

Entergy Nuclear Northeast Entergy Nuclear Operations, Inc. 440 Hamilton Avenue White Plains, NY 10601 Tel 914 272 3200

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Michael R. Kansler President

October 25, 2005

Re:

Indian Point Units 2 and 3 Dockets 50-247 and 50-286 NL-05-124

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U.S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, DC 20555-0001

SUBJECT:

**Energy Policy Act of 2005** 

**Backup Power for Emergency Sirens** 

Reference:

1) Entergy Letter NL-05-122, F. Dacimo to S. Collins, "IPEC Emergency Plan

Siren System Performance and Corrective Actions."

Dear Sir:

The Energy Policy Act of 2005 (Act) contains a provision, Section 651(b), regarding emergency notification systems which is applicable to Indian Point Units 2 and 3. Section 651(b) states in part:

"... not later than 18 months after enactment of this Act, the Commission shall require that backup power to be available for the emergency notification system of the power plant, including the emergency siren warning system, if the alternating current supply within the 10-mile emergency planning zone of the power plant is lost."

Although the wording in the Act speaks to emergency notification system, we understand that the intent is to apply to the alert notification system. The emergency notification system (ENS) is a specific telephone system intended for communications between the NRC and licensees whereas the alert notification system (ANS) is a system to provide warnings to members of the public and cause them to obtain additional information and direction to protect health and safety promulgated by government officials using broadcast media.

This letter outlines the course of action being taken by Entergy Nuclear Operations, Inc (Entergy) to address this provision of the Act. In a separate letter (Reference 1), Entergy has provided a discussion of actions being taken to improve performance of the current alert notification system.

The Indian Point Energy Center and participating counties of Orange, Putnam, Rockland, and Westchester, rely on a siren system to accomplish the alert notification requirement specified in 10 CFR 50.47. The current system meets applicable requirements including those specified in

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NUREG 0654 and FEMA-REP-10. Entergy has reviewed the design of the current system and concluded that it is not feasible to incorporate a backup power feature into the existing system.

There are many options for alert notification of the public that include but are not limited to sirens. Alternative alert notification technologies are rapidly being developed by the private sector, public-private partnerships, and the underlying legal basis for them is being considered in Congress and federal government agencies. Although Entergy and the participating counties are interested in employing alert notification techniques that are more modern and effective than sirens, these various initiatives will not be completed in sufficient time to meet the intended time frame in the Energy Policy Act of 2005 as it relates to the Indian Point. Entergy recognizes the interest of all parties in completing the actions required by the Act as expeditiously as possible. We have therefore concluded that it is most efficacious to replace the existing siren system with a new siren system which incorporates a backup power feature. We will seek to deploy a new siren system in a way that will enable us to take advantage of new alert notification capabilities as they become commercially available.

In our review of applicable regulations, guidelines and standards, we have identified the following as being applicable to specification and procurement of a modern siren system:

- NUREG-0654 / FEMA REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparations in Support of Nuclear Power Plants"
- FEMA Rule 44 of the Code of Federal Regulations Part 350, "Review and Approval of State and Local Radiological Emergency Plans and Preparedness"
- FEMA REP-10, "Guide for the Evaluation of Alert and Notification Systems for Nuclear Power Plants", 1985
- Civil Preparedness Guide CPG-17
- FEMA Guidance Memorandum AN-1, "Alert Notification Systems"

With regard to back up power / stored energy attributes for a new alert notification siren system we have determined that meeting the following performance criteria, as established through the manufacturers factory testing, is appropriate:

- The warning device shall provide a signal (sounding) that shall sound for a continuous period of from three to five minutes
- Sufficient back up power / stored energy shall be sufficient to perform 15 minutes of alerting (three to five cycles)
- Back up power devices will be able to operate the sounding device for 15 minutes with the back up power / stored energy devices being within 50% of their designed lifetime according to a). their manufacturer or b.) according to standards such as NFPA 1221 2002 Edition, Tables 10.4.3 and 10.4.4 as applicable.
- Back up power / stored energy shall be recharged to 80% of the maximum rated capacity from a fully discharged condition within 24 hours
- Back up power / stored energy systems shall be capable of maintaining the "standby mode" of the system without the presence of GRID alternating current (AC) power for a period of 24 hours
- If electric storage batteries are used as the means of back up power / stored energy, the batteries should have a useful life of three years in the environmental conditions typical of the region

- Back up power / stored energy is applicable to the sound making device and its
  proximate control components, the computers that actuate and perform system
  management and diagnosis, and dedicated communications equipment, if any, which is
  used to carry signals from control devices to and from the sound making devices.
- Back up power / stored energy devices may include but are not limited to wet and dry
  cell batteries, compressed bottled gases, fossil fuel powered electric generators, photovoltaic systems, thermionic power devices, and fuel cells.
- Back up power / stored energy devices may float on local electric distribution grid or operate independently.
- The licensee is not required to provide back up power to any commercial communications networks such as public utility telephone systems, cellular phone systems, commercial paging systems, satellites and broadcast media that may provide communications connecting control devices and sound making devices.

Entergy is taking deliberate action with the intent of having in place by January 2007 a new siren system that meets the applicable requirements established by NRC and FEMA and the requirements of the Energy Policy Act of 2005. In doing so, we will engage local and state stakeholders in the process. We recognize that some requirements such as review and approval of design by regulatory authorities and issuance of various permits and approvals from state, county, and local government bodies are outside of our direct control. However, we intend to work closely with those authorities to meet the stated completion date.

We look forward to discussing our plans for meeting the requirements of the Energy Policy Act of 2005 at a public meeting to be held in Buchanan, New York on November 16, 2005. Should you have questions regarding this matter, please contact Charlene Faison, Manager, Licensing at 914-272-3378.

Sincerely

Michael R. Kansler

President

cc: Mr. John P. Boska, Senior Project Manager, NRC NRR

Mr. Samuel J. Collins, Regional Administrator, NRC Region 1

NRC Resident Inspector's Office, Indian Point Unit 2

NRC Resident Inspector's Office, Indian Point Unit 3

Mr. Peter R. Smith, NYSERDA

Mr. Paul Eddy, NYS Department of Public Service

Mr. Craig Conklin, DHS / EP&R / FEMA