

INVESTIGATION REPORT

MATTER INVESTIGATED BY:

The concerns indicated in this report were investigated at Oyster Creek by TMI Nuclear Security Agent, Brian R. Frantz, and Security Analyst III, Francis Coppinger.

Senior Site Protection Supervisor Richard Ewart and Site Protection Supervisor Rocco Pezella provided security computer keycard data and analysis of the data. Radwaste Operations Manager, Robin Brown, provided a technical review of the readings recorded on the three nuclear plant operator tour sheets, and a comparison to plant operating conditions. Technical Analyst Senior I, Richard Nash provided radiation work permit data.

PURPOSE OF THE INVESTIGATION:

It is important to note that this investigation was not conducted in response to any formally identified allegations or accusations of wrong doing. The investigation was initiated at the request of J. J. Barton, Oyster Creek Vice President/Director, and was intended to identify and address anomalies and discrepancies inherent to the tours (and tour logs) conducted by the Oyster Creek Plant Operations personnel.

SOURCE:

The anomalies and concerns disclosed during this investigation were identified through a comparative analysis of two documentary references. The documents examined during the analysis included access journals generated by the security computer (relative to individual employee keycard use), and the operations logs which identified personnel responsible for conducting tour log surveillances. By comparing an individuals access (by the Security access computer) into specified vital areas, and the documented data from readings within the specified vital area, a reasonable conclusion could be determined as to whether the tour logs reflect legitimate information as a result of an operators access to that equipment. This review covered a (91) day period from December 1, 1991, through February 29, 1992, and was conducted by Oyster Creek security personnel, Richard Ewart, Rocco Petella, Valerie Roeseller, and Richard Bernava.

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One anomaly was identified through a review of the nuclear plant operator tour sheets (intake area, reactor building and turbine building) for the period of December 1, 1991, through February 29, 1992. The purpose of this review was to determine if readings logged on these tour sheets were consistent with the plant conditions and followed expected trends. Manager Radiological Waste (Radwaste) Operations, Robin Brown performed this review, and provided the results to the security investigators for potential follow-up.

SCOPE OF THE INVESTIGATION:

• Applicable Laws/Rules/Regulations/Procedures and Other Requirements:

- 1) Oyster Creek Nuclear Generating Station Procedure, Number 106, "Conduct of Operations", Revision No. 52.

• Persons Interviewed:

Eighteen personnel were interviewed during the investigation. Those employees interviewed who are employed by Jersey Central Power and Light (JCP&L) are members of the International Brotherhood of Electrical Workers (IBEW) Union Local 1289. During the interviews, the IBEW members were afforded the opportunity to have a union steward present. U1 or U2 provided this representation during these interviews.

In addition to those personnel interviewed, John J. Barton, Oyster Creek Vice President/Director, and/or Sander Levin, Director of Operations and Maintenance were provided with daily debriefings on the progress of the investigation. Russell Cook, Area Manager Human Resources, and James Bruffy, Staff Administrator Human Resources, were also provided with the findings regarding specific individuals in order to assist them in determining appropriate disciplinary action.

• Other Relevant Documents Reviewed:

- 1) Security computer keycard listings for all operations department personnel covering the period of December 01, 1991, through February 20, 1992.

- 2) Turbine building tour sheets for the following dates:
December 29, 1991, January 2, 3, 6, 9, 12, 14, 20, 22, 25, 31,
1992, and February 17, 1992.
- 3) Reactor Building Tour Sheet for January 18, 1992.

* Physical Evidence:

None

* Other:

Senior Site Protection Supervisor Richard Ewart provided B. Frantz and F. Coppinger a tour of the new cable spreading room.

INVESTIGATION RESULTS:

On Tuesday, March 17, 1992, John J. Barton, Oyster Creek Vice President/Director requested an investigation to assess the overall conduct of plant tours by Operations personnel at Oyster Creek. This investigation was directed toward two areas. The first area covered a review of vital area entries of nuclear plant operators using their security issued keycards, and entry into radiologically controlled areas (RCA's) as evidenced by radiation work permits (RWP's). These entries would be compared to areas required to be entered during the three nuclear plant operator (NPO) tours (intake area, turbine building, and reactor building). Richard Ewart, Senior Site Protection Supervisor, and Rocco Pezella, Site Protection Supervisor were given responsibility to obtain the keycard records via the security computer. Richard Nash, Technical Analyst Senior I, was given the responsibility to obtain the RWP data. The second area covered a review of the readings recorded on the nuclear plant operator tour sheets and a comparison to plant conditions to determine if readings recorded were consistent with plant conditions. Robin Brown, Manager Radiological Waste (Radwaste) Operations, was given responsibility for completion of this second area. After obtaining and reviewing the information, it was turned over to the security investigators for disposition.

The following anomalies and concerns surfaced as a result of this comparative review process:

- 1) Most nuclear plant operators did not make two complete tours of their assigned areas during their shifts.
- 2) On January 22, 1992, Nuclear Plant Operator (NPO12) did not enter the new cable spreading room as required by the Turbine Building Tour Sheet, but indicated he performed the task by placing his initials in the space provided on the tour sheet.
- 3) On January 2, 1992, Nuclear Plant Operator (NPO11) did not enter the new cable spreading room as required by the Turbine Building Tour Sheet, but indicated he performed the task by placing his initials in the space provided on the tour sheet.
- 4) On January 18, 1992, Nuclear Plant Operator (NPO8) did not enter the old (lower) cable spreading room as required by the Reactor Building Tour Sheet, but provided an indication of entry by recording readings and his initials in the spaces provided on the tour sheet.
- 5) On five dates in January, (09, 12, 20, 25, & 31), 1992, Nuclear Plant Operator (NPO10) did not enter the new cable spreading room as required by the Turbine Building Tour Sheet, but provided an indication of entry by recording his initials in the space provided on the tour sheets.
- 6) On five dates, December 29, 1991, January 3, 6, and 14, 1992, and February 17, 1992, Nuclear Plant Operator (NPO3) did not enter the new cable spreading room as required by the Turbine Building Tour Sheet, but provided an indication of entry by recording his initials in the space provided on the tour sheets.
- 7) Several Nuclear Plant Operators did not accurately record readings and/or comments in the proper spaces provided on the Turbine Building, Reactor Building and/or Intake Area Tour Sheets.

The first area of concern that was identified was the fact that most of the nuclear plant operators (24 out of 25) were not entering some vital areas twice during their assigned shifts. The first two sentences of the three tour sheets state the following: "The equipment operators responsible for this

tour should perform two complete rounds covering all below listed equipment and areas. Readings shall be completed on the first round, and compared to actual conditions during the second round, to note changing trends in equipment." The tour sheets indicate that a nuclear plant operator "should" make a second tour for the purpose of noting changing trends in equipment. [NOTE: According to American National Standard ANSI/ANS 3.3-1982; "should" denotes a recommendation, "shall" denotes a requirement]. A review of the security keycard data for nuclear plant operators for the previously indicated three month period showed one NPO (NPO15) who always entered each vital area twice per shift. Two other NPO's, (NPO4 and NPO7), frequently reentered all vital areas twice per shift, while the remainder of nuclear plant operators entered all vital areas twice per shift on an infrequent basis.

Seven nuclear plant operators who frequently did not enter all assigned vital areas twice per shift were randomly selected to be interviewed. In addition, five other nuclear plant operators (NPO3, NPO8, NPO10, NPO11 and NPO12) were also selected for interview based upon other anomalies which applied specifically to them. All twelve of these NPO's were questioned about why they frequently did not reenter some vital areas. Generally, these (12) NPO's listed the same reasons for not frequently reentering some vital areas. The reasons are as follows: the workload of the nuclear plant operators which included resin transfers, and require two or three NPO's, surveillances, higher priority jobs, and/or concentration on operating plant systems. These NPO's were also asked if they notified their respective group operating supervisor (GOS) or group shift supervisor (GSS) that a complete second tour was not accomplished, or if a notation was placed on the tour sheet when portions of a second tour were not made. Several of the NPO's indicated that they expected their GOS to know that a full second tour could not be completed based upon the fact that the GOS assigned them to additional duties. Other NPO's said it had not occurred to them to notify their GOS. None of these twelve nuclear plant operators indicated that they noted an incomplete second tour on their tour sheet.

NPO4 and NPO7 were questioned as to why they frequently made two complete tours of their assigned areas. NPO4 said he did not find it difficult to complete two tours provided the workload was not too large. NPO4 said he would not normally note an incomplete second tour on his tour sheet, but he would notify the next NPO assigned to the same tour, to ensure that this next NPO performs a thorough check. NPO7 said there are times when he

cannot complete a second tour due to the heavy workload, but he tries to get two complete tours done.

The review of the security keycard records for Nuclear Plant Operator NPO15, revealed that NPO15 entered the vital areas twice for each assigned tour during the period of December 01, 1991, through February 29, 1992. NPO15 was interviewed to determine how he managed to accomplish two complete tours per shift. NPO15 said he felt it was his responsibility to conduct two complete tours, and if this could not be accomplished it was also his responsibility to inform his GOS. NPO15 said he would make this notification to the GOS in order to keep him (the GOS) informed of what work was or was not accomplished.

Another anomaly that was identified via the security keycard records of the nuclear plant operators, was that there was no indication of anyone entering the new cable spreading room on January 22, 1992 during the 0800-1600 shift. The new cable spreading room is included on page (1), section (2) of the Turbine Building Tour Sheet. The tour sheet does not specify what actions are required to be performed during the check, but it does require the assigned operator to log his initials in the space provided. A check of the new cable spreading room requires utilizing a security issued keycard to gain entry into the room. R. Ewart provided B. Frantz and F. Coppinger a tour of the new cable spreading room, which is located on the 63 foot elevation of the turbine building. Essentially, this area contains electrical cables and cable trays.

In order to determine if there was any error in the operation of the security computer, or the keycard readers at the new cable spreading room, several evolutions were performed. First, the new cable spreading room door keycard readers were checked for all operations department personnel entries and exits. Because this did not indicate any NPC activity at the keycard readers, NPO12's keycard was checked individually for all activity during the shift. NPO12 was the NPO who signed the Turbine Building Tour Sheet for the 0800-1600 shift on January 22, 1992. Although this keycard report showed activity at the main gate, control room and 4160 switchgear room, it did not show any activity for the new cable spreading room. A further check was made of all personnel with keycards for activity at the new cable spreading room for the aforementioned date and shift. This activity report showed only security personnel entering and exiting the room. A final check was made to

determine if there were any "terminal downs" on the keycard readers for the new cable spreading room. A "terminal down" is a message the keycard reader sends to the Central Processing Unit (CPU) in order to inform the security alarm station operators of a problem with a keycard reader. This final check failed to indicate any keycard reader problems.

On April 07, 1992, NPO12 was interviewed regarding the aforementioned issue. During the interview, NPO12 was asked if he could identify the handwriting, initials and signature on the January 22, 1992, 0800-1600 shift Turbine Building Tour Sheet. NPO12 confirmed his handwriting, initials and signature. NPO12 was informed that there were no security keycards entries or exits for himself or any other operations department personnel at the new cable spreading room, and B. Frantz reviewed the security computer keycard data with him. NPO12 was then questioned about why he indicated his initials on the tour sheet when there was no confirmation of his entry into the area.

NPO12 said he believed he entered the new cable spreading room, and he did not believe that he forgot to enter the room. NPO12 said the purpose of entering this area is to inspect for fires. NPO12 said there have been instances where the keycard readers would not grant him access and they would indicate "entry denied," but he did not know if that type of incident occurred on January 22, 1992. R. Ewart explained that an "entry denied" message may be caused by one of three reasons. If an employee improperly inserts his keycard into the reader, an "entry denied" message will result. If a keycard is not programmed for access into a vital area this will also cause an "entry denied" message, in addition to a keycard which is not validated for access into the protected or vital areas. Since NPO12's keycard was valid and he did have authorized access to the new cable spreading room, improper insertion of the keycard would be the apparent reason to cause an "entry denied" message for NPO12's keycard. If an "entry denied" message is received for improper insertion, the security computer would not receive the message, but the electronic door release would not function until the keycard is inserted properly. Section 4.4.1, of Oyster Creek Station Procedure Number 106, states, "On tour sheets, satisfactory completion of a checklist item will be documented with the initials of the person performing the item verification."

