4953

κακαι Ο. ΡΟΤΤΣ, Ρ.C. ΣΤΕΛΗΣΑΙ Ο. ΡΟΤΤΣ, Ρ.C. ΣΤΕΛΗΣΑΙ Ο. ΡΟΤΤΣ, Ρ.C. ΟΕ ΑΛΑΙΟ Ο. ΡΑΚΑΙΟΓΥ, Ρ.C. ΟΕ ΑΛΑΙΟ Ο. ΡΑΚΑΙΟΓΥ, Ρ.C. ΤΗΟΤΗΥ ΗΛΑΙΟΛΥ, Ρ.C. ΟΕ ΑΛΑΙΤΑΙ, Ρ.C. ΟΤΑΙΟΕ ΑΛ. ΙΤΤΙΑ, Ρ.C. ΟΤΑΙΟΕ ΑΛ. ΙΤΙΑ, Ρ.C. ΤΑΙΟΕ ΑΛ. ΙΤΙΑ, Γ.C. ΤΑΙΟΕ ΑΛ. ΙΤΙΑ, Γ.Υ. ΤΑΙΟΕ ΑΛ. ΙΤΙΑ, Γ.Υ.

*

SHAW, PITTMAN, POTTS & TROWBRIDGE

A PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIONS

2300 N STREET, N. W. (202) 663-8000

WASHINGTON. D. C. 20037 87 DEC -1 P3:01

OFFICE OF SECRETARY DOCKETING & SERVICE. BRANCH

GEORGE F TROWBRIDGE FRED DRABNER JOHN F. DEALYRS ROBERT E. CONN THOMAS M. BROWNELL* FRANK J. BALTZ"

VIRGINIA OFFICE ISOI FARM CREDIT DRIVE MCLEAN, VIRGINIA 22102 (703) 790-7900

TELECOPIER (202) 223-3760 6 223-3761

TELEX/CABLE 89-2693 (SHAWLAW WSH)

WRITER'S DIRECT DIAL NUMBER

(202) 663-8084

November 30, 1987

Mr. Samuel J. Chilk Secretary of the Commission U.S. Nuclear Regulatory Commission Washington, D.C. 20555

JAMES & HAMLIN, P.C. RANDAL B. RELL P.C. B SCOTT CUBTER, JR. RICHARD S. BEATTY WARWICK R. FURR II' ROBERT E. ZAHLER, P.C. ROBERT B. ROBBINS, P.C. STEVEN M. LUCAS, P.C. VICTORIA J. PERKINS, P.C. JONN H. O'NEILL, JR., P.C. JONN H. GLASSPIEGEL THOMAS H. MCCORNICK WILLIAM P. BARR⁵ RADLF MICKEY, JR. JONN L. CARR, JR. ROBERT M. GORDON' CAMPBELL KILLEFER DAVIO J. CYNAMON LOUISE A. MATHEWS PHILIP J. HARVEY DEBORAH B. BAUSER SCOTTA ANENBERG JOHN M. SPYSON II ELLEN A. FREDEL L. DUANE CHEEK RALPH A. TAYLOR, JR. ALLEN J. KLEIN

In the Matter of Inquiry Into Three Mile Island Unit 2 Leak Rate Data Falsification Docket No. LRP

Dear Mr. Chilk:

* RESIDENT IN VIRGIN **NOT ADMITTED IN D. * ADMITTED IN VIRGIN

The Commission has pending before it, in this proceeding, the Presiding Board's May 21, 1987 Recommended Decision (LBP-87-15) and the Staff's July 20, 1987 Recommendations Regarding Individuals Associated With The Leak Rate Surveillance Testing Irregularities at TMI-2.

Enclosed, for the information of the Commission, is a redacted copy of a November 20, 1987 letter, with Attachments 1 and 2, from Mr. Edwin H. Stier to Mr. Philip R. Clark, President, GPU Nuclear Corporation. The letter and attachments present the results to date of Mr. Stier's investigation concerning allegations of sleeping and inattentiveness to duty by a shift

8712040043 871130 PDR ADOCK 05000320

D503

SHAW, PITTMAN, POTTS & TROWBRIDGE

Mr. Samuel J. Chilk November 30, 1987 Page 2

1

supervisor at TMI-2. GPU Nuclear Corporation has filed an unexpurgated copy with the NRC Staff, with a request that it be withheld from public disclosure.

Mr. Stier's letter and attachments contain the names of four individuals who are among the eight individuals identified with an exception to the Staff conclusion regarding the pre-accident individuals in the above-referenced Staff memorandum, July 20, 1987, at page 6. The four individuals, and their alphabetical designators used in the enclosure, are:

> BB Congdon, J. A Illjes, T. B McGovern, H. O Miller, A.

Also enclosed, for the information of the Commission, is a copy of a GPU Nuclear news release, issued today, which among other things reports that GPU Nuclear has dismissed the shift supervisor under investigation.

Respectfully submitted,

Thomas A. Baster for

Ernest L. Blake, Jr. Counsel for GPU Nuclear Corporation

cc (w/encl.): Chairman Lando W. Zech, Jr. Commissioner Frederick M. Bernthal Commissioner Thomas M. Roberts Commissioner Kenneth M. Carr Commissioner Kenneth C. Rogers Administrative Judge Sheldon J. Wolfe Administrative Judge Glenn O. Bright Administrative Judge James H. Carpenter Mary E. Wagner, Esquire Docketing and Service Branch Harry H. Voigt, Esquire Smith B. Gephart, Esquire James B. Burns, Esquire Michael W. Maupin, Esquire Mrs. Marjorie M. Aamodt

EDWIN H. STIER

LAW OFFICES

11 E CLIFF STREET SOMERVILLE NEW JERSEY 08876

4

TELEPHONE

November 20, 1987

Mr. Philip R. Clark President GPU Nuclear Corporation One Upper Pond Road Parsippany, New Jersey 07054

Dear Mr. Clark:

You have requested that I advise you of the status of our investigation concerning allegations of sleeping and inattentiveness to duty by a shift supervisor at the Three Mile Island Nuclear Generating Station, Unit 2 (TMI-2).

Background

The allegations against the shift supervisor were brought to your attention after an anonymous letter was received by TMI-2 management on July 9, 1987. A copy of the letter also was received on the same date by the Nuclear Regulatory Commission (NRC) resident's office. The July 9 letter referred to an earlier anonymous letter that had been received by Plant Operations Manager B on April 8, 1987, in which it was alleged that the supervisor of "F" shift at TMI-2, A, had been sleeping on duty. The April letter furth/2r alleged that \mathcal{B} had previously been made aware of the sleeping allegations. It contained a demand that A be to the attention of higher management and the NRC if he was

The letter received on July 9 stated that seven members of A's crew would swear to having seen A asleep on more than one occasion, accused TMI-2 management of a cover-up, and threatened to call the news media.

On July 14, 1987, a third anonymous letter was received by TMI-2 Director Frank Standerfer. It reiterated the allegations made in the previous letters concerning A's sleeping and made other allegations against him, including inaccurate turnover briefings, ignorance of plant conditions, doing work in the control room for an outside business in which he had an interest, and taking extended plant tours during which he could not be promptly contacted by the control room.

Investigation

On July 10, 1987, you retained me to investigate both the allegations against A and GPUN management's knowledge of and responses to those allegations. The investigation was to be independent and under my exclusive control. You assured me that GPUN personnel would provide their complete cooperation. You further instructed me to keep NRC representatives fully apprised of all of the evidence that we obtained.

Since then, we have interviewed more than seventy persons and taken more than thirty sworn depositions. We have also examined documentary evidence, including memoranda, diary entries, logs, personnel files, and computerized records of control room entries and exits. Personnel from the Security, Quality Assurance, Human Resources, Labor Relations, and Licensing departments provided logistical support, assisted in the gathering of evidence, and were consulted with respect to relevant guidelines, procedures, and background information.

We have concluded the phase of our investigation concerning the allegations against A ... Summarized below are the principal findings from this phase of the investigation. Attachment 1 is a partial chronology, which provides a more detailed allegations against A ... (This chronology will be supplemented in our final report to reflect additional facts relating to management's responses to these allegations.) Attachment 2 is a list of the witnesses who testified to having personally observed A asleep, "nodding off," or otherwise inattentive, testimony. The exhibits and transcripts referenced in the partial chronology are available for your inspection upon

Summary of Findings

.

A. Standards and Procedures for Resolving Sleeping Allegations

We have devoted considerable attention during the investigation to the issue of what standard of proof is required to substantiate an allegation of sleeping or inattentiveness to duty, and the related issue of what procedure is appropriate for investigating and resolving such allegations. These issues are particularly important to the evaluation of TMI-2 management's actions in response to the allegations.

There is no single, clearly established standard of proof applicable to allegations of sleeping or inattentiveness to duty. In July 1987, however, following the discovery of areas in

the TMI-2 turbine building that may have been used for sleeping, Site Operations Director C wrote a memorandum containing guidelines for management personnel conducting tours, who might observe employees sleeping on duty. The sources for the guidelines in C's memorandum were varied, and included experience from union grievance and arbitration proceedings and legal considerations.

There was some disagreement among the witnesses as to how strictly some of the guidelines -- $\underline{e.g.}$, obtaining more than one witness and observing the sleeping employee for two to four minutes -- had been or should be followed in resolving allegations. These divergent views will be analyzed in connection with the phase of the investigation concerning mangement's response to opinion about the amount, strength, or type of evidence needed to substantiate an allegation are not critical. Under any reasonsupport the conclusions described below.

B. Summary of the Evidence

1. Evidence of Sleeping and Inattentiveness to Duty

Twenty-one witnesses testified to having personally observed sleeping, "nodding off," or appearing to be asleep while on duty. These persons included all of the control room operators (CROs) assigned to A's shift prior to his being relieved of licensed duties in July 1987, all of the auxiliary operators (AOs) on that shift, former crew members, another shift supervisor, maintenance personnel, an Instrument and Control technician, and CROs and AOs who had worked under A temporary or "fill-in" basis. Some witnesses made only one on a observation, while others testified to having seen A sleeping on numerous occasions over a period of years. The earliest observations occurred during the early 1980s, and the most recent on June 27, 1987. Most of the sleeping occurred during 11 p.m. to 7 a.m. shift but there were instances of sleeping on the 3 p.m. to 11 p.m. shift, and at least one on a day shift.

Many instances of sleeping were quite brief, and can best be characterized by the term "nodding off." Others lasted several minutes or more. On a number of occasions, A was awakened intentionally by members of his crew or others who slammed books, set off alarms, shouted at him, talked loudly, or otherwise took action to rouse him. Indeed, long prior to the commencement of this investigation in July 1987, A had acquired a widespread reputation for sleeping that extended well beyond his immediate

Some of the more noteworthy incidents that could be dated with reasonable certainty were the following:

- a. Within two six-week cycles of April 13, 1985, machinists D and E simultaneously observed A asleep in the shift supervisor's office. D and E, standing in that office, observed that A was motionless, both eyes were closed, and his head was propped up by his hands. D then yelled at A, stating either, "Hey," or "Hey, A, wake up." A jerked his head up and looked startled. D then told A that he, D, had just received three days on the street for the same conduct. (D had been suspended for three days in April 1985, for sleeping.)
- b. On June 4, 1985, while giving AO F an SDS checkout, A asked F a bizarre question that began with a matter pertinent to the checkout and ended with a reference to flying, then nodded off briefly, awoke, and asked F what they had been discussing.
- c. On September 17, 1986, A was substituting for "A" Shift Supervisor G on the 11-7 shift and, between 1:30 and 3:00 a.m., began nodding off at the shift supervisor's desk. CROS H and T both observed A falling asleep and began to talk loudly and slam books in an attempt to keep A awake. Later, they saw that A had fallen asleep again and they awakened him by simulating a diesel startup, which caused an alarm to sound.
- d. During a turnover briefing on a 3-11 shift in September or October 1986, A- fell asleep in front of the entire crew. After he was awakened, A presented his briefing and repeated portions of the briefing that a CRO had just given to the crew.
- e. On October 21, 1986, during an 11-7 shift, AOs J and K simultaneously observed A asleep in the shift supervisor's office. CRO L made a similar observation on this occasion and also concluded that A was asleep. J began speaking in an increasingly loud voice about the need for shift supervisor to remain awake if everyone else was out working.

...

A emerged from his office and asked: "What's up J?" J replied: "You are, finally, A." There followed an angry confrontation during which J accused A of sleeping, an accusation A denied. B learned about this incident and, on October 24, 1986, he visited "F" Shift during the early morning hours. He spoke to members of the crew about the confrontation between A and J and later had a long conversation with A about

f. Shortly after midnight on June 27, 1987, while the "F" Shift was working 11-7, CROS *M* and *N* observed *A* asleep in the shift supervisor's office. *M* awakened *A* by slamming a notebook on the floor. This incident happened within a few days after TMI-2 Manager Plant Operations *O* had warned *A* about avoiding even the appearance of sleeping or inattentiveness.

:

In addition to sleeping, witnesses testified that 4

- a. provided other shift supervisors with incomplete or misleading turnover briefings;
- b. frequently took extended plant tours, during which he ignored attempts to page him, and was similarly unavailable while spending extended periods of time in the bathroom and on the telephone;
- c. worked on non-GPUN-related documents in the shift supervisor's office and elsewhere in the control room; and
- d. was frequently unaware of plant conditions.
- 2. <u>A's Response to Evidence of Sleeping and</u> Inattentiveness to Duty

A categorically denied that he had ever slept or "nodded off" during a shift. When asked if he could explain why members of his crew and others said he had done these things,

A implied that certain crew members' personal dislike of him might explain some of the allegations. He also suggested that the crew members might have gotten the impression he was sleeping because he was in the habit of propping his head up with his hand while reading plant-related materials in his office, and he

questioned how the men could have seen his eyes closed given the position of his desk in the shift supervisor's office. A further contended that no one had ever attempted to awaken him when he appeared to be sleeping.

Regarding other allegations, A said the following:

- a. <u>Inaccurate Turnover Briefings</u> -- He admitted that other shift supervisors had complained to him about his turnovers, but said that such complaints were not unusual among shift supervisors, and that he had found inaccuracies from time to time in the turnovers given to him by other supervisors.
- b. <u>Extended Plant Tours</u> -- A admitted that he spent substantial amounts of time outside the control room in the course of his duties, but denied that he ever ignored pages or was knowingly out of contact with the control room.
- c. <u>Reading Non-Work-Related Materials in Control</u> <u>Room</u> - A admitted that he had studied pilot training materials in his office during shifts, but said he did this during lunch breaks. He similarly admitted to having read financial documents pertaining to a lumber company in which he had an interest, but said this, too, was done during breaks.
- d. Lack of Knowledge of Plant Conditions --A denied any recollection of giving permission to Fuel Handling Senior Reactor Operator P to begin core alteration at a time when A knew that a double door reactor building defeat was in progress. Additionally, A claimed that he never on any occasion gave P permission to conduct a core alteration without checking with the CROS.

4's responses to specific allegations are set forth with more particularity in the attached partial chronology.

C. Evaluation of Conflicting Testimony

We attempted to resolve conflicts in the testimony given by witnesses by considering the following: the opportunity each witness had to observe the matter under investigation, the possi-

ble bias or intered to of the witness, the extent to which a witness' testimony was corroborated by other witnesses or by documentary evidence, and the inherent plausibility or implausibility of the testimony. The nature of the conflict was also important. For example, most witnesses had difficulty remembering times, dates, and the order in which certain events occurred. There were occasions when all witnesses, including \mathcal{A} , agreed that an event had occurred, but, citing the disorienting effects of shift work, had widely divergent estimates of when it had occurred and whether it had occurred before or after another event. Thus, confusion over dates and times was not by itself regarded as seriously undermining the credibility of testimony

The most significant conflict in testimony was between the twenty-one witnesses, each of whom testified to having seen A asleep, apparently asleep, or "nodding off" on at least one occasion, and A, who categorically denied that he had ever done this during a shift. In arriving at the conclusions set forth below, we resolved this conflicting testimony in favor of the witnesses who said they had personally observed A

A offered no convincing reason to believe that the witnesses who supported the sleeping allegations fabricated evidence against him because of personal malice or for any other reason. Indeed, A characterized as honest people nearly all of the witnesses against him, and this assessment was generally shared by other witnesses who had not themselves observed sleeping incidents. Although there was considerable tension between A and the members of his crew, the sleeping allegations cannot plausibly be dismissed as the product of the crew's malice. In addition to the unanimity of A'S 1986-87 were not members of that crew. The number of witnesses who time period encompassed by their observations, and the fact that concerted fabrication.

Nor did the evidence support an inference that the crew members and others who saw A apparently asleep were simply mistaken. The witnesses were questioned closely about their ability to observe A and the basis for their belief that he was sleeping, and it was clear that they had an adequate basis for concluding that he was asleep or otherwise inattentive on many of the occasions they described.

It is also significant that no witness who worked with A for prolonged periods of time, particularly during 11-7 shifts, refuted the allegations. All of the current and former

CROs on his shift, who had the greatest opportunity to observe him, supported the allegations, as did a substantial number of CROs who had worked for A only sporadically, on a "fill-in" basis. There were witnesses who had worked in the plant during the same time as A and who never saw him sleeping, but these persons had far less opportunity to observe him than did the members of his crew and the "fill-in" CROs.

Finally, 4'5 testimony contained scant refutation of the allegations, and to some extent corroborated them. For example, while denying that he had fallen asleep during a turnover briefing that was estimated to have occurred in September or October 1986, A recalled the basic incident described by the crew and conceded that he may have appeared tired on that occasion. Moreover, A failed to recollect numerous key events to which others testified. These included, for example, a meeting with O on June 24, 1987, during which O , for the first time since the April 1987 investigation, asked A if he had been

D. <u>Conclusions</u>

The evidence firmly supports the conclusion that A fell asleep on numerous occasions while on duty as a shift supervisor. These sleeping incidents date back to at least 1983, and possibly earlier, the most recent incident having occurred during the 11-7 shift on June 26-27, 1987. Together, these incidents were part of a longstanding pattern of activity exhibited by A , pursuant to which he repeatedly fell asleep, "nodded off," and otherwise displayed inattentiveness to his crew and others. This pattern continued despite confrontations between

A and members of his crew over the issue of sleeping and despite several warnings, beginning in October 1986, by TMI-2

This pattern was unique to A . Our investigation uncovered no evidence that any other shift supervisor was even rumored to have slept while on duty. It was clear that supervisors as well as other employees became tired while on duty, particularly during 11-7 shifts. Others, however, reacted to fatigue in various ways that prevented them from either falling asleep or appearing to do so, such as keeping busy or getting up and moving around, rather than sitting motionless at a desk.

Regarding the other allegations against A, the evidence supports the following conclusions:

1. A more frequently than other shift supervisors provided inaccurate or incomplete turnovers to fellow shift supervisors. The inaccuracy of these turnovers was caused in

part by A's practice of completing his turnover sheets at the beginning of the shift and thereafter failing to update them to reflect current plant conditions.

2. In addition to inaccurate turnovers, there was at least one other significant instance wherein A displayed ignorance of or inattentiveness to plant conditions. Between March and May 1986, A gave approval to begin a core alteration despite his having been earlier told by a CRO that a double door reactor building defeat was in progress. One of the CROs caught the error before the core alteration began and, thus, at no time did these events constitute a violation of regulations.

3. A repeatedly, and for substantial periods, studied materials unrelated to his duties while in the supervisor's office and at the shift supervisor's desk in the control room during shifts. These materials chiefly consisted of documents related to piloting a plane and financial records of a business in which A had an interest.

4. A's crew frequently had difficulty contacting him or gaining access to him for the purpose of signing papers or giving approval for actions. The reasons given for this included

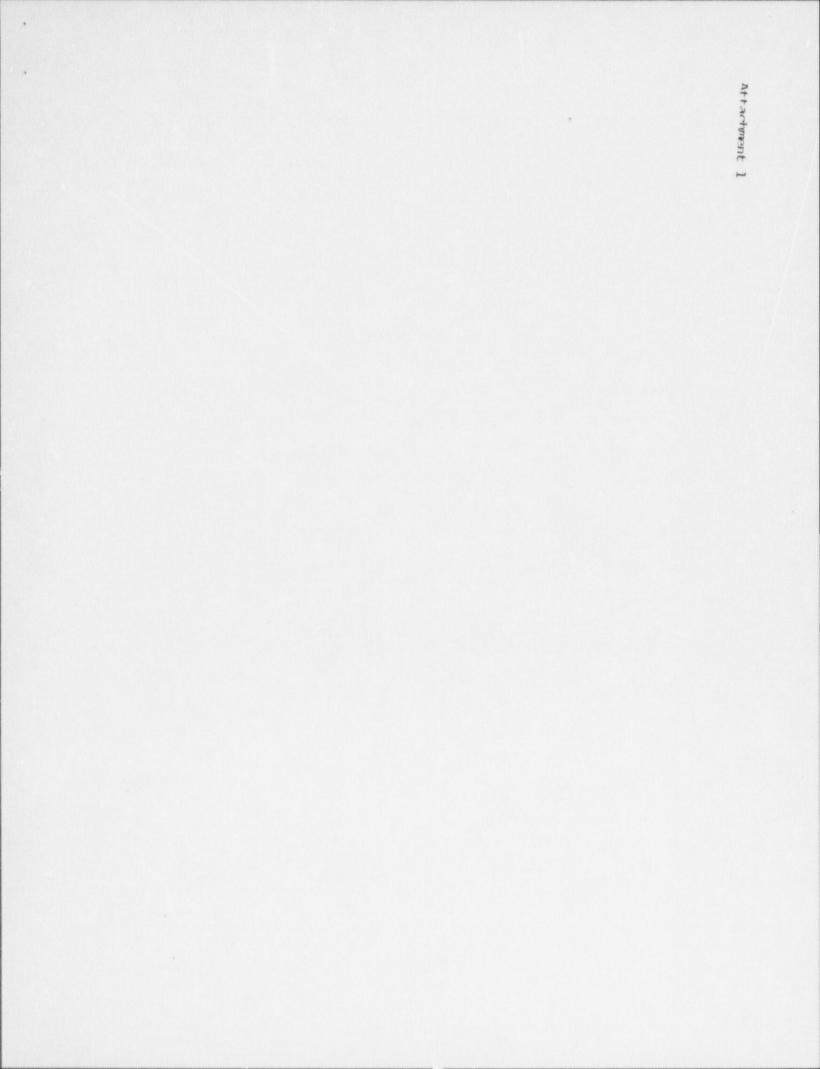
A's failure to respond properly to pages during long plant tours, his spending long periods of time in the bathroom, and his propensity to spend long periods holding the telephone receiver evidence was inconclusive, however, as to whether A was intentionally unavailable and as to whether he used plant tours as a pretext for sleeping, as suggested by the April 8, 1987 during which he observed A failing to respond to a page, but this incident occurred near the control room and it could not be the control room.

In our final report, we will, in addition to incorporating the findings described above, address issues raised during the second phase of the investigation, which focuses on GPUN management's knowledge of and responses to the allegations

Very truly yours, Edwin H. Stier

EHS/kb

Attachments



PARTIAL CHRONOLOGY OF ALLEGATIONS CONCERNING SLEEPING AND INATTENTIVENESS TO DUTY BY A TMI-2 SHIFT SUPERVISOR AND GPUN MANAGEMENT'S RESPONSES

1980 became "F" shift maintenance Q foreman and began to hear rumors that A , supervisor of "F" shift at TMI-2, slept on shift, especially during the first two nights of 11-7. At one time or another, he heard about A sleeping from everyone on his crew. (Q at 12, 14-15) Since 1980, when A became a foreman, Auxiliary Operator (AO) R observed him on the telephone for as long as two to three hours many times. (R at 48-50) Feb. 1980 Control Room Operator (CRO) S began work at TMI as an AO and immediately heard the bathroom referred to as A's office. (S at 4, 33-34) Sept. 1981 AO T began work at TMI and began to hear rumors of A's sleeping or inattentiveness to duty. It was common knowledge among the crews. (T at 8-9) Oct. 1981 - 1985 Machinist U, , who worked on "F" shift from 1981 to 1985 and sporadically since then, heard that A was less than alert on the job and that he slept on shift. U saw A studying flight charts at his desk, usually on the 11-7 shift, between one and ten times. When U needed to have a tagging order or work package signed by A and was told A was in the bathroom, he knew from past experience to wait two hours before returning. On an 11-7 shift, U could count on A being in the bathroom between 1:00 and 3:00 a.m. (14 at 3, 7-12) Oct. 1982 -AO J saw A sleeping at Oct. 1986 least forty times. About 95 percent of the time, it was on the 11-7 shift, generally during the first few nights. (J at 12 - 17)A's Response: A believes that AO J said this because J did not like A . A thinks J either had personal problems

1983 - July 6, AO V saw A sleeping between 1987 five and ten times, all on the 11-7 shift except one, which occurred on the 3-11 shift.

From 1983 to the beginning of 1986, a couple of times a shift week, V also saw A on the phone for two or three hours, not speaking, in the shift supervisor's office. (V at 9-18)

- Beginning 1983 AO W saw A nodding off between mid-1984 A sitting at his desk in the control A sitting at his desk in the control down, and then he would jerk it up. The nodding off lasted fifteen to thirty seconds. (W at 5-8, 10-11)
- <u>A's Response</u>: A has no recollection of these events and no knowledge as to why AO W would form these impressions. A believes that AO W is an honest person. (A, Vol. 2, at 34-35)
- Prior to Aug. 1983 CRO X from about fifteen feet away, observed A sleeping at the shift supervisor's (SS) desk in the control room. Someone had told him to look at A and he saw A resting back in his chair, his head back, mouth open, and eyes closed. (X
- <u>A's Response</u>: A has no recollection of this event and believes CRO X is an honest employee. (A Vol 1, at 67-68, Vol. 2, at 26)
- Sept. 1983 CRO N began work at TMI and, within a couple of weeks, began to hear rumors that A was sleeping or appeared to be sleeping on the job. N characterized A's sleeping as common knowledge throughout the operations department. (N at 54-56)
- Oct. 1983 -Oct. 1984 AO T, as a CRO trainee on "F" shift, often observed A dazed with a blank stare. At such times, T would have to repeat what he had said to A . T also observed A staring into space once or twice a night and three or four nights cut of an 11-7 or 3-11 shift week. He also saw A on the telephone, not saying anything,

A does not recollect looking at flight maps for that amount of time although he

talked about flying with T and may have shown him maps because T either was going for his pilot's license or had flying experience. A also says he was not studying flying until about October 1984. He says that T is a generally honest person. (A Vol. 1, at 67, Vol. 3, at

A's Response:

29-31)

1984

CRO N's first recollection of hearing about A's inaccurate turnovers. (N at 162)

By 1984, according to CRO L , everyone in Unit 2 operations had heard about A's sleeping. During that year, L first saw A sleeping on duty and it got worse over time.

L saw A sleeping one dozen times at his desk in the shift supervisor's office from 1984 to 1987, and one dozen times at the SS desk during the same time period. One such time, L took a piece of paper from A's hand, photocopied it, and returned it while A slept. (L at 36, 40, 44, 47, 72)

A's Response:

A has no recollection of sleeping in L's presence although he is sure he ared tired at times. He does not remember the photocopying incident. A believes L to be a generally honest person. (A Vol. 1, at 65, Vol. 3, at 11-12)

In 1984, machinist D heard m that A was hard to keep awake on heard rumors backshift, spent a lot of time in the bathroom, and was hard to contact on backshift. The bathroom was called A's second office. (D at 18, 25)

During 1984, CRO H, then an AO, was called to come in for an 11-7 shift and A spoke to him strongly about not falling asleep and how important it was to stay awake. (H at 38-39)

Sept. 1984

. *

Radiological Control Technician (Rad Con Tech), needed A's signature on paperwork, but A was not in the control room. An AO said he would show Y how to find A on the 11-7 shift, and took him to a two-story maintenance structure on the turbine deck. The maintenance office on the second story was locked and the lights were out. No one responded to banging on the door so the AO took Y to a page phone 60 yards away, paged A twice, and hung up the phone. Two minutes after they had banged on the door, they returned to the maintenance office and the door was unlocked, the lights were on, and A was sitting behind the partition. Y had been told that A slept on night shift, often in the maintenance office. Y savs it was common knowledge among AOs that A slept on night shift. (Y at 3, 10-20)

A's Response: A has no explanation as to why "F" Shift AOs told Rad Con Tech Y that A could be found in the maintenance office on 11-7 shift nights. He also has no recollection of the specific events. (A Vol. 2, at 31-33)

Oct. 1984 -June 1985 AO F saw A doze off once or twice during each week of 11-7. Occasionally, this occurred on the 3-11 shift. (F at 17-19)

A's Response: A has no recollection of these events and no knowledge as to why AO F would have these impressions. A believes F is an honest employee. (A Vol. 1, at 84, Vol. 2, at 35)

Dec. 1984 or Jan. 1985 AO F began to hear rumors of A spending long periods in the bathroom. The rumors continued up to July 1987. F also noticed that A was repeating the CROs' turnovers, which continued until July 1987, and that A spent a lot of time on the telephone. (F at 36-43, 52-56)

1984 - 1985 CRO N first saw A tired and nodding

off when A substituted for 'Z N's shift foreman at the time. (N at 50-54)

The first time that CRO M believes he observed A sleeping was 1984 - 1985, which was when A started acting like he did not care any more. In approximately 1985, A's sleeping became a regular affair. (M at 39-40)

Machinist D saw A looking like he had just awakened three to four times during the 3-11 and 11-7 shifts. He observed A from a distance of about four to six feet and noticed that his eyes were bloodshot and glassy. A also spent extended periods of time, up to two hours, in the bathroom and extended periods of time, up to one hour or so, listening on the telephone. (D at 20-23, 24-28, 30-31)

At some time between the 1979 accident and 1985, Unit 1 AO AA was bringing fire system paperwork to the Unit 2 control room during either the 3-11 or 11-7 shift. He stopped in front of the windows separating the corridor from the shift supervisor's office and saw A at his desk facing the control room with his right hand covering his face and supporting his head. At banged his hard hat on the window. A did not respond but someone in the control room, beyond the office in which A was located, heard the noise, turned to face AA , and came and took the papers from AA . (A at 5-20)

A's Response: states that he might not have moved, A but might have told his CROs to open the control room door. Normally, however, he would have looked to see who was banging. (A Vol. 2, at 36-37)

> During these years, in conversations with Unit 2 AOs and CRO L , with whom he carpooled, AA heard stories about sleeping or inattentiveness. Rumors continued into 1987. (AA at 20-23)

1985

Machinist E saw A sleeping, with his eyes closed, up to four times at his desk in shift supervisor's office and believes A disappeared from the control room

Prior to 1985

during 11-7 as a standard practice. E remembers that A was often in the bathroom and the longest time he can remember is three hours. E also saw A working on flight materials. (E at 6-8, 14-20)

CRO S , who was on shift possibly a dozen times with A , saw him nodding off once or twice in the control room or at his desk in the shift supervisor's office. 5 believes it was 1986 when he saw A nodding off at the shift supervisor's desk in the control room. A was bent over the desk, reading material in front of him, head tilted over, nodding, eyes closed or fluttering. When S saw him in the shift supervisor's office, A's head was down, he was not moving, and his eyes were closed. (S at 5-17)

> A has no recollection of this event although he says that, if he had been at his desk in the shift supervisor's office with his head on his hand, and his head had been down, his eyes would not have been visible. (A Vol. 2, at 37-40)

> S's supervisor, BB received inaccurate turnovers from A approximately two-thirds of the time. S also knows shift Supervisor CC wrote A a note, probably during the last couple of months A was on shift, about inaccurate turnovers. (S at 18-23)

1985 - Present CRO H heard rumors about A sleeping from CROs L N M and the AOS. N told H about the difficulty in finding A , his extended times in the bathroom, his sleeping on shift, and the CROs doing A; job for him. The bathroom inci-dents occurred more often than the sleeping, according to N . N frequently could not find A . Occasionally, N said he had to do A's turnover because A did not know what was going on or was not present in the control room. Stories from the other CROs were similar. H has heard every shift supervisor complain about A's turnovers. DD also heard that, when A became a shift supervisor, he delegated a lot of his tasks to his CROs without giving any follow-up support or advice. (H at 20-22, 27-31, 42; DD at 19-21)

1985 - July 1987

A's Response:

Jan. - Apr. 1985

At some time during this period, at a party at the Mariner restaurant, Plant Operations Manager B , in a conversation with AO J , asked how things were on "F" shift. This was the first time J raised A's problems with B . AO remembers it as a licensing party, perhaps for EE , among others. (EE received his SRO license on April 30, 1985.) T estimates the encounter lasted about a minute. F's recollection is that sleeping was mentioned as one of A's problems, but was not a major point. J does not recall specifically does not recall specifically B's response but believes it was something to the effect that he would see what he could do or would speak with A According to F , B did not seem surprised and made a comment to the effect that he kept A with them because they could keep an eye on him or keep him out of trouble. J believes B did do something because CRO L told him shortly after that that A was giving out more work because J had complained to B about A . (J at 88-93; F at 63-68)

This is the only time CRO N recollects anyone speaking to B about A's problems prior to January 1986, but it is N's impression that B was repeatedly informed during 1986 and 1987, particularly by AOS. (N at 108-09, 117)

After Apr. 1985

Machinists D and E, through the corridor windows, observed A apparently asleep for 10 to 15 seconds. D said to E, "There the asshole is, sleeping again." D and E walked into the control room and into the shift supervisor's office and saw A -- eyes closed, motionless, head propped up by his hands. D yelled, "Hey," and A woke up, startled, his head jerking up. (E remembers D yelling, "Hey, A, wake up.") D said, "I just had three days in the street not too long ago for that shit."

1. N places this conversation in December 1985.
(N at 108-09)

It was a 3-11 or 11-7 shift. D later told his foreman, Q , about the incident. (D at 7-14; E at 9-13)

A's Response: A has no recollection of this event and does not know why they would lie about it. Machinist D is a generally honest person and A has never known D to lie to him. (A , Vol. 1, at 84-85, Vol. 2, at 40-43)

June 1985 - 1986 During the time A was studying for his pilot's license, CRO FF heard tapping on the control room window on a night A was substituting for his shift supervisor. According to FF , AO GG was pointing at A , whose chin was down on his chest and who looked asleep. Ay flight materials were spread out in front of him in the shift supervisor's office. They observed A asleep for about ten minutes before, according to FF, GG kicked the wall or the door and A picked up his head slowly, his eyes got big, his mouth dropped open, and he started putting his flight materials away. GG does not recall an event in

which he kicked the door to awaken A (FF at 17-22; see also GG at 18)

June 4, 1985 A gave AO F a Submerged Demineralizer System (SDS) checkout, asking F a question which concerned SDS and flying. A said, "'I was up at SDS walking along the west side of the pool . . and some guy coming in for a landing comes in low and gives you a half hair cut.'" A nodded off briefly, with his eyes closed and his chin on his chest, then snapped his head back up, and asked F what they had been discussing. (F at 9-17; F Exh. 1)

A's Response: A has no recollection of this incident. (A_ , Vol. 3, at 31-36)

> CRO H , upon entering the CRO training program, heard about A's established reputation for sleeping on shift, inattentiveness to duty, and not doing his job. (H at 20-21, 26-27)

> > In September 1985, when B formally offered AO N a CRO position and told him it would be on "F" shift, N expressed

Sept. 1985

••	hesitation because of what he had heard about problems on that shift with A . B acknowledged that there were problems working with A but neither man was more specific about the nature of the problems.
	At this time, N began to notice A frequently on the telephone, sometimes for an hour or more, most often on the 7 to 3 shift on weekends and the 3 to 11 shift. A did not seem to be saying much. (N at 82-88, 115-21)
Late 1985	CRO N first saw A sleeping, crouched over his desk in the shift supervisor's office. (N at $57-59$)
Late 1985 - Oct. 1986	A would come to work with pilot's maps and books that he would study at night. When AO V came to the shift supervisor's office to return the previous day's reading, A would be in a slouched position with his eves closed and would not acknowledge V standing five feet from him for thirty seconds to a minute. (V at 18-24)
After 1985	During the time AO AA had key card access to the Unit 2 control room, he saw A sitting at the shift supervisor's desk in the control room looking at flying information in a magazine format. (AA at 24-28)
1986 - beginning 1987	CRO N saw notes from β to A telling him he had done something wrong. (N at 164-66)
<u>A's Response</u> :	A has no recollection of notes from \mathcal{B} regarding inaccurate turnovers, but does recall that he showed \mathcal{N} a note from another shift erroneously blaming "F" shift for something. He believes \mathcal{N} to be a generally honest person. (A , Vol. 1, at 52-63, Vol. 3, at 51-52)
1986	Rad Con Tech γ , an aviation buff in high school, once saw A reviewing flight maps in the shift supervisor's office. (γ at 22-25)
1986 - July 1987	AO AA heard rumors of A dis- appearing in the plant. (AA at 32)

Beginning CRO FF heard a rumor that 'A was asleep of 1986 more than he was awake during training. (FF at 11, 13) Jan. - Oct. 1986 At some time during this period, when B was walking into the shift supervisor's office, CROS L , M , and N were alluding to A's problem staying awake and N said it was a problem that needed to be addressed. B nodded affirmatively. (N at 111-13) At some time during this period, when A was substituting for SF Z on an 11-7 shift, AO GG observed A , in the shift supervisor's office, first from the corridor and then from the office, motionless, with his head on his chest. GG called, " A ," three times, more loudly the second and third times. A did not respond so GG took care of his business with the CROs instead of A . (GG at 8-14) Feb. - June 1, Several times, Fuel Handling Senior Reactor 1986 Operator (FHSRO) brought to B's attention that A would work outside the procedures and fail to follow a procedure or to have appropriate paperwork in place (process instructions and data sheets, for example). B's response was that P should keep an eye on A P (1 at 37-39) Mar. - May 1986 FHSRO P called the control room on a 3-11 shift during this period to get permission to conduct core alteration and gave it, not remembering that CRO N had told him that there was a double door reactor building defeat in progress. CRO L called P back to tell him not to proceed. The CROs and P decided to coordinate all future authorizations needed from A through the CROs. (' P at 24-28; N at 30-37; L . Vol. 2, at 45) A's Response: A has no recollection of this event or of knowing of an agreement to coordinate future authorizations through the CROs, although that is the way he would prefer it. (A , Vol. 3, at 75-78) Spring 1986 Instrument and Control (I&C) Technician HH discussed A with II and

- 10 -

spending a lot of time in the I&C shop and suspected A was going through people's papers. He also talked about the extra work A assigned that he thought unnecessary and that interrupted other things that needed to be done. He did not discuss A's sleeping with IJ or II. JJ told HH that other people had had trouble with A and that was the way it was. (HH

About May 1986

....

B met with FHSRO P to tell him that, to round out the shift, P and FHSRO KK were switching shifts. (P at 5-7)

- Several Days Later - May 1986 HSRO P met again with B who told him the switch was made to match up better experiences. P expressed his displeasure and told B that switching was not going to make the shift any better. (P at 7-8)
- Mid-May 1986 FHSRO P demanded to know from B the reason for the switch because he was worried that B believed P had problems working with people or questioned his competence. B implied that the reason the change was being made was that A did not like working with P and did not like being confronted by him. (P at 8)
- A's Response: A does not recall that he disliked working with P or disliked being confronted by him. (A , Vol. 3, at 79-82)
- Spring or Summer 1986 If C Tech HH was checking through Health Physics, coming from job, and A came behind him. A was paged and did not respond, although there was a phone nearby. The page was clearly audible to HH, who was about sixteen inches from A According to HH, A could have gone back to the control room, about three minutes walk, instead of picking up the phone. (HH at 53-57)
- Spring Fall During this period, AO K saw A 1986 working on pilot's materials. (K at 64)
- June 18, 1986 Although he had not requested a transfer, FHSRO P was reassigned from "F" Shift

**	to "C" Shift with FHSRO KK going from "C" Shift to "F" Shift because of personality problems with A . B told KK that A and P did not get along and that KK's personality and disposition were best suited to get along with A KK agreed to the switch because he was willing to do whatever he could to make it easier for everyone, although he did not really want to leave "C" shift. (P at 3-5; KK at 23-25)
July 1986	AO K began to notice A asleep on the 11-7 shift, usually during the first four days. Normally, A was asleep with material laid out in front of him, occa- sionally flight maps. (K at 21-25)
July 1986 - Feb. or Mar. 1987	At some time during this period, SF Z , present for in-plant training, saw A on the 7-3 shift sleeping at the shift super- visor's desk inside the control room. (Z at 6-10, 13)
<u>A's Response</u> :	A has no recollection of this event. He believes SF Z to be a generally honest person who has never lied to him. (A Vol. 1, at 21, Vol. 2, at 44)
July - Dec. 1986	At some time during this period, AO K first discussed A's sleeping with B . (K at 38-39)
Sept. 17, 1986	A was substituting for "A" shift supervisor G on the 11-7 shift, having worked the 7-3 shift Tuesday morning. Between 1:30 and 3:00 a.m. A began nodding off at his control room desk, slumped down in his chair, his head bobbing up and down, chin going toward his chest. CROs H and T decided to keep him awake and talked loudly and slammed books. A may have realized he was nodding off when he heard the sounds and caught himself. Later, A moved to the communications desk and looked at the required reading book. T, H, and A had been talking and then T and H began to converse just with each other. Between one and five minutes elapsed and T saw A leaning to the left side, chin close to his chest. both eyes closed. T remembers A not slumped over, but G remembers his head face down, either right on the desk or a

.

• •

couple of inches off it. I and H observed A for about two minutes before they decided to simulate starting a diesel, which involved alarms and flashing lights.

A quickly rose out of his chair and appeared scared. Either \mathbf{T} or \mathbf{H} said that the diesel had started but, by the time A got to his feet, they told him they were only kidding. A said nothing and went either to the shift supervisor's office or to the shift supervisor's desk in the control room. He did not, however, sit back down in the chair. A said nothing then or at any later point concerning the incident. A was supposed to substitute for G for the next two nights, but B took the shifts. (H at 6-20, 22-26; T at 5-16, 47-48)

<u>A's Response</u>: A has no recollection of this event or of ever being startled by a simulation of the diesel starting. He does not remember B taking the other two shift nights and has no knowledge as to why I and H would lie about this event. (A, Vol. 2, at 44-47)

Fall 1986

At some time during this period, after CROs LL , MM , and FF had relieved the "F" shift CROs, who had left, they were in the control room talking and looked at A , who had not been relieved, at the shift supervisor's desk in the control room. A was asleep. According to FF , LL picked up a trash can and, just as he started to slam it down, A woke up. LL said hello to A , who did not reply. (FF at 22-23)

A's Response:

A has no recollection of this event and no knowledge as to why CRO FF would lie about it. (A , Vol. 2, at 47-48)

After A returned from vacation, he showed LL a map of some land he had purchased and LL understood that A was a silent partner in Zeager Brothers Lumber Mill. He heard rumors but never saw A working on Zeager Brothers materials. ('LL at 12-14)

Sept. - Oct. 1986 At some time during this period, at approximately 3:10 p.m., A was sitting near the log book desk while CRO N, to his left and a bit in front of him, was reading aloud his turnover for the shift they were beginning. After about two minutes, N did not hear any reactions from Aso he turned and A's eyes were closed and his head was tilted to one side. (From where CRO L was standing, A appeared to have his head on N's shoulder, although he did not.) When N spoke more loudly to him, A jerked up and opened his eyes. L was also present.

The AOs came in for turnover at 3:15 p.m., N began speaking, and, after two or three minutes, saw that A , sitting behind the shift supervisor's desk, again had his head on his chest and his eyes shut. AOs \mathcal{R} , K \mathcal{J} , V, and \mathcal{F} were probably present. (According to N, one AO may have been missing.) When everyone laughed after N asked if his turnovers were boring, A opened his eyes and N continued. (' \mathcal{J} does not recall the comment; he recalls that A was awakened by the O telephone call.) (N at 37-47, Vol. 2, at 26-27; L at 48-52; \mathcal{J} at 54-62; \mathcal{R} at 6-11; see also \mathcal{F} at 25-30; Exh. 7)

onse: A has no recollection of an incident in which he had his eyes closed during a turnover, but does remember appearing tired during one turnover. He says he was alert enough to carry out his duties. (A , Vol. 2, at 56-57)

> After N finished, A began his briefing and repeated some of what N had said. M did not pay attention while A was repeating material, and when A asked him to pay attention, everyone laughed. At some point, one of the AOs yelled that A was repeating what N had said but A did not acknowledge the comment. CROS L and M were also present. (N at 47-49, Vol. 2, at 26-27; J at 62-65; see also Exh. 7; F at 30-32)

> According to \ltimes , either that time or during another turnover, \bot answered a phone call from \mathcal{O} and told \mathcal{O} if he wanted to talk to A he'd have to wake him up. According to \Im , A did not take the call. V recalls that A did take the call and that apparently \mathcal{Q} thought \bot 's remark was a joke. \bot recalls

A's Response:

	that A took the call and fell asleep during it. (K at 14-20, 36; J at 57-58, 60-61; V at 35-39; L at 48-53)
•	At a flag football game during this period, B told CRO I that B had to go to work that night to calm a revolt or uprising on A's shift. (I at 42-44)
Oct. 1986 - Apr. 1987	CRO M saw A nodding off more than six times during turnover briefings and then A would repeat precisely what the CROs had said. Typically, A would be sitting at his desk in the control room, but occa- sionally he would be over at the CRO's desk, called the log in or log book desk. On one occasion, A slept motionless for one minute close to N during N's turnover briefing to the AOS. N was at the CRO log book desk. M was sitting between the shift supervisor's office and Panel #1. N did something to wake A up and someone made a comment about sleeping, which A denied or ignored. (M at 31-35)
<u>A's Response</u> :	A has no recollection of this specific event or of ever sleeping or nodding off during any turnover briefing. A believes M to be a generally honest person who has never lied to him. (A, Vol. 1, at 64, Vol. 2, at 48-50)
ct. 20-21, 1986	At some time between 2:00 and 4:30 a.m., AOs and K, for about fifteen seconds, observed A sitting at his desk in the

shift supervisor's office, facing the control. room, motionless, slumped over with his head down. They were in the corridor and then

then spoke with the

entered the control room and observed A still motionless and with his eyes closed. CRO L had also observed A in the shift supervisor's office and considered him

J

1. Although AO J testified that this event occurred on the 11-7 shift which began on Sunday, October 19, and ended on Monday, October 20, the list of events recorded by the security computer does not show AOs I and K in the control room together during the morning of October 20. The list of events, however, does show that they were in the control room on the morning of October 21 from 4:42 a.m. to 4:46 a.m.

to be sleeping.

Oct

CROs present about the job for which he had gone to the control room. (About two minutes elapsed between the time he first observed A and he began talking to the CROs.) After he and K completed their business with the CROs, during which he observed A , who remained motionless, three or four times, J began speaking more loudly about how the shift supervisor should stay awake if everyone else was out working. A came out of his office and J thought his eyes looked bloodshot. K says he was stretching and yawning. Five to ten minutes had elapsed since \Im and K had first seen A sleeping. A asked what was up, \Im said A finally was, and an argument that lasted ten to fifteen minutes ensued. A said he had been reading not sleeping and \exists accused him of lying. A , \exists , and K walked toward the control room door and continued to argue. Toward the end, K looked straight at A and told him he had been sleeping. About twenty-five minutes elapsed between the time J first observed A and the time he and K left the control room. This is the last time J saw A sleeping. (: J at 19-32; K at 30-33; L at 54-58; see also N at 14-18)

*

A's Response:

A remembers an incident in which AO \square accused him of sleeping and threatened to turn him in, but recollects that \square was referring to his belief that A was asleep on an earlier occasion when he had just returned from a camping trip and appeared tired. A believes that, if he was at his desk, he was working on paperwork during the time AOs \square and K and CRO L claim to have seen him asleep. A considers K to be a generally honest person. (A, Vol. 1, at 82, Vol. 2, at 50-54, Vol. 3, at 98-99)

That same morning, A told B he had had an argument with \Im on the night shift and that it had been taken care of. (\Im _ at 33-34)

According to FF, SF Z had heard A telling B that he was having a problem with a particular AO, meaning J, but that he could handle it. When A left the room, Z told B that he thought

A was the problem. FF does not know if Z mentioned sleeping. (FF at 15-16, 48-49)

After Oct. 20, 1986

Shortly after the incident between AO T and A , when CRO N and A alone in the control room, were N told A that, if he felt drowsy, he should do paperwork, take a tour of the plant or do anything to keep himself alert. A responded that he was not sleeping. (N at 102-03)

Either shortly after the incident with J and K or in January 1987, A had his wife call him to help him remain alert, according to the CROS. (J at 84-85)

Oct. 20-24, 1986 During this period, there were requirements for a procedure for processing water through the SDS that could not be met and A was trying to avoid following the procedure. He and AO J had another heated exchange during which J accused A during which J accused A of sleeping and lying his way out of it. AO F and probably I&C Tech HH were there. A called J a liar and told him he was "show-boating it," according to N . (N at 18-21, 26)

> A does not recollect this event, but does recollect other occasions during which AO J accused him of sleeping. A states he did not try to avoid following procedures with respect to the SDS, but there were times when he and J argued about procedures. (A , Vol. 2, at 54-56)

On the 11-7 shift, B had a long discussion with A concerning "F" shift morale and the need for improvement by November 7. Manager Plant Operations O also had a discussion with A . (Exh. 5, at 3, Exh. 6)

> According to AO J , the Wednesday evening after his encounter with A , at about 11:00 p.m., B came to AO Central to clarify what had occurred. The AOs present, K, R, F, V, and \Box , suggested putting A on a different shift. B said it would not be fair to the other shifts. Someone suggested

Oct. 24, 1986

A's Response:

switching A with EE , the scheduler, and B said he had discussed it with EE and that EE did not even consider it. B said he would come in when A, was on back shift, but he came in the last two nights and A was always more alert at the end of the week. Following his conversation with the AOs, B spoke with A in the shift supervisor's office. (J at 35-41, 93; F at 57-63; V at 54-57; Exh. 5; see also K at 52-55) (R placed this in approximately February 1987. (R at 22-25))

A spoke with AO F about problems regarding A's management style but not about sleeping. F had the impression that B had told A to apologize to his crew. (F at 84-88; Exh. 7)

A spoke with AO V , who was working at SDS. about how A could do a better job. V told him to stop sandbagging surveillances but did not bring up sleeping because everyone knew what had happened and he thought A knew he was sleeping. (V at 28-31; Exh. 7)

A met with CRO N regarding the problems on the shift. N does not remember the meeting specifically, but has spoken to A about most of the comments listed, including giving reasons for assigning jobs and not putting out extra surveillances just to keep crew busy when they have more than enough already. (N at 92-102; Exh. 7)

met with AO R , who told him that A there was friction during turnovers, in part because A often repeated what others had said. (R at 16-20; Exh. 7)

> CRO L told A that if he got busy he would not be so sleepy or bored on back shift but that, if asked, he would have to tell management A was sleeping. (L ; Vol. 2, at 20-23; see Exh. 7)

CRO M spoke to A about problems with A's management, including tensions Oct. 30, 1986 and repeating at turnovers. M told A to listen and not be sleeping or off in his own world. (M at 76-77; Exh. 7)

Oct. 27, 1986

Oct. 28, 1986

- After Oct. 1986 Rumors about A sleeping in the I&C shop began. (I at 76)
- Nov. 4, 1986 A met with AO J, who told him his only problem with A was sleeping at night. A denied sleeping but told T that he would try to be more concerned and that T should come to him if there were any problems. (J at 42-47; Exh. 7)
- Nov. 28 -Dec. 5, 1986 The most recent incident during which AO K saw A asleep occurred in this period. It was an 11-7 shift cycle. (K at 26; Exh. 3)
- <u>A's Response</u>: A thought he was on vacation at this time, but company records showed that he was on vacation only the first three of the seven nights of this shift. (A, Vol. 2, at 57-58)
- Dec. 13, 1986 At a Christmas party, AO K told B that A was still sleeping and B said he had been afraid of that because no one had spoken to B since about October. (K at 26-28)
- 1987 CRO L saw A asleep once every midnight shift week during 1987, with the possible exception of the April and May shifts. (L, Vol. 2, at 4, 7-8)
- A's Response: A has no recollection of these events. (A, Vol. 2, at 58-59)

Early 1987 A began leaving the control room quite a bit, although prior to the AO J incident he seldom left the control room. He was gone for extended periods and the CROs had trouble paging him. ('L, Vol. 2, at 31-32)

Jan. 1987 During an 11-7 shift, AO T was having some problems with the equipment at Epicor and A came from the control room. He sat down on the console and his head began to bob and his eyes fall back in his head. This continued for about a minute before I&C Tech HH came in and the noise of the door opening made A alert. J left HH and A and went to eat lunch. ('J at 67-70)

- <u>A's Response</u>: A has no recollection of this event. (A, Vol. 2, at 59-60)
- Jan. Feb. 1987 A was substituting for SF Z on an 11-7 shift, probably Saturday night - Sunday morning and, for about three hours during the shift, his head would go down on his chest and, about thirty seconds later, pop back up. A was sitting at the shift supervisor's desk in the control room. According to CRO FF, maintenance foreman NN came in and asked A if it was a rough night and A acknowledged that it was. That same night, A was out in the plant for a couple of hours. (FF at 24-26, 28)
- <u>A's Response</u>: A has no recollection of this event. (A, Vol. 2, at 60)
- Jan. Mar. 1987 FHSRO KK first began to hear rumors of A sleeping. (KK at 20-21)

SS DD first heard rumors of A sleeping or dozing in his office. During the same time, DD heard from a CRO that A in the control room, was studying materials to prepare for a flight license. After he heard the first sleeping rumor, DD confronted A, who denied he had been sleeping. (DD at 10-12, 14-15, 22-23)

- A'S Response: A remembers that SS DD may have confronted him regarding sleeping, but has no specific recollection. He considers DD to be a generally honest person. (A, Vol. 1, at 24, Vol. 2, at 60-61)
- Jan. July 1, 1937 At some time during this period, CRO L told AO AA that A was working on materials from the Zeager Lumber Company on the job. (AA at 33)

Jan. - July 1987 SS DD and SS CC made copies of A's turnovers, highlighted the inaccurate items, and left them on A's desk or in his mailbox. On one occasion, CC copied A's shift foreman's logbook where an entry contradicted the turnover, and stapled them together. DD taped highlighted inaccurate turnovers onto book cabinets around A's desk in the shift supervisor's office and also spoke to A , whose response was to the effect of okay. According to DD , it was common knowledge among other shift supervisors that A's turnovers were more inaccurate than those of the others. (CC at 53-57; DD at 44-54; see also LL at 19-20; N at 160; FF at 30)

<u>A's Response</u>: A recollects CC bringing an inaccurate turnover to his attention by leaving him some sort of information in 1986. He also recalls DD leaving a highlighted turnover taped up in his office. (A, Vol. 3, at 46-49)

....

Feb. 20-27, 1987 Sometime during this week of 11-7. probably toward the beginning, AO F came out of the control room and walked by the window in the hallway that looks into the shift supervisor's office. He saw A motionless at his desk, with his head down. F saw A's right profile and his right eye was closed. He observed A for a maximum of a minute. This was F's most recent observation of A sleeping. ('F at

<u>A's Response</u>: A does not believe it is possible to see his face or even his profile from the corridor looking through the windows into the shift supervisor's office and, therefore, an employee would not be able to see whether even one of his eyes is closed. A does acknowledge that, if he turned his body or head, then his profile would be visible from the corridor. (A Vol. 2, at 62-66)

Feb. - Mar. 1987 SF Z told B he should do something about A shortly after overhearing members of A's crew talking about documenting A's sleeping and after hearing about the AO J incident, and seeing A sleeping. (Z at 11-12, 14-15, 17-18; 1 see also MM at 31-32; FF at 13-16)

^{1.} This occurred a couple of days before 6 came in on the 11-7 shift, interviewed the AOs, and made an unannounced visit to the control room, but it is unclear which visit. (Z at 17-18) AO T placed it at a day or two following his October 1986 exchange with A. (J at 34-35) AO FF, who said SF Z told his CROs about it, placed it in November or December 1986. (FF at 14-16)

After Mar. 31, 1987 Shortly after the Peach Bottom shutdown order, CRO N spoke to A about the shutdown and how important it was to stay awake and A agreed. (N at 104-06)

<u>A's Response</u>: A recollects such a conversation, but says he denied he was ever sleeping. (A Vol. 2, at 66-68)

> The last time CRO MM saw A nodding off was after the Peach Bottom order. A was at the shift supervisor's desk in the control room, and his head would come down to his chest and he would jerk it up. MM observed him for perhaps fifteen minutes. This was a typical situation when MM came in early for his 7-3 shift that had been going on for two to three years. (MM at 7-15)

- A's Response: A says it is unlikely he would be asleep at that time cause of the level of activity in the control room prior to shift change. (A Vol. 2, at 68-69)
- Spring 1987 CRO N saw A working on Zeager Lumber Company books. He subsequently saw the books but did not see A working on them. (N at 167-69)
- Late Spring 1987 CRO LL heard that SS CC turned over to A that a dewatering system tank was ready to be pumped but A's turnover to SF Z said that the pumping would have to wait until the tank got up higher. CC gave LL the impression that it was an oversight on A's part. (LL at 17-19)
- Mar. July 1987 FHSRO KK heard rumors of A disappearing for long periods. (KK at 30-31)

Apr. 8, 1987 B received the first anonymous letter (Exhibit 9), in which the writer referred to A's sleeping, the shake-up at Peach Bottom, and threatened to go to the NRC. (Exhs. 9, 10)

Apr. 9, 1987 B came into the control room at about 4:30 a.m. and asked where A was. CRO N said he had left about ten minutes earlier on a plant tour and B went to find him. B returned shortly after A did and they spoke in the Technical Support Center. B showed A the anonymous letter and interviewed the shift. According to B's memo on these meetings, most of the men told him they had seen A sleeping on duty at some time in the past and that they would swear to it. Most also said A seemed to be making more of an effort to remain alert since December, although one person claimed to have seen A sleeping since then, and that A took extended plant tours of up to two hours. B told the shift members that the ombudsman was the proper forum for claims such as those in the letter. (N at 11-12, 66, 121-22; Exhs. 11, at 2, 12, 16, at 1-2)

N was interviewed for fifteen to twenty minutes by \mathcal{B} , who showed him the anony-mous letter. \mathcal{N} was shocked when he saw the letter because he was concerned someone would write the NRC. N thinks the main purpose of the meeting was for B to tell the employees to contact the ombudsman if they had any problems. N was surprised that B gave the impression he did not know about A's sleeping, but N told B only that it was a definite problem. (N said B may not remember L's earlier comment about A's sleeping.) They also talked about Peach Bottom and about A being unreach-able. B asked if N had times and dates of the sleeping incidents. N had kept notes but had thrown them out when seemed to be doing better. (N at 121-37, Vol. 2, at 24-25, 34)

CRO M met with B for ten to fifteen minutes. B took no notes but seemed very upset. M told B that A was doing better but was still sleeping. B asked for dates but M had none. They also discussed paging problems. (M at 80-84)

AO J was shown the anonymous letter by B in the Technical Support Center. J told B he did not know about the extended plant tours, but that the remainder of the letter appeared accurate. B looked like he did not know what J was talking about when J said he had told B about A's sleeping two and a half years before. B dropped the issue of knowledge after J referring to AO F , said he had a witness to the conversation. B told \square he needed dates because otherwise it would never hold up and A could sue him for slander. On this morning, \square first heard that the nickname for A's crew was the Peach Bottom Crew. (\square at 73, 94-102, 134-35)

In his interview with B, F first saw the anonymous letter. He said A had been doing better but forgot about the February 1987 incident and about mentioning he had spoken to B about A two years earlier. B seemed concerned, told F it was hard to prove A was sleeping, and asked if F had dates and times. (F at 6-7, 70-75)

A0 V met with B in the Tech Support Center and said he would swear in court he had seen A sleeping more than once. B appeared nervous and visibly upset. (V at 64-70)

I&C Tech HH was asked by B if he had seen A sleeping or if A was unavailable for long periods. HH said no to both questions although he had seen A in the I&C shop asleep or appearing to be asleep at some time in 1987.

