as discussed above, have been considered to address uncertainties in estimating the time available.

#### Reliability

The action is reliable because the licensee's analysis demonstrates that there is adequate time available to account for uncertainties not only in estimates of the time available, but also in estimates of how long it takes to diagnose and execute the operator manual action (e.g., as based, at least in part, on a plant demonstration of the action under nonfire conditions). The stated completion time of 15 minutes provides reasonable assurance that the OMA can reliably be performed under a wide range of conceivable conditions by different plant crews because it, in conjunction with the 15-minute margin and other installed fire protection features, accounts for sources of uncertainty such as variations in fire and plant conditions, factors unable to be recreated in demonstrations and human-centered factors.

In summary, the defense-in-depth concept for a fire in Fire Area 10 provides a level of safety that results in the unlikely occurrence of fires, rapid detection, control and extinguishment of fires that do occur and the protection of structures, systems and components important to safety. As discussed above, the licensee has provided preventative and protective measures in addition to a feasible and reliable OMA that together demonstrate the licensee's ability to preserve or maintain safe shutdown capability at JAFNPP in the event of a fire in Fire Area 10. Authorized by Law

This exemption would allow JAFNPP to rely on an OMA, in conjunction with the other installed fire protection features, to ensure that at least one means of achieving and maintaining hot shutdown remains available during and following a postulated fire event, as part of its fire

protection program, in lieu of meeting the requirements specified in III.G.2 for a fire in Fire Area 10. 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 will not result in a violation of the Atomic Energy Act of 1954, as amended, or 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 Part 50, Appendix R, Section III.G is to ensure that at least one means of achieving and maintaining hot shutdown remains available during and following a postulated fire event. Based on the above, no new accident precursors are created by the use of the specific OMA, in conjunction with the other installed fire protection features, in response to a fire in Fire Area 10, thus, the probability of postulated accidents is not increased. Also based on the above, the consequences of postulated accidents are not increased. Therefore, there is no undue risk to public health and safety.

#### Consistent with Common Defense and Security

The proposed exemption would allow JAFNPP to credit the use of the specific OMA, in conjunction with the other installed fire protection features, in response to a fire in Fire Area 10 in lieu of meeting the requirements specified in III.G.2. This change, to the operation of the plant, has no relation to security issues. Therefore, the common defense and security is not diminished by this exemption.

# **Special Circumstances**

One of the special circumstances described in 10 CFR 50.12(a)(2)(ii) is that the application of the regulation is not necessary to achieve the underlying purpose of the rule. The underlying purpose of 10 CFR Part 50, Appendix R, Section III.G is to ensure that at least one means of achieving and maintaining hot shutdown remains available during and following a

postulated fire event. While the licensee does not comply with the explicit requirements of III.G.2, specifically, they do meet the underlying purpose of 10 CFR Part 50, Appendix R, and Section III.G as a whole. Therefore, special circumstances exist that warrant the issuance of this exemption as required by 10 CFR 50.12(a)(2)(ii).

### 4.0 RESPONSE TO COMMENTS FROM THE STATE OF NEW YORK

In accordance with its stated policy and the requirements of 10 CFR 51.30(a)(2), on May 4, 2009, the NRC staff consulted with the New York State official, at the New York State Energy Research and Development Authority, regarding the environmental impact of the proposed action. The New York State official provided following comments by e-mail dated June 12, 2009 (ADAMS Accession No. ML091690397):

# Public Notice and Opportunity to Request a Hearing

It appears that the requested action will effectively amend the facility's operating license as well as the operative regulation, 10 C.F.R. § 50.48 and Appendix R to Part 50 Appendix R, Section III.G. Thus, regardless of what words are used to refer to the requested change, notice of the request should be published in the Federal Register and the public should be offered an opportunity to comment on the environmental impacts and request a hearing. Such transparency and opportunity for participation is consistent with the Atomic Energy Act, the National Environmental Policy Act, the Administrative Procedure Act, the federal Council on Environmental Quality regulations, and the Commission's commitment to public participation in its administrative matters.

