



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

January 20, 2010

Vice President, Operations  
Entergy Nuclear Operations, Inc.  
Indian Point Energy Center  
450 Broadway, GSB  
P.O. Box 249  
Buchanan, NY 10511-0249

SUBJECT: INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 AND 3 - REQUEST  
FOR ADDITIONAL INFORMATION REGARDING REQUEST FOR EXEMPTION  
(TAC NOS. ME0798 AND ME0799)

Dear Sir or Madam:

By two letters dated March 6, 2009, and two letters dated October 1, 2009, Entergy Nuclear Operations, Inc. (Entergy) submitted to the Nuclear Regulatory Commission (NRC) requests for exemptions from Title 10 of the *Code of Federal Regulations*, Part 50, Appendix R, "Fire Protection Program for Nuclear Power Facilities Operating Prior to January 1, 1979," Paragraph III.G.2, for Indian Point Nuclear Generating Unit Nos. 2 and 3. The letters are available in the NRC's Agencywide Documents Access and Management System, Accession Nos. ML090770151, ML090760993, ML092810230, and ML092810231. The request was made to allow the use of operator manual actions in lieu of meeting the separation requirements contained in Paragraph III.G.2.

The NRC staff is reviewing the submittal and has determined that additional information is needed to complete its review. The specific questions are found in the enclosed request for additional information (RAI). On January 14, 2010, the Entergy staff indicated that a response to the RAI would be provided within 60 days of the date of this letter.

Please contact me at (301) 415-2901 if you have any questions on this issue.

Sincerely,

A handwritten signature in cursive script that reads "John P. Boska".

John P. Boska, Senior Project Manager  
Plant Licensing Branch I-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-247 and 50-286

Enclosure:  
RAI

cc w/encl: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION (RAI)  
REGARDING APPENDIX R EXEMPTION REQUEST  
ENTERGY NUCLEAR OPERATIONS, INC.  
INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 AND 3  
DOCKET NOS. 50-247 AND 50-286

By two letters dated March 6, 2009 and two letters dated October 1, 2009, Entergy Nuclear Operations, Inc. (Entergy) submitted to the Nuclear Regulatory Commission (NRC) requests for an Exemption from Title 10 of the *Code of Federal Regulations*, (10 CFR) Part 50, Appendix R, Paragraph III.G.2 for Indian Point Nuclear Generating Unit Nos. 2 and 3 (IP2 and IP3). The letters are available in the NRC's Agencywide Documents Access and Management System, Accession Nos. ML090770151, ML090760993, ML092810230, and ML092810231. The request was made to allow the use of operator manual actions in lieu of meeting the separation requirements contained in 10 CFR, Part 50, Appendix R, Paragraph III.G.2 (III.G.2). The NRC staff is reviewing the submittal and has the following questions:

**Questions Related to IP2**

**RAI-01 Circumstances for Review**

Section 5.0 of Attachment 1 describes the regulatory analysis performed by Entergy. According to Section 5.0, it is Entergy's position that the protective measures prescribed by III.G.2 are not necessary to meet the underlying purpose of the rule, however, this assertion does not address how defense-in-depth is provided such that operators are able to safely and reliably achieve and maintain safe shutdown capability. Note that it is the NRC staff's position that operator manual actions alone, regardless of their feasibility and reliability, do not meet the underlying purpose of the rule without specific consideration of the overall concept of defense-in-depth that is being applied in a particular fire area.

RAI-01.1: Provide a discussion of how the proposed arrangement achieves the underlying purpose of the rule.

**RAI-02 Ensuring That One of the Redundant Trains Is Free of Fire Damage**

Section 6 of Attachment 2 identifies seven fire areas, which are not in compliance with Appendix R, Section III.G.2 because hot shutdown operator manual actions (OMAs) would be required to mitigate maloperation of equipment in the required or credited equipment train to achieve safe shutdown.

With the exception of Fire Areas C and F, the method described in the request appears to demonstrate safe shutdown capability independent of the fire area of origin consistent with III.G.3, yet the request is for an Exemption from the requirements of III.G.2. III.G.2 specifically states that measures must be taken to ensure that one of the redundant trains remains free of fire damage within the fire area. Section III.G.3 of Appendix R addresses alternative or

Enclosure

dedicated shutdown capability independent of the fire area of origin and establishes a series of requirements to achieve and maintain safe shutdown capability.