Another anomaly that was identified by the security computer keycard records of the operation department personnel occurred on January 02, 1992, during the midnight to 0800 shift. During this date and shift, there was no

indication of any entry into the new cable spreading room by anyone within the Operations department. The same type of security computer cross checks were utilized as in the case of NPO12, in order to determine if anyone from the Operations department was present in this area during the aforementioned date and shift. This cross check revealed that three security personnel were the only individuals to keycard in and out of the new cable spreading room. NPO11's signature appeared on the Turbine Building Tour Sheet for this date and he was subsequently interviewed regarding the identified anomaly. NPO11 was provided with the Turbine Building Tour Sheet for January 02, 1992, and he was asked if he recognized the signature, handwriting and initials on the tour sheet. NPO11 confirmed that the signature, handwriting and initials were his. NPO11 was informed that there was no indication of entry into the new cable spreading room by himself, or anyone else from the Operations department, and the security computer keycard records were displayed and explained to NPO11. NPO11 was then asked for an explanation as to why his initials appeared on the Turbine Building Tour Sheet when there was no evidence of entry into the new cable spreading room. NPO11 said he did not recall the specific day, but offered a possible explanation. NPO11 said he may have been on the roof checking the fans and received a call over the radio to respond to another area. NPO11 said if this did occur, he may have completed the tour sheet at a later time, placing his initials in the block believing he had entered the room. NPO11 said there are numerous occasions during a shift when his assigned tour is interrupted and this could have been one of those occasions. The fans that NPO11 referred to are located on the roof of the office building adjacent to the new cable spreading room door. A check of these fans is required by the Turbine Building Tour Sheet on page (1), section (4).

The fourth anomaly that was identified via the review of the security computer keycard records occurred on January 18, 1992, during the 0800-1600 shift. The situation that was identified involved NPO8, and the fact that there was no record of his entry into the lower cable spreading room. There is only one door for entrance and exit to this area, and it is a vital area door controlled by a security keycard reader. A check of this room is required by the Reactor Building Tour Sheet page (1) section 1. A review of this tour sheet shows that a nuclear plant operator is required to observe and record (12) volt and amp readings and indicate a check of the brush recorder and auto transfer switch DC-E, by placing their initials in the appropriate space. NPO8 was interviewed on April 08, 1992, regarding this anomaly. NPO8

was asked if he recognized the signature, initials, and handwriting on the tour report. NPOS confirmed all three elements as his own. NPOS was informed that the security computer keycard records showed that he did not enter the lower cable spreading room on this date nor was there any indication of any entry by Operations department personnel. B. Frantz explained the security keycard printouts to NPOS, including how his possible entries/exits were checked and cross checked into the lower cable spreading room. NPOS was asked if he could offer any explanation why he recorded readings on the Reactor Building Tour Sheet for the lower cable spreading room, when there was no evidence of his entry into the area. Initially, NPOS said that he had broken his keycard and a new one was issued. Frantz confirmed this was true; however, NPOS did not receive a new keycard until January 23, 1992, five days after this incident. NPOS was again asked how he obtained the readings indicated on the tour sheet if he was not present in the lower cable spreading room. NPOS replied, "I don't know." During the interview the issue was revisited, and NPOS was asked if it was possible he could have taken the previous shift's readings and recorded them for his shift. NPOS replied, "No, I don't normally do that." NPOS was then asked if he recorded a previous shift's readings on this occasion. NPOS replied, "No, I don't do that. I do my job here. My answer is No, I don't know."

On April 09, 1992, at the request of U1, a check of keycard maintenance records was performed by P. Ewart in order to determine if any work orders had been submitted on the keycard readers at the new cable spreading room or the lower cable spreading room. This check revealed that the "in" reader on the new cable spreading room had been tagged with a deficiency tag on January 8, 1992, because the keycard reader would not accept keycards. The "in" reader was repaired on the same day, January 8, 1992. At the lower cable spreading room, the "out" reader was replaced on two occasions, September 12, 1991, and March 25, 1992, due to "terminal downs" on the keycard reader. A "terminal down" prevents the use of the keycard readers and disables certain alarm functions that work in correlation with the keycard reader. The three dates indicated above were not dates during which any of the anomalies identified in this report were in question.

On April 9, 1992, Nuclear Plant Operator NPO10 was interviewed in an attempt to resolve several anomalies which were identified as a result of the review of NPO10's security computer keycard data and the comparison to Turbine Building Tour Sheets. The security computer keycard data revealed that there

were no keycarded entries by operations personnel into the new cable spreading room on January 9, and 12, 1992, during the 0800-1600 shift, January 20, 1992 during the 1600-2400 shift; and January 25, and 30, 1992, during the midnight-0800 shift. The security computer keycard records for operations personnel were also checked and cross checked using the same methods previously indicated in this report. During NPO10's interview, he was asked if there were any areas that he may not enter which are required by the Turbine Building Tour Sheet. NPO10 replied, "Yes, on occasions." NPO10 was then asked what areas came to mind that he did not enter and he replied, "The new cable spreading room." This was followed up by asking NPO10 to determine how often he believes he may not have entered the new cable spreading room over any given period of time. NPO10 said he could not place a number on it. NPO10 was then asked if he (NPO10) would be surprised if the security keycard records indicated that he did not enter the new cable spreading room on five occasions during a two month period (January and February 1992). NPO10 replied "Yes that's possible, very likely." NPO10 was given the Turbine Building Tour Sheets for the aforementioned dates and asked to identify the handwriting, initials and signature on each tour sheet. NPO10 confirmed that all three elements were his own. NPO10 was asked what his initial indicated on page (1), section (2) "New Cable Spreading Room," of the Turbine Building Tour Sheet. NPO10 said that his initials indicate that he was there and completed that part of the tour. The security computer keycard data was explained to NPO10, and after this explanation, NPO10 was asked how he could resolve the fact that there was no evidence of his entry into the new cable spreading room, but his initials indicate he was there. NPO10 replied, "Like I can't resolve it." NPO10 was asked why he did not go into the new cable spreading room on these five occasions. NPO10 said that there was nothing there to check on or get readings on, and the check was essentially a fire check. NPO10 added that if there was a fire, the fire system alarm would go off. During the first interview with NPO10 on March 17, 1992, NPO10 was asked if he ever had not fully performed a task because he did not feel it was necessary. On March 17, 1992, NPO10 replied, "No, never."

The last anomaly that was identified via the security computer keycard records focused on Nuclear Plant Operator NPO3. These security computer keycard records showed five days and shifts (December 29, 1991, 0800-1600 shift, January 3, 6, and February 17, 1992, 1600-2400 shift, and January 14, 1992, midnight-0800 shift) where there was no evidence that NPO3 entered the new cable spreading room. On January 14, 1992, another operations department

person, CRO1, a Control Room Operator Step 2, was in the new cable spreading room during the midnight-0800 shift. On April 9, 1992, NPO3 was interviewed in an attempt to resolve these issues. NPO3 was asked if he does not perform portions of his tours because he does not feel they are necessary. NPO3 replied, that to the best of his ability, he tries to cover everything required by the tour sheets. NPO3 was then asked if it was possible that he did not perform a portion of the required tours. NPO3 replied, "I'm human, I may have. Yes it's possible." NPO3 was asked if any specific area came to mind which may have been missed. NPO3 said he could not think of any areas. NPO3 was asked to review the Turbine Building Tour Sheets for the aforementioned dates and determine if the handwriting, initials and signature were his on each tour sheet. NPO3 said all the tour sheets appeared to contain his handwriting initials and signature except for the January 6, 1992, tour sheet. NPO3 said the signature did not look like his (NPO3's), but added that he may have been writing in a hurry. NPO3 did confirm that the handwriting and initials on the January 6, 1992, tour sheet were his own. NPO3 was informed that the security computer keycard records for him do not indicate any entry into the new cable spreading room for the dates indicated on the previously identified Turbine Building Tour Sheets. NPO3 said, "Obviously it's correct (the security records). I initialed it. I do the (roof) fans and I may have forgotten to go in there."

B. Frantz told NPO3 that it seemed difficult to believe that a person would forget to enter an area on five separate occasions. NPO3 replied, "Ask my friends, I'm pretty absent minded, I forget my keys all the time. Maybe I was just trying to make up time. I may have forgotten." NPO3 was asked what may have made him forget to go into the new cable spreading room. NPO3 said he checks the roof fans and passes the door to the new cable spreading room, and since there are no readings to take, he may not have realized that he did not enter the room. NPO3 said he may have forgotten whether he did enter the room, and initialed it while initialing the computer room portion of the tour. NPO3 recommended that the section on the Turbine Building Tour Sheet for the new cable spreading room be separated more from the computer room section, in order to eliminate the possibility of inadvertently initialing a section of the tour that was not actually completed. NPO3 was shown the security computer keycard data for January 14, 1992, and asked if CRO1 may have performed the check of the new cable spreading room. NPO3 said that CRO1 may have performed the check of the new cable spreading room on this date.

During the review of readings recorded on the Intake Area, Turbine Building and Reactor Building Tour Sheets and the comparison to plant conditions, Radwaste Operations Manager, Robin Brown identified eleven (11) data points that appeared to be out of the expected range without a documented change in plant conditions. According to R. Brown, this review did not indicate any substantiated falsification of data points on an overall or individual basis. After the security investigators received and reviewed the information supplied by R. Brown, it was determined that the eleven (11) issues identified would not be pursued during the investigation. This decision was based upon the fact that there was no reason to believe that any of the readings recorded had been falsified, and the anomalies identified appeared to be additional examples of what Company 1 previously identified to Oyster Creek operations management in the way of inaccurate or incomplete log keeping practices.

"CORRECTIVE" RESPONSES TO DATE:

According to James Bruffy, Oyster Creek Administrator Human Resources, five employees (NPO3, NPO8, NPO10, NPO11, and NPO12) received five-day suspensions without pay for falsification of nuclear plant operator tour logs. Robert Barrett, Plant Operations Director, stated that all five employees met with Barrett and Philip Scallon, Manager Plant Operations upon return from their suspensions, for the purpose of reinforcing the accuracy of record and log keeping practices, and the need for honesty and integrity in performing the job of a nuclear plant operator. Similar meetings occurred between the previously identified nuclear plant operators and Sander Levin, Operations and Maintenance Director, and John J. Barton, Oyster Creek Vice President/Director.

FINDINGS:

The findings for each of the specific anomalies are identified below.

- 1) Most nuclear plant operators did not make two complete tours of their assigned areas during their shifts.

This has been substantiated. The review of the security computer keycard records for operations department personnel, showed that in most cases, personnel did not reenter one or more vital area doors to take

comparative readings. The three tour logs do not require that personnel make a second complete tour and the operative word that is recognized in the language at the top of the tour report is "should." The reasons that the personnel listed for not making two complete tours were reasonable to believe. It is worthy to note that NPO15 made two complete tours in every area he was assigned, and that both NPO7 and NPO4 were relatively consistent in making two complete tours of their assigned areas.

- 2) On January 22, 1992, Nuclear Plant Operator (NPO12) did not enter the new cable spreading room as required by the Turbine Building Tour Sheet, but indicated he performed the task by placing his initials in the space provided on the tour sheet.

This has been substantiated. On January 22, 1992, NPO12 was assigned to the 0800-1600 shift, and was responsible for completing a check of the new cable spreading room according to the Turbine Building Tour Sheet. Although NPO12 placed his initials in the space provided, which indicates satisfactory completion of a checklist item according to Oyster Creek Procedure 106, Section 4.4.1, there was no documented entry to the new cable spreading room by NPO12 or any Operations department personnel, according to the security computer keycard records. NPO12 believed he did enter the area, but could not offer a further explanation for the lack of a keycard entry and/or exit.

- 3) On January 2, 1992, Nuclear Plant Operator (NPO11) did not enter the new cable spreading room as required by the Turbine Building Tour Sheet, but indicated he performed the task by placing his initials in the space provided on the tour sheet.

This has been substantiated. On January 2, 1992, NPO11 was assigned to the midnight to 0800 shift, and was responsible for completing a check of the new cable spreading room according to the Turbine Building Tour Sheet. NPO11 placed his initials in the space provided, which indicated satisfactory completion of the checklist item according to Procedure 106, Section 4.4.1, but there was no documented entry (according to the security computer keycard records) into the new cable spreading room by NPO11 or any other operations department personnel. NPO11 offered a possible explanation saying that he may have been on the roof of the office building checking the fans and received a radio call to respond to another area. NPO11 said he may have completed that portion of the tour sheet at a later time, and inadvertently placed his

initials in the space provided, believing he performed the check.

- 4) On January 18, 1992, Nuclear Plant Operator (NPO8) did not enter the old (lower) cable spreading room as required by the Reactor Building Tour Sheet, but provided an indication of entry by recording readings, and his initials in the spaces provided on the tour sheet.

This has been substantiated. On January 18, 1992, NPO8 was assigned to the 0800-1600 shift, and was responsible for obtaining volt and amp readings, and checking the brush recorder and auto transfer switch DC-E, located within the old cable spreading room. NPO8 recorded (12) readings and his initials in the spaces provided on the Reactor Building Tour Sheet, but there was no indication (as evidenced by the security computer keycard records) of his entry or the entry of anyone from the Operations department into this room during the shift. NPO8 could not offer any explanation as to why he recorded readings if he was not present in the room. When NPO8 was asked if he may have taken the previous shift's readings and recorded them for his shift, he said he did not normally do that. When he was queried further about this response he said his answer was "No, I don't do that. I do my job here. My answer is No, I don't know." NPO8 could not offer any explanation for the incident.

- 5) On five dates in January, (09, 12, 20, 25, 31), 1992, Nuclear Plant Operator (NPO10) did not enter the new cable spreading room as required by the Turbine Building Tour Sheet, but provided an indication of entry by recording his initials in the space provided on the tour sheet.

This has been substantiated. NPO10 was assigned to the 0800-1600 shift during January 9, and 12, 1992; the 1600-2400 shift on January 20, 1992; and the midnight-0800 shift on January 25, and 31, 1992. During all these dates and shifts, NPO10 was assigned to complete the Turbine Building Tour and one of the requirements of the tour is entry into the new cable spreading room. NPO10 indicated his entry of the room by placing his initials on the tour sheet, however there was no evidence established by the security computer keycard records of NPO10's entrance or the entrance of any operations department personnel during these dates and shifts. Prior to informing NPO10 of the investigation findings, NPO10 admitted that he did not enter the new

cable spreading room on occasions because he did not feel it was necessary. When NPO10 was informed of the five dates where no evidence of his entry could be found, NPO10 replied, "Yes that's possible, very likely."

- 6) On five dates, December 29, 1991, January 3, 6, and 14, 1992, and February 17, 1992, Nuclear Plant Operator (NPO3) did not enter the new cable spreading room as required by the Turbine Building Tour Sheet, but provided an indication of entry by recording his initials in the space provided on the tour sheet.

This has been substantiated. NPO3 was assigned to the 0800-1600 shift on December 29, 1991; the 1600-2400 shift on January 3, and 6, and February 17, 1992; and the midnight-0800 shift on January 14, 1992. During all these dates and shifts, NPO3 was assigned to complete the Turbine Building Tour, and one of the requirements of the tour is entry into the new cable spreading room. NPO3 indicated his entry by placing his initials on the tour sheet, however, there was no documentary evidence (as indicated by the security computer keycard records) of his entry into the area. A check of other operating department personnel showed that CRO1 had entered the new cable spreading room on January 14, 1992, during the midnight - 0800 shift. These records of entries and exits from the new cable spreading room were obtained through the security computer keycard records. After NPO3 was informed of the findings regarding this piece of the investigation, NPO3 said that he may have forgotten to go into the area. During the latter portion of the interview, NPO3 also offered the explanation that the space on the tour sheet to initial, indicating completion of the new cable spreading room check, was too close to the space for the initials required for the computer room check. NPO3 believed this may have caused him to initial the space for the new cable spreading room without actually entering the area. If NPO3 would have only had one incident involving not entering the new cable spreading room, absent mindedness may be considered, but with five incidents, this excuse appears unreasonable to believe.

- 7) Several nuclear plant operators did not accurately record readings and/or comments in the proper spaces provided on the Turbine Building, Reactor Building and/or Intake Area Tour Sheets.

Although interviews of the nuclear plant operators identified by Robin Brown's analysis of the tour sheets was not pursued, it is believed that the

incidents cited were additional examples of what had been previously identified by Company 1 in the way of inaccurate or incomplete log keeping practices.

FILE MAINTAINED AT:

The full investigative file of this case will be maintained in the office of the Nuclear Security Agent at TMI and referenced as Case #030991-01S OC. Security computer keycard data, Turbine Building Tour Sheets and Reactor Building Tour Sheets for the dates and shifts indicated in this report are not included with this report, but are available for review in the office of the Nuclear Security Agent at TMI.

Investigator Signature:

Brian R. Frantz
Nuclear Security Agent, TMI

Date

Investigator Signature:

Francis J. Coppinger
Security Analyst III

Date

Reviewed/Concurred:

James F. Stacey
Security Manager

Date

NSD Review/Approval:

M. K. Pastor
Nuclear Security Director

Date