August 15, 2003

Mr. James Wells, Director

Natural Resources and Environment

United States General Accounting Office

441 G Street, N.W.

Washington, D.C. 20548

Dear Mr. Wells:

I am responding to your July 15, 2003, letter requesting the Nuclear Regulatory

Commission's (NRC) review of the draft report (GAO-03-752) entitled "Nuclear Regulatory

Commission: Oversight of Security at Commercial Nuclear Power Plants Needs to be

Strengthened." I appreciate the opportunity to provide comments to the General Accounting

Office (GAO). The attached detailed comments address the accuracy, currentness, and clarity

of the draft report and follow the August 7, 2003 letter from Chairman Diaz which forwarded his

observations. Should you have any questions about these comments, please contact either

Mr. William Dean, at (301) 415-1703 or Ms. Melinda Malloy, at (301) 415-1785, of my staff for

assistance.

Sincerely,

/RA/

William D. Travers

Executive Director for Operations

Enclosures: (1) NRC Comments on GAO Draft Report, GAO-03-752

(2) Additional NRC Comments (Official Use Only)

cc: Kenneth Lightner, GAO

NRC Comments on GAO Draft Report, GAO-03-752: "Nuclear Regulatory Commission: Oversight of Security at Commercial Nuclear Power Plants Needs to be Strengthened"

1. Most of the information presented in the report relates to historical programs, processes, and specific examples from prior to the terrorist attacks on September 11, 2001. Even prior to the attacks, NRC had identified many of the areas for needed improvement described in the report. Some had been corrected and many others had begun a necessary change process. Following the attacks, NRC aggressively conducted a comprehensive review of security programs and engaged in numerous activities, including issuing new requirements to licensees to enhance security and address emergent issues. Although the report does mention some of these activities, it does not provide a balanced perspective to clearly and accurately describe them relative to the historical activities. Examples of inaccuracies in the report that detract from appropriate recognition of NRC's continuum of actions include:

In What GAO Found:

This section of the report's discussion of the former OSRE force-on-force exercises is written in the present tense. This program is not currently conducted as described and should be referred to in the past tense to be consistent with page 4 of the report.

The second bullet criticizes the NRC's handling of force-on-force exercises by saying, "...more personnel to defend the plant during these exercises than during a normal day." Although this was true before, up to, and including some exercises conducted in 2000, a November 17, 2000, memorandum from Mr. Glenn Tracy to the NRC Regional Offices corrected that problem. The report mentions the same criticism several times later, and only notes that NRC changed the practice at the bottom of page 19. By not clearly stating that NRC had identified and corrected this problem prior to September 11, 2001, and before GAO noted it, the report does not properly characterize NRC actions.

The statements regarding automatic weapons and guard authority are not consistent with the "Recommendations for Executive Action" Section in that there are no GAO recommendations for these issues. NRC has already identified and addressed these issues in such actions as revising the design basis threat and seeking Federal legislation in that area.

Page 8: The report should more realistically provide the major reasons that the OSRE program was suspended. This could be expressed by replacing the current sentences with, "NRC began conducting these exercises in 1991 but suspended them after September 11, 2001, because the conduct of such exercises would have been a significant distraction to licensee security forces which were at NRC's highest level of alert. Moreover, NRC would not have had the resources to conduct the

Enclosure 1

exercises because NRC security personnel were fully engaged in helping to staff NRC's emergency response centers, in developing detailed advisories and Orders for NRC licensees, and in monitoring and evaluating the licensees' heightened security postures, including weekly reports on power reactor licensee physical security resources and program enhancements. See our "Fact Sheet on Force-on-Force Exercises at Nuclear Power Plants" (copy attached) for a more complete discussion.