- RAI-02.1: Confirm and state whether an Exemption from III.G.2 requirements is the appropriate request for all of the OMAs in the request, since safe shutdown capability is provided independent of the fire area of origin for many of the fire areas.
- RAI-02.2: State the specific requirements of III.G.2 that are not met for each of the requested OMAs, e.g., a lack of fire barriers, spatial separation, automatic suppression, etc.
- RAI-02.3: Provide a summary of the plant-specific features that compensate for the lack of III.G.2-required features, identified in RAI-02.2, for each of the requested OMAs. For example, note any enhanced defense-in-depth measures such as a lack of ignition sources or combustibles, more robust or supplemental detection and suppression systems and other physical or administrative controls.
- RAI-02.4: Appendix R establishes the concept of defense-in-depth and III.G.2 requires operators be able to safely and reliably achieve and maintain hot shutdown capability from the control room. Provide a technical explanation that justifies how the proposed methods will result in a level of protection that is commensurate with that intended by III.G.2.

### **RAI-03 Other Evaluations**

Fire areas may have other Exemptions or engineering evaluations that affect fire protection systems or safe shutdown capabilities.

- RAI-03.1: Provide a discussion of any other Exemptions or evaluations, including licensee-developed evaluations, e.g., Generic Letter 86-10 evaluations, which impact this request in any way and provide a justification for why such impact should be considered acceptable.

### **RAI-04 Fire Protection System and Fire Barrier Design Criteria**

Section 6 of Attachment 2 states that several areas are equipped with various fire detection and suppression systems and that nine of the zones included in the request are not provided with automatic fire suppression or detection systems. However, the requests do not state whether the systems that are provided have been designed and installed in accordance with applicable design standards or requirements.

- RAI-04.1: Where fire protection features such as detection and suppression systems and fire rated assemblies are installed, describe the technical basis for such installations including the applicable codes, standards and listings.

For example:

Section 5 of Attachment 2 states that smoke and heat detection systems are provided in certain areas. State whether the detectors have been installed and maintained in accordance with a particular design standard or basis, e.g. National Fire Protection Association (NFPA) 72: National Fire Alarm Code, 1985 Edition.

Section 5 of Attachment 2 states that various suppression systems are provided in certain areas. State whether these systems have been installed and maintained in accordance with a particular design standard or basis, e.g. NFPA 13: "Standard for the Installation of Sprinkler Systems," 1985 Edition. Where pre-action systems or interlocks are provided, include the design standard or basis for the associated systems.

Section 5 of Attachment 2 states that a manually-actuated Halon 1301 total-flooding suppression system is installed in the plant. State whether the Halon system was installed and maintained in accordance with a particular design standard or basis, e.g. NFPA Standard 12A, 1985 Edition.

RAI-04.2: Provide a technical justification for any deviations from codes, standards and listings by independent testing laboratories in the fire areas that could impact this evaluation.

RAI-04.3: Provide a technical justification for any non-rated fire protection assemblies.

#### **RAI-05 Ignition Sources and Combustible Fuel Load**

The requests use terms such as "low" or "moderate" to describe the combustible fuel loading in the fire areas included in the request.

RAI-05.1: Provide critical details or assumptions regarding the in situ and transient fire hazards that could threaten redundant equipment for each fire area included in the requests. This information may include, but is not limited to:

- The number, type and location of potential ignition sources,
- The number and types of equipment that may exhibit high energy arcing faults, and the relationship between this equipment and any secondary combustibles,
- The quantity of cables and other secondary combustibles and their relationship to potential ignition sources,
- The cable type, e.g., thermoplastic or thermoset. If thermoplastic cables are used, provide a discussion of self-ignited cable fires,
- Ratings for cables, e.g., IEEE-383, etc. If not rated, justify why fire spread would be assumed to be slow,

- Controls on hot work and transient combustibles in the area, and the proximity of secondary combustibles that could be impacted by a transient fire, and
- Dimensions of the rooms including ceiling heights.

### **RAI-06 Fire Scenarios**

The request identifies the OMAs needed in each fire area, but does not describe the fire scenarios that have been considered for the postulated events.

For example:

In the event of fire in Fire Area F, OMAs may be required to operate valves and align pumps. However, no information is provided to describe the separation between the redundant train cables. It is also not clear where the cables are located relative to the floor, walls and other trains or whether any spatial separation exists between the two trains.

RAI-06.1: Provide a description of the proximity of the redundant train equipment to in situ hazards and the spatial relationship between the redundant trains in the fire area such that if they are damaged, manual actions would be necessary. Note, that this question is distinct from the RAI addressing Ignition Sources and Combustible Loading, which is generally focused on the combustibles in an area, whereas, this RAI addresses the specific relationship between ignition sources and combustibles and the redundant trains.

RAI-06.2: Provide a description of the suppression, detection and any other systems that are present and capable of mitigating the postulated events for the fire areas included in this request.

### **RAI-07 Initiation of Procedures**

The tables in Attachment 2 state the required time to complete an action as well as the actual time to complete an action but the request lacks a discussion about the time at which these times are initiated from. Additionally, the request lacks a detailed description of the series of events that may occur prior to initiating the OMA. Specifically, the requests do not describe the conditions that must be satisfied in order for operators to enter a particular OMA procedure.

For example, Section 3.ii of Attachment 2 states that various forms of plant response and instrumentation will alert operators to implement the OMA but it is not clear if the analysis assumed an initiating time (i.e., Time 0) as the time at which the fire is detected, the time at which the fire is determined to pose a threat to safe shutdown equipment, the time the reactor is scrammed, the time that a spurious signal or actuation is observed in the control room, or some other point in the fire scenario.

RAI-07.1: Provide an analysis or technical justification that demonstrates that the ability to detect a fire is sufficient to provide notification of a postulated event before damage to the redundant trains occurs or provide an

analysis or technical justification to evaluate scenarios where the redundant components are damaged before a fire has been reported.

### **RAI-08 Time and Sequence Assumptions**

Section 5.2 and 5.4 of Attachment 1 states that the OMAs identified in Tables 2- 8 of Attachment 2 have been evaluated and confirmed to be feasible.

An action is considered feasible if it is shown that it is possible to diagnose an event and execute the action within the available time. The tables provided in Attachment 2 do not provide a clear justification for determining feasibility. For example, the actual time to complete the fourth action in Table 3, the transfer of instrument buses 23 and 23A to alternate power, is indicated to be 2 minutes, however, it is not clear whether any diagnosis time has been accounted for or what portion of the actual time to complete the action represents the physical travel time.

- RAI-08.1: For each of the OMAs contained in the requests, describe the circumstances and criteria needed to enter the OMA procedure and identify:
- 1) **Diagnosis time** - the time required for an operator to examine and evaluate data to determine the need for, and to make the decision to implement, an action.
  - 2) **Implementation time** - the time required by the operator(s) to successfully perform the action including:
    - obtaining any necessary equipment, procedures, or other devices,
    - traveling to the necessary location,
    - implementing the action, and
    - confirming that the action has had its desired effect.
- RAI-08.2: Provide a justification that demonstrates that the proposed OMAs are feasible as well as a technical justification for the times discussed in response to RAI-08.1 above.

### **RAI-09 Reliability of Actions**

Section 5.2 and 5.4 of Attachment 1 states that the OMAs identified in Tables 2-8 of Attachment 2 have been evaluated and confirmed to be reliable.

A feasible action may be considered reliable when it has been shown 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 actions (e.g., as based, at least in part, on a plant demonstration of the action under nonfire conditions). It should be shown that there is extra time available to account for such uncertainties. The request does not contain a discussion of the uncertainties that have been considered in the diagnosis,

execution and confirmation stages of a postulated event or how such uncertainties have been incorporated in the stated times.

For example, Table 3 of Attachment 2 indicates that the actual time to complete the third OMA for Fire Area F (Align Charging Pump suction source to Refueling Water Storage Tank) is 8 minutes and that the required time to complete this action is 75 minutes. This table also states that the action is performed in Fire Area F after 1 hour to allow for fire extinguishment and securing of the area following a fire event. This would leave a margin of 7 minutes.

- RAI-09.1: Provide information that demonstrates that the actions are reliable including a justification that various uncertainties are accounted for in the time margins and that the margins are sufficient to ensure that they provide adequate time to cover potential variations in plant conditions and human performance. If a factor of safety or diagnosis time has been included in the stated times to complete the actions, provide an explanation for how it has been incorporated into the timelines. If not, justify why the stated times are sufficient to assure safety.