Prior to April 1987, in the control room, N pointed to A and HH saw him at the shift supervisor's desk in the control room, eyes closed, head bobbing. After HH had observed him for less than a minute, A got up and went into the bathroom. ('HH at 23-40)

A's Response:

A has no recollection of this incident in the control room and has no reason to believe HH is not an honest employee. (A , Vol. 3, at 15-17)

AO K also was interviewed by B for fifteen to twenty minutes and saw the anonymous letter for the first time. B asked if K had seen A sleeping on that 11-7 week and K said he had not actually seen A asleep. It was K's understanding that B asked only about the April 3-10 period. (K at 7-13)

AO R first saw the anonymous letter when

called him into the Tech Support B Center and asked him about it and about A's sleeping. R told him he had seen A sleeping but did not have dates and times. (R at 21, 32-35) . . Apr. 10, 1987 , at his request, spoke to Site Opera-A tions Director 00 (' C predecessor), who said management was ready to stand behind him. (Exhs. 12, 13, 14) After Apr. 1987 A approached AO K at SDS, maybe on an 11-7 shift, after B had interviewed had interviewed K , was apologetic and said he would try to change his ways and that he hoped there were no hard feelings. K said his problem with A was his sleeping on shift, which A denied. (K at 41-44, 51) Apr. - June 1987 CRO M observed A nodding off with his eyes closed at least six times, either at the shift supervisor's desk in the control room or at A's own desk in the shift supervisor's office on both the 3-11 and the 11-7 shifts. (M at 18-19) A's Response: has no recollection of these events. A (A , Vol. 2, at 70) May or June 1987 When six operators were moved to Unit 1 and the shifts were shuffled, AO R asked B why he was not being moved. B told R he was the most tolerant operator and that B wanted to keep him with A, (R at 51-52) June 1987 FHSRO KK objected when A used one of KK's defueling operators for a job inside containment that KK considered not well thought out. (KK at 25-26) About June 23, P FHSRO talking to I&C Tech HH 1987 learned that HH had seen A sleeping a couple of times in the I&C shop, but had failed to tell management about it during the April 1987 investigation. The incidents seemed to have occurred shortly before April 1987. P decided to talk to (SRG). (P at 40-44 to talk to P at 40-44; HH at 59-60, 62-64) A's Response: A has no recollection of sleeping in the I&C Shop and says that it would be difficult

- 25 -

because all the chairs are of the high pedestal type. (A , Vol. 3, at 13)

June 24, 1987

. .

FHSRO P told SRG PP about I&C Tech HH's story. PP said he knew about I&C of no such April sleeping investigation involving A , but would check with Director of Licensing and Nuclear Safety PP told P this boss. Later that day, told P that neither QQ nor Unit 2 Director Frank Standerfer knew of an investigation and that needed to talk to Site Operations Director C. (P at 44-46; Exhs. 18, 19)

P met with C , who had been informed of P's allegations by QG to tell him about HH's story about A sleeping. C concluded that the incident pre-dated April 1987, and said he would talk to HH again. (at 49-50; Exh. 21)

HH met with C and O , who told HH they knew he had seen A in the I&C shop and had not told B about it. HH said he did not want to get involved. (HH at 64-68)

After the meeting with HH the control room and spoke with A According to O , he strongly expressed to A the seriousness of sleeping or inattentiveness or the appearance of either. A said that he understood and was being careful to avoid the impression of such behavior. He also said he may have been tired during past 11-7 shifts, but had not been sleeping. (Exh. 20, at 1)

C informed Standerfer of what he had learned in the interviews and recommended that the investigation be terminated because it concerned second-hand information about a previously documented incident. Standerfer agreed and requested additional surveillance of A's shift for a short time. (Exh. 21, at 1)

June 26, 1987

FHSRO P again talked to C , who told him he was satisfied about the investigation and that no one was willing to swear that they saw A sleeping. (P at 50-54)

June 25, 1987

June 26-27, 1987

On the first night of the 11-7 shift, CRO L saw A sleeping around 1:00 or 2:00 a.m. and observed him for five minutes through the glass windows looking into the shift supervisor's office. Between approxi-mately 12:30 and 3:00 a.m., CRO N entered the shift supervisor's office and found 4 motionless with his head on his hands and his eyes closed. When N reentered the control room shaking his head, with a sour look on his face, M said something to the effect of "is he in there sleeping again?" and N answered yes. Upset, M. got up, walked into the shift supervisor's office, observed A for approximately twenty seconds sitting at the desk, not moving, right eye closed, elbow on the desk, and hand cupping his chin or behind his chin to hold his head up. M walked outside the shift supervisor's office, picked up a big black binder, and slammed it on the floor of the control room in front of the shift supervisor's door. Twenty seconds later, A ambled out and asked whether anyone was having trouble staying awake tonight. No one responded. M could not believe that A was sleeping even after the Peach Bottom incident. (M at 11-14; N 61-66; L , Vol. 2, at 5, 12-14) at

A's Response: A recollects on some night during this shift that CROs N and M did come into the shift supervisor's office, but A was awake. A did not acknowledge them, even though B had told A to acknowledge such employees, because employees often came into the office for business reasons. (A., Vol. 2, at 70-77)

CRO LL BAW A at about 6:30 a.m. with his chin on his chest and his eyes closed, but 1987 LL did not believe he was asleep. (LL at 5-7, 9-11)

June 29, 19871 left the control room at about 3 a.m. and, at 5:30 a.m., CRO N got a phone call from a fire protection trainer instructor who wanted to run a fire drill, which required the

1. This date is based upon an interview with RR

- June 27 or 28,

permission of the shift foreman. N tried unsuccessfully to page A several times in about a twenty-minute period. A finally returned the page but asked for CRO L He gave his permission for the drill. At about 6 a.m., O came in, then went back out, and returned just behind A . According to N, A looked bad and did not respond when N said, within O'shearing, that he had been paging A unsuccessfully for fifteen or twenty minutes. At about 6:30 a.m., A told N he had been at SDS and could not hear the page because of a fan. (N did not know what fan A meant.) A said he had then gone to Epicor but then said he had not been there. (' N thinks that he changed his mind because they were processing at Epicor and someone would have seen him there.) (N at 69-80; L , Vol. 2, at 34; see also M at 51-54)

A's <u>Response</u>:

....

recollects that he gave RR A permission by phone for the drill at some time during the shift and that he saw RR later outside the control room. He remembers telling N he had been at Epicor but does not recall changing his story and saying he was at SDS. He also recalls saying that apparently the page was not working at Epicor. He does not recall returning the page and asking for L . (A , Vol. 3, at 4-11)

Also on June 29, PP spoke with FHSRO and confirmed that P's concerns had been resolved satisfactorily. (Exh. 18)

Each night, C , O , or B 1987 uncharacteristically came in early, at about 4:30 or 5:00 a.m. (C was in at about 5:30 a.m. July 3.) (. J at 111-12; Exh. 23, at 1)

> FHSRO P ran into AO J at 6:45 a.m. and J told him that A slept on duty and that J would swear to it. (P at 57-59)

At their third meeting in several days, told C about the exchange and C assured P that everything was covered, the case was closed,

July 1, 2, 3,

July 2, 1987

and everyone had been talked to. \subset contacted O and made arrangements for the two of them to interview \Im and Aon July 3. (P at 65-67; Exh. 22, at 1)

July 3, 1987

. .

O and C met with A . (Exh. 23)

At about 6:30 a.m., C and O asked AO J to meet with them in C's office. AO R , as union steward, accompanied \Box but was told by C that it was more personal and he should wait outside. O asked about the October 1986 incident J described it, but < and and O were more interested in post-April 1987 sleeping incidents. They suggested company policy had changed at that time regarding sleeping and J assumed the policy was to fire individuals caught sleeping, but had seen no memorandum to that effect and did not understand why April was so important to them. J told them A had been doing better until that week and told them about M dropping the book and A taking more tours. J also told them he did not think A was malicious in his sleeping and that he should be removed from shift work, not fired. (T at 103-11, 117-22; R at 40-43) at 40-43)

O and C interviewed CRO N for about twenty minutes in C's office. Ntold them A was sleeping and had been asleep in the last week (referring to the notebook incident). C told N that management was aware of problem with A and was taking action to correct it. (N at 67, 137-46, 150-51, Vol. 2, at 25-26)

CRO M met with C and O at 7:00 a.m. for thirty minutes. M made his own notes. M gave O and C the yellow tab with the June 26 date on it to document the last time he had seen A sleeping and described A on that occasion as not moving, with at least his right eye closed. They asked if M touched him and M said no. O lectured M on what was sleeping. M told them that N also saw A sleeping. M's impression of C and O, based upon the conversation with them and also based upon the O/C notes, is that management July 6, 1987

FHSRO KK met with O and C in connection with the investigation of sleeping allegations. (KK at 31-35)

July 7, 1987

CRO M met with O again for thirty to sixty minutes at 7:45 a.m. M had asked for a meeting because he was very upset that O and C questioned his integrity. He told O that he did not want A back on the shift or he wanted off A's shift. O said that there was conflicting information about A's performance and that they tended to believe

A because he was a religious man. M expressed concern that all the CROs would get fired if A were caught sleeping but O said that would not happen. said that they would do something. (M at 106-112; M Exh. 3)

July 9, 1987

A second anonymous letter, this one to Standerfer, was received. The letter accused TMI-2 management of a cover-up, threatened to call the news media, and said that seven people would swear to having seen A asleep on more than one occasion. (Exh. 29)

CRO N met again with O, at N'sinstigation. AO R, union steward, was also present. O spoke about defining sleep and how he thought someone in the positions described was not comfortable enough to sleep, but would choke. He also said that A was a religious person and would not lie. Nsaid A had his eyes closed and was motionless for an extended period and Nthought he was asleep. (N at 146-49, Vol. 2, at 36-37; R at 38-40, 42)

C met with Standerfer and reviewed the status of the investigation with him. C suggested that one of them talk to the NRC and Standerfer told C to go. C briefed John Thomas of the NRC on July 9. That evening, for about two and a half hours, C, O, and B discussed the information and C concluded that they could not determine whether A had been sleeping but, because of the working relationship problems on the shift, A should be replaced with another SRO. At about