- Page 9: The October 6, 2001, advisory did not simply suggest that licensees be cautious of temporary employees. It advised licensees to take immediate action to add additional oversight and physical limitations to personnel entering vital areas under temporary unescorted access provisions.
- Page 11: The report incorrectly states that, "While NRC has temporarily suspended its annual security inspections, it continues to check a plant's self-assessments and conduct an inspection if a serious problem is identified by the licensee." First, significant inspection resources have been expended to verify licensee response to the February 25, 2002 Orders. Second, the security baseline inspection effort has been resumed in an abbreviated form with the primary purpose of addressing the areas not covered by the Temporary Instruction TI 2151/148, "Inspection of Nuclear Reactor Safeguards Interim Compensatory Measures" inspection effort. Third, the statement incorrectly suggests that NRC only pursues issues if they are licensee-identified.
- Page 12: The report repeatedly refers to plant "self-assessments" in reference to quarterly reporting to the NRC of performance indicator data. The report would be clearer if these references to self-assessments were changed to "performance indicators." The performance indicator program classifies indicator data using a color-coded scheme. The "problems" discussed in the report are issues that are outside the nominal expected range of performance and warrant additional oversight. The use of the word "problem" could connote greater significance than is warranted. The sentence at the top of page 12, that begins "Under guidelines for these self-assessments, …" should be changed to "Under guidelines for the quarterly performance indicator data, performance that is outside 'the nominal expected range' is highlighted for additional NRC oversight."
- Page 15: To address the comments relative to use of the term self-assessments (see comments on Page 12), change the number of plants to reflect that the white performance indicators in early 2000 were reported for both units at 2 plants, and to reflect the second quarter performance indicators (which were posted in late July and were all green for security-related performance indicators), the paragraph beginning at the bottom of page 14 should be revised as follows:

"In addition to NRC's annual inspections, NRC conducts an inspection if a plant's quarterly performance indicators identify performance outside the nominal expected range. Between 2000 and 2002, only 4 of 104 plants (on two sites) reported security performance outside the nominal, expected range leading to additional NRC inspection. In 2000, these plants reported greater than nominal failure rates for security equipment such as intrusion detectors and closed-circuit televisions. Typically, these conditions require assignment of additional security guards to the plant areas affected by the broken equipment. None of the 104 plants' security-related performance indicator data for 2001, 2002, or the first six months of 2003 indicate performance outside the nominal expected range.

- Page 17: The report discusses the frequency of OSRE exercises (critical of conducting them every 8 years) and that the exercises were not specifically required. The report does not mention that the staff had already recognized this issue, and that on June 4, 2001, had prepared and submitted to the Commission for review a proposed rulemaking including, among other major revisions to the code, a requirement for licensees to conduct triennial exercises. Nor does the report recognize that the Commission testified in the spring of 2002 to Congress that it was considering more frequent exercises and announced its decision to conduct force-on-force exercises on a three-year cycle in former Chairman Meserve's September 5, 2002, letter to Congress.
- Page 18: The report refers to licensees enhancing their security with more guards and barriers for an exercise without notifying the NRC. This statement should include mention of NRC action taken to change that approach initiated by the Glenn Tracy memorandum dated November 17, 2000 (previously cited). The report does mention this change on page 19.
- 2. The report discusses the NRC non-cited violation (NCV) process. NRC inspectors can classify the significance of a security problem as a non-cited violation if the problem had not been previously identified within a specified frequency or if the problem had no direct, immediate, adverse consequences at the time it was identified. The purpose of having NCVs is to ensure that regulatory and licensee emphasis is placed on issues of higher significance. Licensees are expected to address violations that are non-cited; however, in the broader perspective, NCVs should receive a low level of regulatory focus. This process is a proper way to focus both licensee and regulatory resources. Consistent with that low level of regulatory focus, typically, follow-up inspections of NCVs are not warranted. The report mischaracterizes NRC use of NCVs in the following instances:

In What GAO Found:

The statement, "Non-cited violations do not require a response from the licensee ..." (also found on page 4) is incorrect and is not consistent with a similar statement on page 13. Licensees are required to respond by taking appropriate actions to correct the violation. This statement should read, "Non-cited violations do not require a written response to NRC from the licensee..."