#### The Fire Safety Regulation

Specifically, paragraph III.G.2 of 10 C.F.R., Appendix R requires that, where electrical cables or equipment, including associated non-safety circuits that could prevent operation or cause maloperation [as a result of hot shorts, open circuits, or shorts to ground ] of redundant trains of systems necessary to achieve and maintain hot shutdown conditions are located within the same fire area outside of primary containment, one of the following means of ensuring that one of the redundant trains is free of fire damage shall be provided:

- (a) separation of cables and equipment by a fire barrier having a 3-hour rating,
- (b) separation of cables and equipment by a horizontal distance of more than 20 feet with no intervening combustibles or fire hazards and with fire detectors and an automatic fire suppression system in the fire area, and

(c) enclosure of cables and equipment in a fire barrier having a 1-hour rating and with fire detectors and an automatic fire suppression system in the fire area.

Paragraph III.G.2 of Appendix R does not list operator manual actions as a means of ensuring that one of the redundant trains is free of fire damage.

This regulation has been applicable since November 1980 when it was promulgated by the NRC. According to RIS 2006-10, in 2000, the NRC implemented the Reactor Oversight Process which included systematic inspections of licensees' safe shutdown capability. During these inspections, fire protection inspectors noticed that many licensees had not upgraded or replaced Thermo-Lag 330-1 fire barrier material or had not provided the required separation distance between redundant safe shutdown trains, in order to satisfy the requirements in paragraph III.G.2 of Appendix R to 10 CFR Part 50.

In the present situation, the licensee states that the Safety Relief Valve electrical trains or cables, which control the emergency depressurization system, do not meet the required minimum separation distances prescribed in Appendix R. (The issue of fire insulation material does not come in to play here since the facility does not use significant amounts of such insulation around electric cables or trains.)

#### The Proposed Operator Manual Action

According to the February 2009 filing, the licensee relies upon an Operator Manual Action that is not allowed per 10 C.F.R. Part 50, Appendix R, Section III.G.2. Further, the NRC has stated that manual actions are not specifically authorized by Appendix R, Section III.G.2.

If a fire were to occur, the manual action proposed by the licensee requires an operator to leave the control room, travel to a local control panel located in the reactor building, and then operate up to eleven (11) valves that are essential for the depressurization system and the emergency core cooling system. Based on the submissions, it appears that it could take up to fifteen minutes for an operator to reach the local control panel in the reactor building.

While it may be appropriate to regularize and formalize the proposal to have an employee manually operate the safety related valves, the February 2009 application seeks to do so in a way that avoids the opportunity for the public to request a proceeding or comment on potential environmental impacts. Also, the application does not appear to discuss the impact of the proposed change on the defense and security of the facility and host community, the feasibility of the proposed change during a significant fire event, or the cumulative effect of the proposed change given the several previous changes to the fire protection program at the facility. It would seem appropriate to address these issues via a public forum under the AEA, APA, and NEPA before reaching any final decision.

The NRC staff has reviewed the comments provided by the State of New York, dated June 12, 2009, on the fire safety regulation and the proposed OMA and has concluded that the consideration or granting of the requested exemption does not violate the fire safety regulation or diminish the level of safety that is present at JAFNPP. Additionally, upon review of the request, NRC staff has concluded that the licensee is not solely reliant upon the requested OMA for compliance with the regulation and that the overall defense-in-depth concept employed in the specific fire area is consistent with the underlying purpose of the fire safety regulation.

Regarding the comment concerning "Public Notice and Opportunity to Request a Hearing," the regulations under 10 CFR 50.12, "Specific exemptions" do not include comment period and opportunity for a hearing. The public can pursue other avenues, such as petition for changes to the regulatory framework to allow hearings via the rulemaking process (10 CFR 2.802), or a petition for enforcement action (10 CFR 2.206) where stakeholders assert that license holders are not meeting regulatory requirements.

# 4.0 CONCLUSION

Based on the all of the features of the defense-in-depth concept discussed above, the NRC staff concludes that the use of the requested OMA, in this particular instance and in conjunction with the other installed fire protection features, in lieu of strict compliance with the requirements of III.G.2 is consistent with the underlying purpose of the rule. As such, the level of safety present at JAFNPP is commensurate with the established safety standards for nuclear power plants.

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), the exemption is authorized by law, will not present an undue risk to the public health and safety, is consistent with the common defense and security and that special circumstances are present to warrant issuance of the exemption. Therefore, the Commission hereby grants Entergy an

exemption from the requirements of Section III.G.2 of Appendix R of 10 CFR Part 50, to JAFNPP for the OMA discussed above.

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 (75 FR11575).

This exemption is effective upon issuance.

Dated at Rockville, Maryland, this 11<sup>th</sup> day of March 2010.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Joseph G. Giitter, Director Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation