

POLICY ISSUE
(Information)

SECY-00-0238

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FOR: The Commissioners
FROM: William D. Travers
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SUBJECT: EMERGENCY PLANNING FOR INDIAN POINT 2 AND OTHER CO-LOCATED LICENSEES

- **PURPOSE:**
- **BACKGROUND:**
- **DISCUSSION:**
- **CONCLUSION:**
- **RESOURCES:**
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PURPOSE:

To inform the Commission of an ambiguity in the emergency planning (EP) regulations with regard to the level of exercise participation between co-located licensees and offsite authorities; and to inform the Commission of the staff's actions to resolve related issues concerning the Indian Point Unit 2 (IP2), Indian Point Unit 3 (IP3), Nine Mile Point (NMP), and James A. FitzPatrick (JAF) nuclear power plants.

BACKGROUND:

IP2 was shut down after the steam generator tube failure event on February 15, 2000. In a letter dated June 29, 2000, from the Union of Concerned Scientists and others, supplementing a petition submitted earlier under [10 CFR 2.206](#), the petitioners stated that [10 CFR Part 50, Appendix E](#), requires each licensee at each site to conduct a full participation exercise of its emergency plan every 2 years, and requested that the NRC not permit the restart of IP2 until the completion of such an exercise. The petitioners noted that the last full participation exercise at IP2 was conducted on June 24, 1998, and the next full participation exercise at IP2 is scheduled for 2002. On August 9, 2000, the Consolidated Edison Company (Con Ed, the licensee) announced its plans to replace the IP2 steam generators and to restart the plant before the end of the calendar year. A 2.206 Director's Decision issued on October 6, 2000, denied the petition, but noted that the petitioners did point out an ambiguity in the emergency preparedness regulations and their application at a site with co-located licensees, and that the staff would evaluate whether a clarification to the regulations is warranted.

The emergency planning regulations were significantly upgraded in 1980 after the accident at Three Mile Island (45 FR 55402, August 19, 1980). The 1980 regulations required an annual exercise of the onsite and offsite emergency plans. In 1984, the regulations were amended to change the frequency of participation of State and local governmental authorities in nuclear power plant offsite exercises from annual to biennial (49 FR 27733, July 6, 1984). In 1996, the regulations were amended to change the frequency of exercising the licensee's onsite emergency plan from annual to biennial (61 FR 30129, June 14, 1996). The current regulations state that the offsite emergency plans for each *site* shall be exercised biennially with the full (or partial) participation of each offsite authority having a role under the plans, and that *each licensee at each site* shall conduct an exercise of its onsite emergency plan every 2 years, an exercise that may be included in the full participation biennial exercise (emphasis added).

Because there are two licensees at the Indian Point site, Con Ed (Unit 2) and Entergy (Unit 3), the practice has been to alternate the onsite participation in the exercises of the offsite emergency plans between the two licensees. The same practice also occurs at the Nine Mile Point and FitzPatrick nuclear power plants in upstate New York because the two licensees are located on what is essentially the same site and share a common emergency planning zone. The practice of alternating licensee participation in offsite exercises has apparently been followed at these sites since sometime in the mid-1980s.

DISCUSSION:

The NRC's evaluation of onsite emergency preparedness at Indian Point and Nine Mile Point/FitzPatrick has been conducted in accordance with NRC regulatory requirements and established inspection program directives. The NRC has reviewed the licensees' emergency plans, conducted periodic inspections of the licensees' emergency preparedness programs, and observed the licensees' performance in annual exercises of the onsite emergency plans. The NRC has determined that the onsite emergency plans for Indian Point and Nine Mile Point/FitzPatrick are adequate and that there is reasonable assurance that the plans could be implemented in the event of a radiological emergency at these sites.

Recent NRC inspection efforts at IP2 have identified several weak areas in the onsite emergency preparedness program, as reported in NRC Inspection Report No. 2000-06, including three areas that were subsequently determined to be violations of NRC requirements with low to moderate safety significance. The NRC has observed that the licensee is making progress on corrective actions to improve these weaknesses, and the NRC will continue to monitor the licensee's completion of appropriate

corrective actions.

The most recent exercises of the offsite plans at Indian Point involving IP2 were a full participation plume exposure pathway exercise on June 24, 1998, and an ingestion exposure pathway exercise May 25-27, 1999. After these exercises, the Federal Emergency Management Agency ([FEMA EXIT](#)) confirmed that the State and local offsite emergency plans, specific to IP2, could be implemented and were adequate to provide reasonable assurance that appropriate measures could be taken to protect the health and safety of the public in the event of a radiological emergency at the site. A FEMA-evaluated full participation exercise with IP3 was conducted during the week of November 13, 2000. The final FEMA exercise report has not yet been issued.

As indicated above, the IP2 and IP3 licensees have alternated participation in the exercises of the offsite emergency plans with the result that since some point in time after the emergency planning regulations were amended in 1984, each licensee has participated once every 4 years in the biennial full participation exercises of the offsite plans. In the interval between full participation exercises of the offsite plans, the IP2 and IP3 licensees conduct annual exercises of the onsite emergency plans and engage in various emergency planning training and coordination activities with the State of New York and the local counties. NRC, FEMA, and the State of New York have been aware of the current practice, but no evidence has been found of explicit NRC approval of the alternating participation practice for the Indian Point licensees.

A similar practice occurs for the Nine Mile Point/FitzPatrick site where the licensees also alternate their participation in the biennial full participation exercises of the offsite emergency plans. Here, the licensees' commitments to exercise the onsite and offsite emergency plans, and the staff's expectations, are reflected in an exchange of correspondence between the licensees and the NRC. In a letter dated September 18, 1984, the licensees stated that full participation exercises with Oswego County will be biennially alternated between NMP and JAF so that each licensee will hold a full participation emergency preparedness exercise with Oswego County once every 4 years. In addition, the licensees stated that the licensee that does not conduct the full participation exercise with Oswego County will conduct a partial participation exercise⁽¹⁾ with the county and other offsite agencies. In separate letters to the licensees on February 14, 1985, the NRC stated that the licensees' stated actions are in accordance with Section IV, Paragraphs F.3 and F.3(d), of Appendix E to 10 CFR Part 50 (the applicable emergency plan exercise requirements at the time) and are, therefore, acceptable.

The staff believes that the unique considerations raised by co-located licensees most likely were not considered when emergency planning requirements were established. The regulations can be interpreted in two ways: (1) each licensee co-located on a site can alternate participation in the biennial offsite exercises such that each licensee participates in an exercise with offsite authorities every 4 years, or (2) each licensee co-located on a site should participate in an exercise with offsite authorities (either full or partial) every 2 years. Due to the ambiguities in the regulations regarding exercise requirements for "sites" vs. "licensees," different conclusions can be reached regarding whether the co-located licensees are in compliance with the emergency planning regulations. To fully comply with the second interpretation, each of the licensees would have to conduct a full or partial participation exercise as defined in 10 CFR Part 50, Appendix E, on a biennial basis. Given the history of implementation of this requirement for co-located licensees, the staff has determined that plant-specific backfits would be necessary to bring the licensees into compliance with the latter interpretation of the regulations.


It is recognized that the burden of imposing the requirement that each licensee conduct a biennial exercise with offsite participation falls most heavily on the State and local authorities. These authorities are currently conducting biennial full participation exercises at the Indian Point and Nine Mile Point/FitzPatrick sites, as well as at the Ginna site, in accordance with the regulatory requirement that the offsite emergency plans for each site be exercised every 2 years. Thus, the issue of concern is not the lack of a biennial full participation exercise at each site, but rather the level of participation by each licensee in the "off biennial" years (that is, in the years in which they do not conduct a full participation exercise). The dates of the last full participation exercise and the next currently scheduled exercise are shown in [Attachment 1](#) for IP2, IP3, NMP, and JAF. The licensees engage in various emergency plan training and other coordination activities with offsite authorities in the 4-year interval between full participation exercises. Additionally, New York State has an active emergency response program and conducts emergency plan training around each nuclear power plant site, including a State-evaluated off-year exercise with licensee participation. However, some of these interactions between the licensee and offsite authorities are not specifically performed to meet NRC's regulatory requirements and are not well documented.

The staff requested each licensee to document the EP training and coordination interactions that currently take place between the licensee and offsite authorities in the period between full participation exercises and requested that each licensee continue the same or similar EP training and coordination interactions between full participation exercises in the future. The staff has reviewed the licensees' submittals (Attachments 2 - 6) and found them acceptable. The staff intends to revise the guidance for inspection of these activities for co-located licensees.

The staff has concluded that imposing plant-specific backfits to require biennial full or partial participation exercises for each of these co-located licensees is not warranted as long as the current level of interaction between each licensee and the offsite authorities is maintained for the following reasons: (1) The NRC has continued to find that there is reasonable assurance that appropriate measures could be taken to protect the health and safety of the public in the event of a radiological emergency at Indian Point and Nine Mile Point/FitzPatrick. This finding is based on the NRC assessment of the adequacy of the licensee's onsite EP program and the FEMA assessment of the adequacy of the offsite EP program, and on the current level of interaction between the onsite and offsite emergency response organizations in the period between full participation exercises. (2) The burden of imposing the requirement that each licensee conduct a biennial full or partial participation exercise with offsite participation falls most heavily on the State and local authorities (i.e., each site would be required to have an annual full or partial participation exercise). (3) The regulations are ambiguous with regard to exercise requirements for co-located licensees and permit an interpretation that would allow each site, rather than each licensee at the site, to fulfill the biennial requirement

of a full or partial participation exercise. (4) The activities that constitute an acceptable partial participation exercise for co-located licensees are not well defined in staff guidance.