The report is inconsistent in that it refers to NRC inspectors "sometimes" using the NCV process and later describes "extensive" use of NCVs for serious problems (also found on page 4).

The report incorrectly states that NRC may, "...reduce the likelihood that needed improvements are made." The report's evidence supporting that statement is unclear. Licensee corrective actions for past identified issues, including security violations, are routinely inspected as part of NRC review of the licensee's Problem Identification and Reporting efforts, and if isolated problems are found, they are addressed with the licensee. If programmatic problems are identified, then, in accordance with Section VI.A.1 of the Enforcement Policy, the NRC could start issuing cited violations rather than NCVs.

- Page 4: The report states that, "...NRC inspectors sometimes minimized the significance of security problems by classifying them as 'non-cited violations'..." The use of the word "minimized" implies that the inspectors intentionally and incorrectly down-play the issues. The word should be changed to "classified," and an argument should be provided on the reasoning why the issues are considered improperly classified (e.g., "...NRC inspectors sometimes classified the significance of security problems as 'non-cited violations'...").
- 3. The report details many concerns regarding NRC programs fulfilling its oversight of licensee security. These programs include the security inspection program, the former Operational Safeguards Response Evaluation (OSRE) program, and the current force-on-force pilot program. Inaccuracies in the report in this area are:
 - Page 4: The report incorrectly refers to "Operational Safeguard and Response Evaluation (OSRE) exercises" when they should be referred to as "Operational Safeguards Response Evaluation (OSRE) exercises."

The report states that the mock adversary forces (MAFs) used by licensees in force-on-force exercises are not trained in terrorist tactics. Although the range of skills varies among MAFs, they were all advised by NRC's skilled contractors and, in addition, many of them were trained by their own employers in terrorist tactics.

Page 5: The report states in absolute terms that, "...the exercises did not provide information on the power plant's ability to defend against the design basis threat..." The exercises did clearly provide information on facility security, far more information than is available about any other element of the civilian critical infrastructure. The description could more realistically be stated, "As a result, while the exercises provided information on the power plant's ability to defend against most elements of the design basis threat, some elements of the threat were not fully addressed at all facilities." Moreover, all significant deficiencies discovered in any OSRE were corrected.

Page 9: The report states that the NRC conducted inspections of licensees to check for "compliance" with advisories. The NRC does not inspect for compliance with advisories. The inspections referenced in this statement were conducted to assess licensee implementation of the advisories.

The report states, "As of June 30, 2003, NRC had determined that 75% of the power plants were in compliance with the order." A more accurate statement would be, "As of June 30, 2003, NRC had determined that 75% of the facilities have been inspected for compliance with the order." There should be no implication the other 25% are not in compliance.

- Page 10: The report states that NRC regions do not routinely collect and disseminate security inspection information to NRC Headquarters. This is incorrect. Headquarters is on distribution for every security inspection report (also found on pages 15 and 16). Additionally, the report does not mention that licensees disseminate such information amongst themselves in the form of "Operating Experience" (OE) reports.
- Page 11: The report's last paragraph on this page begins, "Under the previous security inspection program..." as meaning the current security inspection program that is now undergoing revision. This paragraph is written in the past tense and would be more appropriately written as follows:

"Under the previous security inspection program, initiated in 1999, the NRC used a "risk informed" performance-based system (the Reactor Oversight Process) that was intended to focus both the NRC's and licensees' resources on important safety matters. In an attempt to focus NRC attention on plants with the most serious problems and to reduce regulatory burdens on the nuclear industry, the Reactor Oversight Process implemented a revised baseline inspection program and licensee assessment process. An element of the Reactor Oversight Process was NRC's collection of quantitative licensee performance indicator data which was then used as a method to redirect or refocus NRC inspection into areas where performance-related or safety significant issues were indicated. This performance indicator data was (and continues to be) generated by the licensees and is submitted quarterly to the NRC. In the security area, the current performance indicators are: (1) the operation of

security equipment (such as intrusion detectors and closed-circuit television cameras), (2) the effectiveness of the personnel screening program (including criminal history and background checks), and (3) the effectiveness of the employee fitness-for-duty program (including tests for substance abuse and behavior observations). Under guidelines for these performance indicators, licensees are required to report only data that meets pre-established reporting requirements and thresholds. Then, in addition to the routine baseline inspections conducted at every licensee, NRC inspectors follow a multi-step process to monitor security including, in part, verifying the licensee's performance indicator data. The Reactor Oversight Process does not require NRC inspectors to verify all aspects of licensees performance indicators during the annual security inspection of the plants."