#### **RAI-10 Fire Area Proximity and Access**

Section 3.iii of Attachment 2 states that pre-staged self contained breathing apparatus (SCBAs) are available for deployment in response to post-fire environmental conditions and that OMAs are generally not conducted in the area directly affected by a postulated fire but does not mention whether SCBAs are required for performing the action.

- RAI-10.1: State whether operators are procedurally directed to don SCBAs and whether the time needed to don the SCBAs was included in the analysis of the time available to perform the action.

#### **RAI-11 Fire Area of Origin Re-entry**

Section 3.0 of Attachment 1 states that, in certain areas, operators are required to reenter the fire-affected area after 60 minutes but does not provide a technical basis or justification for why this should be considered acceptable or consistent with the intent of the regulation.

- RAI-11.1: Provide critical details or assumptions of the analysis that demonstrates that the required safe shut down equipment or component located within the area is maintained free of fire damage and remains accessible and operable following the fire event.
- RAI-11.2: Provide a technical justification for why the assumed 60-minute reentry period is appropriate and an explanation for what is assumed to be included in this time.

### **Questions Related to IP3**

#### **RAI-01 Circumstances for Review**

Section 5.0 of Attachment 1 describes the regulatory analysis performed by Entergy. According to Section 5.0, it is Entergy's position that the protective measures prescribed by III.G.2 are not necessary to meet the underlying purpose of the rule, however, this assertion does not address how defense-in-depth is provided such that operators are able to safely and reliably achieve and maintain safe shutdown capability. Note that it is the NRC staff's position that operator manual actions alone, regardless of their feasibility and reliability, do not meet the underlying purpose of the rule without specific consideration of the overall concept of defense-in-depth that is being applied in a particular fire area.

- RAI-01.1: Provide a discussion of how the proposed arrangement achieves the underlying purpose of the rule.

#### **RAI-02 Ensuring That One of the Redundant Trains Is Free of Fire Damage**

Section 6 of Attachment 2 identifies five fire areas, which are not in compliance with Appendix R, Section III.G.2 because hot shutdown OMAs would be required to mitigate maloperation of equipment in the required or credited equipment train to achieve safe shutdown.

With the exception of Fire Areas AFW-6, TBL-5, YARD-7 and PAB-2, the method described in the request appears to demonstrate safe shutdown capability independent of the fire area of origin consistent with III.G.3, yet the request is for an Exemption from the requirements of III.G.2. III.G.2 specifically states that measures must be taken to ensure that one of the redundant trains remains free of fire damage within the fire area. Section III.G.3 of Appendix R addresses alternative or dedicated shutdown capability independent of the fire area of origin and establishes a series of requirements to achieve and maintain safe shutdown capability.

- RAI-02.1: Confirm and state whether an Exemption from III.G.2 requirements is the appropriate request for all of the OMAs in the request, since safe shutdown capability is provided independent of the fire area of origin for many of the fire areas.
- RAI-02.2: State the specific requirements of III.G.2 that are not met for each of the requested OMAs, e.g., a lack of fire barriers, spatial separation, automatic suppression, etc.
- RAI-02.3: Provide a summary of the plant-specific features that compensate for the lack of III.G.2-required features, identified in RAI-02.2, for each of the requested OMAs. For example, note any enhanced defense-in-depth measures such as a lack of ignition sources or combustibles, more robust or supplemental detection and suppression systems and other physical or administrative controls.
- RAI-02.4: Appendix R establishes the concept of defense-in-depth and III.G.2 requires operators be able to safely and reliably achieve and maintain hot shutdown capability from the control room. Provide a technical explanation that justifies

how the proposed methods will result in a level of protection that is commensurate with that intended by III.G.2.

### **RAI-03 Other Evaluations**

Fire areas may have other Exemptions or engineering evaluations that affect fire protection systems or safe shutdown capabilities.

- RAI-03.1: Provide a discussion of any other Exemptions or evaluations, including licensee-developed evaluations, e.g., Generic Letter 86-10 evaluations, which impact this request in any way and provide a justification for why such impact should be considered acceptable.

### **RAI-04 Fire Protection System and Fire Barrier Design Criteria**

Section 6 of Attachment 2 states that several areas are equipped with various fire detection and suppression systems and that thirteen of the zones included in the request are not provided with automatic fire suppression or detection systems. However, the requests do not state whether the systems that are provided have been designed and installed in accordance with applicable design standards or requirements.

- RAI-04.1: Where fire protection features such as detection and suppression systems and fire rated assemblies are installed, describe the technical basis for such installations including the applicable codes, standards and listings.

For example:

Section 5 of Attachment 2 states that smoke and heat detection systems are provided in certain areas. State whether the detectors have been installed and maintained in accordance with a particular design standard or basis, e.g. NFPA 72: National Fire Alarm Code, 1985 Edition.

Section 5 of Attachment 2 states that various suppression systems are provided in certain areas. State whether these systems have been installed and maintained in accordance with a particular design standard or basis, e.g. NFPA 13: "Standard for the Installation of Sprinkler Systems," 1985 Edition. Where pre-action systems or interlocks are provided, include the design standard or basis for the associated systems.

Section 5 of Attachment 2 states that a manually-actuated Halon 1301 total-flooding suppression system is installed in the plant. State whether the Halon system was installed and maintained in accordance with a particular design standard or basis, e.g. NFPA Standard 12A, 1985 Edition.

- RAI-04.2: Provide a technical justification for any deviations from codes, standards and listings by independent testing laboratories in the fire areas that could impact this evaluation.
- RAI-04.3: Provide a technical justification for any non-rated fire protection assemblies.

### **RAI-05 Ignition Sources and Combustible Fuel Load**

The requests use terms such as “low” or “moderate” to describe the combustible fuel loading in the fire areas included in the request.

RAI-05.1: Provide critical details or assumptions regarding the in situ and transient fire hazards that could threaten redundant equipment for each fire area included in the requests. This information may include, but is not limited to:

- The number, type and location of potential ignition sources,
- The number and types of equipment that may exhibit high energy arcing faults, and the relationship between this equipment and any secondary combustibles,
- The quantity of cables and other secondary combustibles and their relationship to potential ignition sources,
- The cable type, e.g., thermoplastic or thermoset. If thermoplastic cables are used, provide a discussion of self-ignited cable fires,
- Ratings for cables, e.g., IEEE-383, etc. If not rated, justify why fire spread would be assumed to be slow,
- Controls on hot work and transient combustibles in the area, and the proximity of secondary combustibles that could be impacted by a transient fire, and
- Dimensions of the rooms including ceiling heights.

### **RAI-06 Fire Scenarios**

The request identifies the OMAs needed in each fire area, but does not describe the fire scenarios that have been considered for the postulated events.

For example:

In the event of fire in Fire Area ETN-4{1}, OMAs may be required to operate valves and align pumps. However, no information is provided to describe the separation between the redundant train cables. It is also not clear where the cables are located relative to the floor, walls and other trains or whether any spatial separation exists between the two trains.

RAI-06.1: Provide a description of the proximity of the redundant train equipment to in situ hazards and the spatial relationship between the redundant trains in the fire area such that if they are damaged, manual actions would be necessary. Note, that this question is distinct from the RAI addressing Ignition Sources and Combustible Loading, which is generally focused on the combustibles in an area, whereas, this RAI addresses the specific relationship between ignition sources and combustibles and the redundant trains.

- RAI-06.2: Provide a description of the suppression, detection and any other systems that are present and capable of mitigating the postulated events for the fire areas included in this request.

### **RAI-07 Initiation of Procedures**

The tables in Attachment 2 state the required time to complete an action as well as the actual time to complete an action but the request lacks a discussion about the time at which these times are initiated from. Additionally, the request lacks a detailed description of the series of events that may occur prior to initiating the OMA. Specifically, the requests do not describe the conditions that must be satisfied in order for operators to enter a particular OMA procedure.

For example, Section 3.ii of Attachment 2 states that various forms of plant response and instrumentation will alert operators to implement the OMA but it is not clear if the analysis assumed an initiating time (i.e., Time 0) as the time at which the fire is detected, the time at which the fire is determined to pose a threat to safe shutdown equipment, the time the reactor is scrammed, the time that a spurious signal or actuation is observed in the control room, or some other point in the fire scenario.

- RAI-07.1: Provide an analysis or technical justification that demonstrates that the ability to detect a fire is sufficient to provide notification of a postulated event before damage to the redundant trains occurs or provide an analysis or technical justification to evaluate scenarios where the redundant components are damaged before a fire has been reported.

### **RAI-08 Time and Sequence Assumptions**

Section 5.2 and 5.4 of Attachment 1 states that the OMAs identified in Tables 2-9 of Attachment 2 have been evaluated and confirmed to be feasible.

An action is considered feasible if it is shown that it is possible to diagnose an event and execute the action within the available time. The tables provided in Attachment 2 do not provide a clear justification for determining feasibility. For example, it is not clear whether any diagnosis time has been accounted for or what portion of the actual time to complete the action represents the physical travel time.

- RAI-08.1: For each of the OMAs contained in the requests, describe the circumstances and criteria needed to enter the OMA procedure and identify:
- 1) **Diagnosis time** - the time required for an operator to examine and evaluate data to determine the need for, and to make the decision to implement, an action.
  - 2) **Implementation time** - the time required by the operator(s) to successfully perform the action including:
    - obtaining any necessary equipment, procedures, or other devices,
    - traveling to the necessary location,

- implementing the action, and
- confirming that the action has had its desired effect.

RAI-08.2: Provide a justification that demonstrates that the proposed OMAs are feasible as well as a technical justification for the times discussed in response to RAI-08.1 above.

### **RAI-09 Reliability of Actions**

Section 5.2 and 5.4 of Attachment 1 states that the OMAs identified in Tables 2-9 of Attachment 2 have been evaluated and confirmed to be reliable.

A feasible action may be considered reliable when it has been shown 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 OMAs (e.g., as based, at least in part, on a plant demonstration of the action under nonfire conditions). It should be shown that there is extra time available to account for such uncertainties. The request does not contain a discussion of the uncertainties that have been considered in the diagnosis, execution and confirmation stages of a postulated event or how such uncertainties have been incorporated in the stated times.

For example, Table 7 of Attachment 2 indicates that the actual time to complete the fourth OMA for Fire Area PAB-2{5} (Locally close valve LCV-112C and open valve 288 to establish flowpath from the refueling water storage tank to the charging pump suction) is 11 minutes and that the required time to complete this action is 75 minutes. This table also states that the action is performed in Fire Area PAB2-{5} after 1 hour to allow for fire extinguishment and smoke venting in the area following a fire event. This would leave a margin of 4 minutes.

RAI-09.1: Provide information that demonstrates that the actions are reliable including a justification that various uncertainties are accounted for in the time margins and that the margins are sufficient to ensure that they provide adequate time to cover potential variations in plant conditions and human performance. If a factor of safety or diagnosis time has been included in the stated times to complete the actions, provide an explanation for how it has been incorporated into the timelines. If not, justify why the stated times are sufficient to assure safety.

### **RAI-10 Fire Area Proximity and Access**

Section 3.iii of Attachment 2 states that pre-staged SCBAs are available for deployment in response to post-fire environmental conditions and that OMAs are generally not conducted in the area directly affected by a postulated fire but does not mention whether SCBAs are required for performing the action.

RAI-10.1: State whether operators are procedurally directed to don SCBAs and whether the time needed to don the SCBAs was included in the analysis of the time available to perform the action.

**RAI-11 Fire Area of Origin Re-entry**

Section 3.0 of Attachment 1 states that, in certain areas, operators are required to reenter the fire-affected area after 60 minutes but does not provide a technical basis or justification for why this should be considered acceptable or consistent with the intent of the regulation.

- RAI-11.1: Provide critical details or assumptions of the analysis that demonstrates that the required safe shut down equipment or component located within the area is maintained free of fire damage and remains accessible and operable following the fire event.
  
- RAI-11.2: Provide a technical justification for why the assumed 60-minute reentry period is appropriate and an explanation for what is assumed to be included in this time.

January 20, 2010

Vice President, Operations  
Entergy Nuclear Operations, Inc.  
Indian Point Energy Center  
450 Broadway, GSB  
P.O. Box 249  
Buchanan, NY 10511-0249

SUBJECT: INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 AND 3 - REQUEST  
FOR ADDITIONAL INFORMATION REGARDING REQUEST FOR EXEMPTION  
(TAC NOS. ME0798 AND ME0799)

Dear Sir or Madam:

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Please contact me at (301) 415-2901 if you have any questions on this issue.

Sincerely,

*/RA/*

John P. Boska, Senior Project Manager  
Plant Licensing Branch I-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-247 and 50-286

Enclosure:

RAI

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ADAMS ACCESSION NO.: ML100150128

\*See memos dated 12/23/09

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