March 17, 2003

Mr. Fred Dacimo Vice President - Indian Point Nuclear Generating Station Entergy Nuclear Operations, Inc. 295 Broadway, Suite 1 Post Office Box 249 Buchanan, NY 10511-0249

# SUBJECT: SPECIAL INSPECTION OF NUCLEAR REACTOR SAFEGUARDS INSPECTION REPORT NOS. 50-247/03-005, 50-286/03-003

Dear Mr. Dacimo:

On January 31, 2003, the U.S. Nuclear Regulatory Commission (USNRC) completed a special inspection at the Indian Point Energy Center, Units 2 and 3. The inspection activities were conducted December 11-13, 2002, December 16-18, 2002; January 13-16, 2003 and January 27-31, 2003. The enclosed report documents the results of that inspection. The results were discussed on January 31, 2003, with Chris Schwarz, General Manager, Plant Operations, Indian Point Energy Center (IPEC), and Mr. David Thompson, Security Manager, IPEC, and other representatives of your staff. A separate inspection report (Inspection Report Nos. 50-247/03-006 and 50-286/03-004) documenting NRC review of your implementation of Interim Compensatory Measures, was also issued March 17, 2003.

This inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations, and with the conditions of your license. This inspection includes interviews with numerous security officers; reviews of the physical security features, plans and procedures, performance testing of selected security systems, and the conduct of table-top drills by NRC security specialists and contractors. The specific purpose of this inspection was to follow-up on concerns relative to certain elements and characteristics of your physical protection and security program to assure conformance with NRC regulatory requirements. Since this inspection involved the review and assessment of security measures relative to the physical protection of the Indian Point facility, the report is considered as Safeguards Information and is required to be controlled in accordance with 10 CFR 73.21, "Requirements for the protection of safeguards information." However, a non-safeguards summary has been prepared and is enclosed.

Our inspectors concluded that the Indian Point Energy Center has enhanced its protective strategy, added more physical protection and security features, and fortified its defensive posture. Further, IPEC conforms to the requirements stipulated in NRC regulations, Orders, and security advisories. The inspection did not identify any violations of NRC regulatory requirements or findings of significance.

Some areas for improvement were identified during the inspection such as firearms maintenance and the control of personal computers that may contain Safeguards Information. Your staff took immediate actions to address these matters during the inspection. Notwithstanding this, the NRC considers that more timely corrective actions could have been taken when these matters were initially raised by security officers. The inspectors also heard a number of concerns from various security officers, including issues such as stress due to the extensive use of overtime and the amount of security training. Our inspectors confirmed that you had initiated or planned actions to address many of these issues.

As mentioned in NRC's annual assessment letter dated March 4, 2003, the area of corrective actions continues to be a focus area which will receive heightened NRC inspection effort. Additionally, some aspects involving fitness-for-duty and the control of Safeguards Information remain under NRC review and will be addressed in a later report.

As In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, without enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <a href="http://www.nrc.gov/reading-rm/adams.html">http://www.nrc.gov/reading-rm/adams.html</a> (the Public Electronic Reading Room).

Sincerely,

/**RA**/

Brian E. Holian, Deputy Director Division of Reactor Projects

Docket Nos. 50-247, 50-286 License Nos. DPR-26, DPR-64

Enclosures: (1) Non-Safeguards Summary (2) NRC Inspection Report Nos. 50-247/03-005, 50-286/03-003 (CONTAINS SAFEGUARDS INFORMATION (SGI))

cc w/o encl w/o SGI:

- J. Yelverton, Chief Executive Officer, Entergy Nuclear
- M. R. Kansler, Chief Operating Officer Entergy Nuclear Northeast
- J. Herron, Senior Vice President, Indian Point Energy Center
- C. Schwarz, General Manager Plant Operations
- D. Pace, Vice President, Engineering
- J. Knubel, Vice President, Operations Support
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- J. Spath, Program Director, New York State Energy Research and Development Authority
- P. Eddy, Electric Division, New York State Department of Public Service
- C. Donaldson, Esquire, Assistant Attorney General, New York Department of Law
- T. Walsh, Secretary, NFSC, Entergy Nuclear Operations, Inc.
- Mayor, Village of Buchanan
- J. G. Testa, Mayor, City of Peekskill
- R. Albanese, Executive Chair, Four County Nuclear Safety Committee
- S. Lousteau, Treasury Department, Entergy Services, Inc.
- M. Slobodien, Director, Emergency Planning
- B. Brandenburg, Assistant General Counsel
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- T. Judson, Central NY Citizens Awareness Network
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- D. Lochbaum, Nuclear Safety Engineer, Union of Concerned Scientists
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- M. Mariotte, Nuclear Information & Resources Service
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- R. Witherspoon, The Journal News
- J. Comiotes, Director, Nuclear Safety Assurance, IPEC
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- C. Terry, Niagara Mohawk Power Corporation

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## SUMMARY OF FINDINGS

IR 05000247/03-005, 05000286/03-003; 12/11/02 - 12/13/02; 12/16/02 - 12/18/02; 01/13/03 - 01/16/03; 01/27/03 - 01/31/03; Indian Point Nuclear Generating Station; Special Inspection, Procedure 93812.