- Page 12: The report states that, "Under guidelines for these self-assessments, licensees are required to report only the most serious problems." This statement is incorrect in that the documents that provide guidance to the licensees on what data to report, NRC Inspection Manual, Manual Chapter 0608, "Performance Indicator Program," and NEI 99-02, Rev. #2, "Regulatory Assessment Performance Indicator Guidelines," do not require nor imply the reporting of only the most serious problems.
- Page 13: The report discusses "Random checks of changes to security plans (performed biennially)," with respect to the assertion that inspectors only conduct random checks to verify that licensee security plan changes are justified. This is incorrect. All security plan changes are reviewed, although NRC may not physically examine a change unless there is an issue.
- Page 15: The report states, "If the licensee accepts the report's findings, the report is filed at the region. If the licensee does not accept the findings..." The NRC does not send security inspection reports to licensees for comment. This statement appears to mischaracterize the appeal process associated with inspection findings. It is more appropriate for the statement to read: "If the licensee does not challenge the report's findings, the report is filed at the region. If the licensee challenges the findings..."
- Page 17: The report discusses the lack of any law, regulation, or order requiring the conduct of OSRE exercises. By itself, this implies that the NRC has no regulatory basis for conduct of force-on force exercises including OSREs. The report should mention that 10 CFR 73.55(b)(4) provides the regulatory basis for the conduct of these exercises.
- Page 19: The OSRE statistics in the middle of page 19 skew the actual results and paint a biased view of them. By relating the findings per OSRE, rather than per total number of exercises, the results are portrayed unfairly. Over the history of the OSRE program, the attacking force simulated the

interdiction of a complete target set in about 13 percent of the exercises. All significant deficiencies identified in these exercises were corrected.

Page 22: The report states, "Delays in releasing a report to the licensee may have affected the timeliness of permanent corrective actions and diminished the effectiveness of feedback on the exercise." This mischaracterizes the NRC's communication of OSRE-identified security weaknesses to the licensee. In all instances, regardless of the timing of the report, the licensee was always clearly and consistently informed of all findings, problems, vulnerabilities, and opportunities for enhancement several times during the conduct of the OSRE.

The report states that, "...the force-on-force exercises were not realistic Page 26: enough to ensure identification and correction of plants' vulnerabilities." The NRC's goal has consistently been to make the force-on-force exercises as realistic as possible. NRC's exercises are, in fact, similar to those conducted by DOE. In order to further enhance the realism of the force-on-force exercises, NRC is now starting to employ MILES lasersimulation weapons. This also mirrors DOE (and DOD) force-on-force exercises. The exercises that have been conducted by the NRC have proven effective at evaluating licensee security response strategies, including identification of significant deficiencies. All significant deficiencies identified in these exercises were corrected. Any vulnerabilities in defensive strategies identified during a FOF exercise are promptly reviewed and properly addressed. Additionally, the statement appears inconsistent with the results summarized on page 4, which state in part that "...force-on-force exercises could demonstrate how well a nuclear plant might defend against a real-life threat..." NRC's historical position is that the force-on-force testing program, including the OSREs, have been an effective evaluation tool.

Page 27: The report incorrectly states that, "...NRC is relying on plants' self-assessments and the force-on-force pilot program as its mechanisms to oversee security at the nation's nuclear power plants." NRC inspection activities are ongoing. This includes inspections by Temporary Instruction and the modified baseline inspection program.