The practice of alternating licensee participation in biennial full participation exercises by co-located licensees is unique to the Indian Point and Nine Mile Point/FitzPatrick sites. Con Ed announced on November 9, 2000, that Entergy won the bid to purchase IP2. As a result IP2 and IP3 may be owned by a single licensee. Thus, the issue may become moot for the IP2/IP3 site. However, future mergers and restructuring of the industry could result in additional co-located licensee situations. In addition, the inconsistent use of the terms "licensee" and "site" in the emergency planning regulations can lead to differing interpretations of these regulations. The staff, therefore, intends to develop a proposed amendment to the regulations (10 CFR Part 50, Appendix E, Paragraphs IV.F.2.b and c) to clarify the use of the terms "licensee" and "site" in the emergency planning regulations. A rulemaking plan will be submitted to the Commission within 6 months that will reflect the priority of the rulemaking. The proposed rulemaking will include development of guidance for the industry and offsite authorities, with stakeholder input, on the types of EP activities and interactions that would test direction and control functions for co-located licensees and offsite authorities in the period between full participation exercises. The staff recognizes that there are a number of ways such activities could be conducted.

The staff has discussed the approach presented in this paper with FEMA and the State of New York Emergency Management Office. FEMA expressed its support for the staff's approach in a letter dated December 6, 2000 ([Attachment 7](#) ). The State of New York endorsed the current practice in a telephone conference on December 1, 2000, in which they stated their belief that it provides ample opportunity for State and local response organizations to interact with the licensees. The State also indicated that they intend to improve the documentation of the training activities and interactions with the licensees that take place between full participation exercises.

CONCLUSION:

The staff finds that the licensees' practice of alternating participation in the biennial full participation exercises, with the current level of other interactions between the licensees and offsite authorities at Indian Point and Nine Mile Point/FitzPatrick, is acceptable and that there is reasonable assurance that appropriate measures could be taken to protect the health and safety of the public in the event of a radiological emergency at these sites. Thus, IP2 is not required to conduct another full participation exercise with offsite authorities until 2002 as shown in [Attachment 1](#). In letters to NRC, each licensee has documented and committed to continue the current level of interaction with offsite authorities. A rulemaking plan to amend the emergency planning regulations to clarify the terms "licensee" and "site" and remove ambiguities about the required conduct of exercises will be submitted to the Commission within 6 months.

RESOURCES:

Resources for the rule and guidance development (approximately 0.3 FTE in FY2001) are not currently budgeted. The planning, budgeting, and performance management process will be used to reallocate resources or eliminate or defer lower priority work.

COORDINATION:

The Office of the Chief Financial Officer has reviewed this Commission paper for resource implications and has no objections. The Office of the General Counsel has no legal objection. The staff has also coordinated the approach presented in this paper with FEMA and the State of New York Emergency Management Office. Both of these organizations expressed support for the staff's approach.

/RA by John W. Craig Acting For/

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Attachments:







1. [Table 1: Licensee Full Participation Exercises](#)
2. [Letter from Indian Point Unit 2 and Unit3, 11/14/00](#) 
3. [Letter from James A. FitzPatrick, 11/17/00](#) 
4. [Letter from Nine Mile Point, 11/17/00](#) 
5. [Letter from James A. FitzPatrick, 11/22/00](#) 
6. [Letter from Nine Mile Point, 11/29/00](#) 
7. [Letter from FEMA, 12/6/00](#) 

TABLE 1
LICENSEE FULL PARTICIPATION EXERCISES

LICENSEE	LAST EXERCISE	NEXT SCHEDULED
Indian Point 2	06/24/98	12/09/02
Indian Point 3	11/15/00	04/25/04
Nine Mile Point	09/27/97	12/03/01
FitzPatrick	10/18/99	06/09/03

1. A "partial participation" exercise for a particular site means appropriate offsite authorities actively take part in the exercise sufficient to test direction and control functions: i.e., (a) protective action decision making related to emergency action levels, and (b) communication capabilities among affected State and local authorities and the licensee. (10 CFR Part 50, Appendix E, Paragraph IV.F.2.c, footnote 5.)