10:00 p.m., Standerfer called \leq at home and said that the NRC had called GPUN President Phillip Clark and that an investigation by GPU Security would begin the next morning. (Exh. 22, at 2)

July 10, 1987 A was relieved of licensed duties pending the outcome of the sleeping investigation (Memorandum from c to A (July 22, 1987))

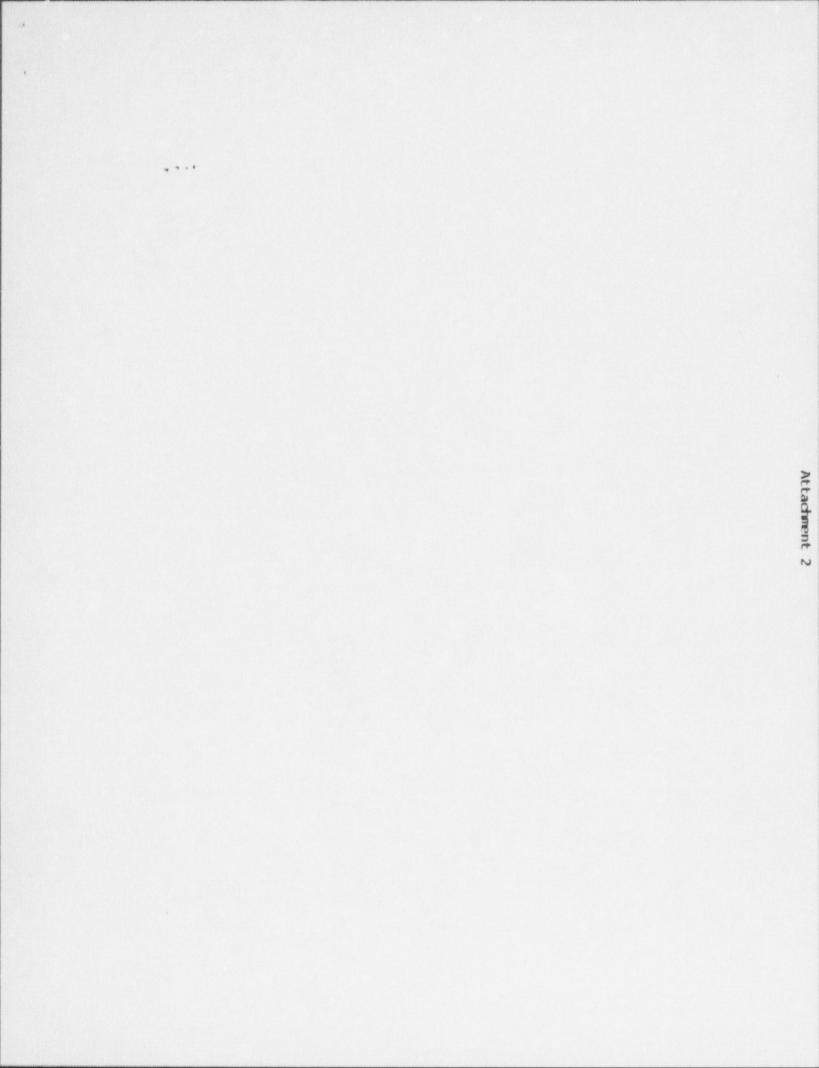
> O crossed out a night order book entry that said supervisors were allowed to sleep at work but not in beds. (Exh. 28)

July 14, 1987

A third anonymous letter was received, this time by Standerfer. It mentioned A's falling asleep at 3:00 p.m., inaccurate turnovers, Zeager Brothers Lumber Co., extended plant tours, and other allegations against A. The letter was eight handwritten pages and listed as those who could tell Standerfer about the allegations NF, L, R, M, K, V, and T. (Exh. 30)

July 28, 1987 C wrote a memorandum to Management Tour Personnel concerning the beds that had been found and guidelines if anyone was found sleeping. These guidelines included getting a second witness, observing the individual for two to four minutes, and calling to the individual. (Exh. 32)

Aug. 3, 1987 A was suspended with pay pending the outcome of the sleeping investigation. (Memorandum from F. Standerfer to A (Aug. 3, 1987))



Summary of Sleep-Related Personal Observations1

Z (SF)	Observed A sleeping in control room once between July 1986 and Feb. or Mar. 1987.
(CRO)	With H , observed A sleeping in control room on Sept. 17, 1986, diesel alarm incident resulted.
(CRO)	First observed A nodding off 1984-85; first saw A sleeping late 1985; then saw him sleep- ing during turnover briefing incident in front of crew, SeptOct. 1986, and with N , June 1987 notebook incident in shift supervisor's office.
(AO)	Observed A sleeping one time in shift supervisor's office during 1986.
X (CRO)	Observed A sleeping once in control room prior to Aug. 1983.
F (AO)	Observed A dozing off 1 or 2 times during each week of 11-7 between Oct. 1984 and June 1985, at SDS checkout, June 1985, and at turnover briefing inci- dent in front of crew, SeptOct. 1986; saw A sleeping once during week of Feb. 20-27, 1987.
H (CRO)	With T , observed A sleeping in control room on Sept. 17, 1986, diesel alarm incident resulted.
D (Machinist)	With E , observed A asleep in shift supervisor's office after Apr. 1985.
HH (I&C Tech)	Observed A possibly asleep in I&C shop 1987; also observed A dozing in control room after N pointed A out to HH.
(CRO)	First observed & sleeping during 1984; saw A sleeping in shift supervisor's office 12 times and at SS control room desk 12 times during 1984-87, including photocopying incident, Sept Oct. 1986 turnover briefing incident in front of crew, and June 1987 notebook incident.

^{1.} Citations to the depositions from which this information is drawn are contained in the partial chronology that is Attachment 1 to this letter. The partial chronology also describes the allegations in detail.

M.M (CRO)	When came on duty, typically observed A nodding off at end of 11-7 shift, last observation occurred after Mar. 31, 1987, but had been going on for 2 or 3 years.
M (CRO)	First observed A sleeping, 1984-85, and, with N, saw him sleeping in shift supervisor's office during June 1987 notebook incident; observed A nodding off more than 6 times during turn- over briefings in front of crew, Oct. 1986-Apr. 1987; and saw A nodding off at least 6 times, AprJune 1987.
FF (CRO)	With MM and LL, observed A asleep at shift supervisor's desk, fall 1986, trash can inci- dent resulted; observed A sleeping between June 1985 and June 1986, when GG kicked wall or door to shift supervisor's office to awaken A ; saw A , who was substituting for Z , nodding off during JanFeb. 1987.
R (AO)	Observed A dozing off during turnover briefing in front of crew, SeptOct. 1986.
4 A (AO)	Observed A sleeping in shift supervisor's office once prior to 1985.
E (Machinist)	Observed A sleeping up to 4 times, 1985, including incident in shift supervisor's office with D .
(AO)	First observed A asleep during July 1986; observed sleeping that was part of J incident Oct. 20-21, 1986, and sleeping during turnover briefing incident in front of crew, Sept Oct. 1986; most recent observation of A asleep occurred between Nov. 28 and Dec. 5, 1986.
W (CRO)	Observed A nodding off 3-6 times between beginning of 1983 and mid-1984.
(AO)	Observed A sleeping 5-10 times, 1983-July 1987, including turnover briefing incident in front of crew, SeptOct. 1986.
J (AO)	Observed A sleeping at least 40 times, Oct. 1982-Oct. 1986, including J incident with K, Oct. 20-21, 1986, and turnover briefing incident in front of crew, SeptOct. 1986; saw A dozing at Epicor II, Jan. 1987.
S (CRO)	Observed A nodding off once or twice, 1985- July 1987.

Three Mile Island Nuclear Station

Post Office Box 480 Middletown, PA 17057 717 948-8197

For Further Information Contact: Gordon Tomb News Release

Public Information Services

For Release:

1 -

Immediately

Date:

November 30, 1987 No. 48-87N

-

REPORT ON THI-2 SLEEPING ALLEGATIONS RECEIVED

Middletown, PA -- An independent, investigatory report into allegations that a shift supervisor at Three Mile Island Unit 2 had slept or been otherwise inattentive to his job has been received by GPU Nuclear Corporation and forwarded to the Nuclear Regulatory Commission.

The report has confirmed allegations that the individual had, on a number of occasions, slept or been otherwise inattentive to his job. Following receipt of the report, GPU Nuclear dismissed the shift supervisor under investigation.

The independent investigation was conducted for GPU Nuclear by Edwin H. Stier, former director of the New Jersey Division of Criminal Justice.

In his report, Stier concluded, "that a longstanding pattern" of sleeping on the job and inattention to duty had been established by the individual. "This pattern continued despite confrontations between (the shift supervisor) and members of his crew over the issue of sleeping and despite several warnings, beginning in October 1986, by TMI-2 management," Stier noted.

Stier further states, "This pattern was unique to (the individual shift supervisor being investigated). Our investigation uncovered no evidence that any other shift supervisor was even rumored to have slept while on duty."

-mone-

November 30, 1987 No. 48-87N

Stier notes that other supervisors and employees, particularly on the 11 p.m. to 7 a.m. shift took action to remain alert to duties by keeping busy or moving around.

*

The investigation revealed a pattern of inattentiveness to duty was substantiated by testimony from nearly two dozen co-workers. Interviews with plant personnel show unsuccessful efforts by the shift supervisor's co-workers to get him to deal with his inattention to duty.

The investigation began in mid-July following allegations about the individual contained in anonymous notes sent concurrently to GPU Nuclear management and to the NRC. The individual was removed from licensed operator responsibilities at that time.

In addition to allegations of inattention to duty, the notes claimed that the shift supervisor took extended plant tours placing him out of contact with the control room, demonstrated a periodic lack of knowledge of plant conditions, read non-work related material in the control room, and conducted inaccurate turnover briefings with the incoming shift.

Stier's investigation encompassed the additional allegations and found evidence to support each of them.

In July, GPU Nuclear senior management retained Stier to conduct an independent investigation into the anonymous allegations and the response to those allegations by the Company.

The investigation into management response to the allegations is continuing.

GPU Nuclear maintains a firm policy regarding worker attention to their jobs.

"We expect employees to be alert, attentive and busy when they're at work. Sleeping on the job is unacceptable behavior," said Philip R. Clark, GPU Nuclear President.

444