Additional significant inaccuracies in the report include the following:

In What GAO Found:

The report states that, "Un-checked visitors were then allowed unescorted access throughout the plant's protected area." This should read "... then allowed escorted access..." In addition, it should be noted that visitors, by definition, can not have unescorted access. They must be escorted. Likewise, individuals who have unescorted access are not referred to as visitors.

The report states that, "...NRC does not have a routine, centralized process for collecting, analyzing, and disseminating security inspections to identify problems that may be common to plants or to provide lessons learned in resolving security problems." Although NRC does not have such a specific process (for security), NRC does have a process/practice for the entire inspection program. Issues are brought to the attention of supervision/management in the Regions. The respective supervisors/managers communicate through counterpart telephone calls and share generic issues. As a result, the supervisors direct inspectors to look into areas that could be generic problems. Further, Regional Offices have metrics requiring them to submit generic issues to the Office of Nuclear Reactor Regulation to promulgate Generic Letters, Regulatory Issue Summaries, and other communications to industry, as appropriate.

- Page 6: The report refers to the NRC's Office of Nuclear Security and Incident Response and its interface with several agencies, but does not mention its interface with the Department of Homeland Security.
- Page 7: The report states that, "Commercial nuclear power plants are also subject to federal and state laws that control certain matters related to security functions, such as possession and use of automatic weapons..." The sentence would be more correct if "automatic" was deleted, since all licensees are subject to Federal and state laws, but not all licensees have automatic weapons.
- Page 8: The report incorrectly states that, "NRC has given the power plants 2 years to comply with the new design basis threat." In fact, they were given 18 months to comply with the new design basis threat.
- Page 10: The report states that the NRC had concern with the use of temporary clearances for temporary workers for a number of years. During that time frame, temporary clearances were available for both temporary and permanent workers. Furthermore, the report gives the impression that the NRC took no action regarding the concern until the terrorist attacks on September 11, 2001. A more accurate characterization of the issue is that the current threat environment warranted the Commission to eliminate this approach.

The report states that, "In the past, NRC had found instances in which personnel with criminal records had temporary clearances that allowed them unescorted access to vital areas." Licensees evaluate criminal history and other factors in making an access decision. The report's statement should read "...found instances in which personnel who failed to report past criminal activity had obtained temporary unescorted access."

The report provides a footnote description of "vital area" that is inconsistent with the formal definition in 10 CFR 73.2. It should be revised to state, "The vital area, within the protected area, contains plant

equipment, systems, devices, or material, the failure, destruction, or release of which could directly or indirectly endanger the public health and safety by exposure to radiation. It is protected by guard stations, reinforced gates, surveillance cameras, and locked doors." See similar comment regarding the third bullet on Page 14.

- Page 13: The report inaccurately asserts that NRC contractors attempt to smuggle contraband into the plant or to get an unqualified person into the plant. This is not the NRC's approach to intrusion detection testing or contingency exercises.
- Page 14: The third bullet incorrectly states, "The unchecked visitors were then granted unescorted access..." It should state, "The unchecked visitors were then granted escorted access..."

In the third bullet, change "vital area -- where equipment that could cause core damage is located" to "vital area -- where equipment which could be required to protect public health and safety is located." See similar comment regarding the footnote on Page 10.

- Page 16: The report states, "...nor have they [regional NRC security specialists] routinely shared their findings with headquarters or the other regions."

 This is inaccurate and does not capture the fact that: (1) regional division directors routinely meet to exchange and discuss inspection findings and (2) security inspectors routinely meet to share and discuss their experiences, findings, and security areas deserving emphasis.
- Page 18: Figure 2 appears to double count the number of reports reviewed (80) which may be misleading when interpreting the results. The figure should be appropriately modified to provide clarity or an explanation of the data used should be provided in the text.
- Page 21: The report states that "NRC generally used rubber weapons during OSRE exercises." NRC does not handle weapons during the exercises. This statement should be clarified to say, "During OSRE exercises, adversary and plant defense forces generally used rubber weapons."