During various periods between December 11, 2002 and January 31, 2003, NRC Region I conducted a special inspection to follow-up on concerns and review the implementation and effectiveness of the physical protection and security program at Entergy's Indian Point Energy Center (IPEC). Numerous areas were assessed, including: (1) IPEC's physical protection and response strategy; (2) the operational condition of the IPEC's protected area perimeter intrusion detection system; (3) weapons training and qualification for armed responders; (4) maintenance of weapons; (5) application of the Fitness-for-Duty program; (6) control of Safeguards Information; and (7) physical agility testing of security officers. Inspection and assessment activities were performed by senior security specialists from NRC Region I and the Office of Nuclear Safety and Incident Response (NSIR), including NRC security assessment contractors. The Office of Investigations provided assistance in interviewing certain personnel. The Office of the Inspector General provided staff to monitor selected inspection activities.

The inspectors concluded that the Indian Point Energy Center has enhanced its protective strategy, added more physical protection and security features, and fortified its defensive posture. Interviews with security officers; review of the physical security features, plans and procedures; performance testing of selected security systems; and the conduct of table-top drills by NRC security specialists and contractors indicate that the Indian Point Energy Center conforms to the requirements stipulated in NRC regulations, Orders, and security advisories.

Some areas for improvement were identified during the inspection such as firearms maintenance and the control of personal computers that may contain Safeguards Information. The licensee took immediate actions to address these matters during the inspection; however, the inspectors concluded that more timely corrective actions could have been taken when these matters were initially raised by security officers. The inspectors also heard a number of concerns from various security officers, including issues such as stress due to the extensive use of overtime and the amount of security training. The inspectors confirmed that the licensee had initiated or planned actions to address many of these issues.

The inspection did not identify any violations of NRC regulatory requirements or findings of significance. However, some aspects involving fitness-for-duty and the control of Safeguards Information remain under NRC review and will be addressed in a later report. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

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# Synopsis:

#### 1. Protective Strategy Assessment

As demonstrated by the performance in several table-top drills, Entergy's protective strategy was well thought out and fundamentally sound. Protective positions, including installed bullet resistant enclosures (BRE) appeared to be well designed and constructed, and adequately situated to implement the response strategy. Assertions indicating inadequacy in the protective strategy for the Unit 2 Spent Fuel Building were reviewed and found to be unsupported by the facts developed during this inspection.

While a number of security officers interviewed opined that there should be more drills and exercises, none indicated any ineffectiveness in the current protective strategy or reluctance to implement the planned response. The objective evidence indicates that the protective strategy is sound, well conceived, and is effectively being implemented by trained and capable security officers.

The physical fitness of the security staff was confirmed to be in accordance with the Entergy's training and qualification plan; and agility testing was found to be commensurate with industry standards. Inspectors confirmed that this testing was sufficient to identify personnel that could not implement the protective strategy.

#### 2. <u>Response Weapon Training and Qualification</u>

A response weapon qualification test was performed with a number of qualified security officers. One individual failed to qualify and was subsequently reassigned to non-armed response duties. Entergy conducted an extent of condition review to evaluate the possibility of marksmanship weaknesses in other currently qualified personnel. Entergy intends to closely monitor the marksmanship ability of personnel to assure optimized firearms handling ability and effectiveness. The inspectors confirmed that Entergy conducted weapons qualification efforts in accordance with their training and qualification plan.

#### 3. Response Weapons Maintenance

Response weapons, deployed for use, were in fully operational condition. Notwithstanding, a program for routine weapons maintenance was not evident as indicated by the condition of some of the weapons, particularly the weapons that were exclusively used for training and qualification. Some malfunctions of these particular weapons were witnessed during the qualification exercise, and some shooting patterns indicated that some optical sights may not have been properly zero-adjusted. Subsequently, Entergy initiated prompt action to establish a

routine weapons maintenance program; took immediate action to confirm that all weapons deployed for use were in fully operational condition, including verification that the optical sights of response weapons were properly zero-adjusted. While not covered by NRC regulatory requirements, Entergy also took action to assure that the ammunition used for firearms qualification activities was the same as deployed for use at response positions. Condition Reports were filed to document the conditions and initiate corrective measures.

#### 4. Intrusion Detection System Performance

The entire Protected Area perimeter IDS was found to be completely functional and operable as evidenced by performance testing. The system was found to be sufficiently sensitive to detect all instances of attempted intrusion. Review of maintenance records indicated that the system was being maintained adequately. The NRC Performance Indicator (PI) for security equipment operability has remained Green (Licensee Response Band) for the entire inspection cycle, and is improving. When system problems occurred, appropriate compensatory measures were taken; and records of alarm function and condition were maintained in accordance with NRC regulatory requirements.

Assertions implying that an individual was able to circumvent the system multiple times were not substantiated or supported by the facts developed during this inspection.

## 5. Radio Communications

The current security radio systems for Units 2 and Unit 3 are operational and serviceable. Entergy has initiated action to upgrade the radio communication systems for both units, including new base station radios for the Unit 2 and 3 alarm stations, and new mobile radios for the security officers.

#### 6. Bullet Resistant Vests (Body Armor)

Currently, there are enough bullet resistant vests onsite to assure all on-duty response officers have a vest readily available in accordance with the specifications of the Interim Compensatory Measures specified by the Order Modifying License, dated February 25, 2002. In the long-term, IPEC intends to purchase additional vests in order to provide a personal protective device for each responder. Entergy has initiated action to assure that the vests are being maintained in accordance with manufacturers recommendations.

# 7. Control of Safeguards Information

The inspectors confirmed that there was a privately-owned laptop computer, owned by a member of IPEC's security training organization, that was being used by members of the

security training organization to process and display certain Safeguards Information in support of security training activities. Upon being informed of this by the inspectors on December 17, 2002,

IPEC security management conducted an immediate review of the condition and the circumstances, and initiated controls for the continued use of the device to support security training activities. Entergy also initiated action to establish a formal policy and procedure relative to the use of computers used to store or handle data that could be considered Safeguards Information. Other aspects relative to assertions in this area remain under review by NRC.

Entergy uses a privately-owned indoor shooting range for training and qualification of security officers on handguns. There was no evidence that Safeguards Information was revealed to the owner/operator of the range in support of this activity. The use of the range to train and qualify security officers would not provide the owner/operator with any specific knowledge or information that would normally be considered Safeguards Information.

#### 8. <u>Behavior Observation/Fitness-for-Duty</u>

The inspectors confirmed that Entergy followed the regulatory requirements for Fitness-for-Duty and Behavior Observation relative to an occurrence involving the aberrant behavior of an individual in July 2002. Management personnel took appropriate actions and brought the matter to the attention of the Fitness-for-Duty coordinator and Medical Review Officer.

Relative to other assertions involving fitness for duty of some employees, the personnel that were interviewed indicated that they would take appropriate action whenever Fitness-for-Duty was suspected; and some indicated that they had initiated for-cause testing on occasions for individuals that were suspected of not being fit for duty. Review of specific Fitness-for-Duty for-cause and random test records indicated that Entergy was complying with NRC regulatory requirements.

Review of various personnel records (including medical records, access authorization, and investigation documentation) indicated that Entergy was in conformance with the regulatory requirements of 10 CFR 73, Appendix B, "General Criteria for Security Personnel," 10 CFR 73.56, "Personnel access authorization requirements for nuclear power plants," and 10 CFR 26, "Fitness-for-Duty Program," including Section 26.24, "Chemical and alcohol testing," for security force personnel. Based on the review of applicable procedures, directives, and records, the inspector determined that Entergy's currently implemented Fitness-for-Duty and Access Authorization programs at IPEC meet the objectives and requirements of the applicable regulatory requirements.

Other aspects relative to assertions in this area remain under review by NRC.

## 9. Security Computer Backup Capability

Unit 2 security computers are performing reliably. However, a formal preventive maintenance program did not exist. Accordingly, Entergy initiated action to establish a formal maintenance program. Notwithstanding, the primary Unit 2 security computer does have a backup computer that can be brought on-line in the event of a failure of the primary computer, and written instructions to accomplish such action had been established and will be developed as a formal procedure. Finally, as part of site integration efforts, Entergy has a plan to replace the existing security computer system.

## 10. Storage of Weapons

The inspector confirmed that the room (EOF classroom) was maintained and controlled by Wackenhut, the Unit 2 security services contractor. As part of an effort to improve the control of weapons, Entergy's security management initiated action to inventory and relocate all response weapons to a designated area within the protected area, on or about December 2002. Currently, there are no weapons stored in, what is currently referred to as the EOF classroom. As of January 2003, all response weapons were removed from this location to an onsite armory.

## 11. Application of For-Cause Testing

An occurrence involving a truck with a snow plow that accidently backed into a temporary light stand on January 3, 2003 (in the Protected Area), was examined to ascertain if "for-cause" testing of the individual involved should have been performed. Based on the lack of damage to equipment or personal injuries, and the fact that the cause of the occurrence appeared obvious (i.e., the vehicle accidentally backed into the light pole), two sergeants, a lieutenant, and a security shift supervisor made the judgment that the need for "for-cause testing" was not warranted in this particular case. Such exercise of discretion is permitted by IPEC's Fitness-for-Duty (FFD) procedure 1.0, Rev. 15.

# 12. Weapons Training and Qualification Practices

Currently, the present firing range that Entergy uses for the training and qualification of armed responders has limitations that do not permit the firing of response weapons for all conditions that may be experienced with the current response strategy. Notwithstanding, this situation is not a condition that constitutes a vulnerability with respect to the physical protection or security program, or the Interim Compensatory Measures, as required by the Order Modifying License. Entergy is taking reasonable actions to optimize firearms training and qualification activities.

#### 13. Assessment Aid Camera Resolution

Assessment Aid camera resolution was acceptable in the Unit 2 and Unit 3 alarm stations, during periods of darkness and daylight, for all surveillance camera units. Notwithstanding that camera resolution was acceptable, Entergy had established Condition Reports to address some equipment issues.

#### 14. Adequacy of Weapons Relative to the Design Basis Threat

Each security personnel interviewed indicated that their weapons and response strategies were adequate to protect against the current, heightened design basis threat. However, some security personnel did offer possible scenarios, consisting of adversary numbers and weaponry considerably beyond the current heightened design-basis threat, and indicated reservations about being able to successfully defend the plant in such circumstances. All security personnel interviewed indicated that the current response weapon is superior to previous contingency weapons. IPEC security management personnel have initiated action to better explain the bases for response strategy relative to a postulated design basis threat.

## 15. Drills and Exercises

Since September 11, 2001, a limited number of physical security exercises were conducted. These particular exercises were performed to validate specific elements of the IPEC response strategy. Based on discussions with personnel who participated in or observed these activities, and the associated documentation, it is not evident that these exercises were staged to demonstrate that the mock-adversaries would be successfully interdicted. In these cases, the exercises were of limited scope for the purpose of proving the effectiveness of a specific response strategy. Further, it appeared that the exercises were conducted in a manner to provide more advantage to the mock-adversaries in an effort to better understand the strengths and weakness of the response strategy.

# 16. Morale and "Chilling Effect" Regarding the Identification of Safety Issues

The inspectors interviewed a number of security force members (about 25) in the December 2002 - January 2003 period to ascertain if personnel felt "chilled" from raising safety or security concerns for fear of some type of retaliation.

Security force members who were interviewed indicated a good understanding of the processes available to them for raising safety or security concerns. With one exception, all of the interviewed personnel indicated that they would not hesitate to raise safety concerns. This individual indicated some reservation for fear of being labeled a "troublemaker." Another individual, who did not express any reluctance himself, opined that he thought that 80 percent of IP3's security force would be reluctant to raise issues.

The inspectors found no indication, corroboration, or other objective evidence to support that personnel are reluctant to raise safety issues for fear of retaliation.

#### Other Concerns Expressed:

At the time of these interviews, morale was generally considered low by most of the personnel interviewed. For both Units 2 and 3, the current work schedule and the uncertainty about security force consolidation were weighted equally with respect to adverse impact on morale. Aside from the required overtime, some Unit 3 security personnel (i.e., Entergy employees) were concerned with becoming contractors and, thereby, losing pay and benefits.

Unit 2 security personnel (i.e., Wackenhut contractors) were equally concerned about required overtime, but mostly concerned about their employment options if the security force became proprietary. Many of the concerns centered on passing an application test required for employment as a regular Entergy employee.

Since these interviews were conducted, Entergy announced that the Wackenhut security services contract would be terminated in favor of establishing a total proprietary security organization. Entergy is currently conducting seminars with the affected Wackenhut security force members to explain the employment options that are available to them if they elect to continue employment as Entergy employees. While the application test is still mandated, Entergy intends to provide study aids to assist interested personnel.

Relative to work hours, a new class of about 24 security officers was recently assigned to Unit 2, which acted to reduce the total overtime requirements at that unit as much as 50%. While some amount of overtime is still required for security force members (to accommodate military leave, call-outs, training, and other leave), the overtime hours required are generally no more than 12 to 24 hours over the fourteen day pay period. The required overtime at Unit 3 remains higher, i.e., generally about 10 to 20 additional hours per week over the nominal 40 hour work week. A new class of about 13 security officers is expected to graduate by March 2003, and the infusion of this resource is expected to result in reduction in required overtime. While efforts are being made to reduce overtime as new guards are introduced into the workforce, the upcoming outage may require overtime on the order of 10 to 20 hours over the nominal 40-hour work week for security officers at both facilities.

In order to better stabilize work hours and accommodate more frequent training and qualification of personnel, Entergy has initiated action to hire an additional 50 security personnel to assure that resources are maintained at sufficient levels without the need to rely on the extensive use of overtime in the future.