

[REDACTED]
August 29, 1991

withheld
ex. 6

Mr. James Lieberman
Director, Office of Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Lieberman:

On June 3, 1991, Mr. James H. Sniezek, Deputy Executive Director for Nuclear Reactor Regulation, Regional Operations and Research, sent to me a Demand for Information concerning a possible violation of plant Technical Specifications at Vogtle Electric Generating Plant ("VEGP"), Unit 1, in October 1988. In accordance with the Demand, I am submitting the attached response to you. I hereby request that this letter and its enclosure be withheld from disclosure in accordance with 10 C.F.R. § 2.790.

The events in question occurred on October 12, 1988 while I was on shift at Vogtle Unit 1 as the Operations Superintendent on Shift. In connection with these duties, I held, and still hold, a Senior Reactor Operator license from the NRC. In accordance with all of my training and my NRC license, I want you to be assured that I did not either willfully violate or intentionally disregard VEGP Technical Specifications.

The event in question was a pre-planned plant evolution during the first Unit 1 refueling outage. The evolution required the addition of hydrogen peroxide to the Reactor Coolant System ("RCS") to clean that system in a controlled fashion, in order to minimize radiation exposure to plant personnel. As discussed more fully in the attached response to NRC's Demand for Information, during my shift we did not add the hydrogen peroxide to the RCS and I was not involved in the three evolutions which occurred during the day shifts of October 12 and 13, 1988. Rather, individuals on my shift added hydrogen peroxide to the Chemical Mixing Tank.

VEGP Technical Specification 3.4.1.4.2 applies when the plant is in a "loops not filled" condition. At the time of this event, this Specification further provided that valves 1-1208-U4-176 and 1-1208-U4-177 should be secured closed; if open, the Action Statement required that they be "immediately" closed. As noted in the Demand for Information, I do not deny that during my shift valves 1-1208-U4-176 and 1-1208-U4-177 were open to fill the Chemical Mixing Tank. However, this did not amount to a willful or intentional violation on my part.

Information in this record was deleted
in accordance with the Freedom of Information
Act, exemptions 6
95-211

F/K

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During my shift we were draining down the RCS. In accordance with my training at the time, we viewed reaching "mid-loop" level as a significant milestone and were focusing on that point. At that time, I certainly did not believe that Technical Specification 3.4.1.4.2 would prohibit the addition of hydrogen peroxide to the chemical addition pot. Technical Specification 3.4.1.4.2 applies to a "loops not filled" condition. Given our focus on "mid-loop" operations and other activities during my shift, it did not occur to me that the Specification would apply prior to reaching "mid-loop" RCS level. Based upon subsequent guidance, I would no longer equate the terms "loops not filled" and "mid-loop." However, on October 12, 1988, because I did not even consider that we were in Technical Specification 3.4.1.4.2, my shift crew and I did not deliberately or willfully violate that requirement.

In addition, we were conducting a pre-planned outage activity. As with all activities of this kind, I was aware that the procedure would have been the subject of internal review for compliance with applicable procedures and requirements (including Technical Specifications). Perhaps this knowledge made me less "questioning" regarding the outage activity. Nonetheless, given my focus on "mid-loop," I doubt I ever had the opportunity to think about whether Technical Specification 3.4.1.4.2 prohibited opening of valves 1-1208-U4-176 and 1-1208-U4-177. It is for these reasons that I find the allegation of an intentional violation extremely troubling.

My recollection of the events of October 12, 1988 are not clear, and much of what I previously testified to in my interview with the NRC investigator was based upon my current understanding of "loops not filled" and reconstruction of the shift in question. I believe it is important that the NRC know that during that shift I was involved in several significant activities other than the RCS cleaning evolution. In fact, it is fair to say that my most memorable and significant activities on that shift concerned some damage that occurred to a diesel generator's keep warm tank heater. While I was aware that the planned chemical cleaning was scheduled and would be conducted, I was not intimately involved in the operation. Moreover, contrary to the suggestion in the Demand for Information and NRC cover letter, I do not recall and do not believe that on October 12, 1988, I ever made a conscious decision regarding the allowability of entry into Technical Specification 3.4.1.4.2. I am aware that this issue was discussed by others later that day and by Georgia Power Company during a subsequent review of the event. However,

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as discussed above, we never reached the question on my shift because we did not believe Technical Specification 3.4.1.4.2 would apply until the RCS level reached "mid-loop."

In retrospect, I believe I made a mistake on October 12, 1988 insofar as I did not properly understand the definition of "loops not filled" and the applicability of Technical Specification 3.4.1.4.2. Georgia Power Company subsequently provided additional guidance on that matter. I assure you that, had I been aware that this Specification applied, I would not have ignored its terms. I honestly believe I would have viewed the procedure for the planned outage activity as implicating a grey area of technical specification compliance. It has never been my practice to routinely enter Technical Specification "immediate" Action Statements. I believe I would have sought some management review or guidance.

At bottom, I believe I am a conservative operator, committed to full adherence to applicable procedures and requirements. I do not believe that NRC enforcement action is warranted or necessary.

I affirm that the information provided herein is true and correct to the best of my knowledge.

Sworn to and signed before
me this 22nd day of August,
1991.

Mary N. Bentley
Notary Public
My Commission Expires:
MY COMMISSION EXPIRES MAY 12, 1994

Respectfully yours,

Jimmy Paul Cash
Jimmy Paul Cash

Enclosure

cc: Regional Administrator,
NRC Region II

Assistant General Counsel for
Hearings and Enforcement
Office of Enforcement - U.S. NRC

RESPONSE TO DEMAND FOR INFORMATION

A. Explanation of Licensee's Activities.

In the fall of 1988 I was assigned as an Operations Superintendent on Shift ("OSOS"), a Senior Reactor Operator position supervising the operations of Unit 1 of the Vogtle Electric Generating Plant ("VEGP"). Although I was not actively involved in the planning for the first Unit 1 refueling outage, I was generally aware that the Outage and Planning organization had put substantial effort in planning and scheduling the activities to be performed in the outage. One of the pre-planned and scheduled activities for the outage was the addition of hydrogen peroxide to the Reactor Coolant System ("RCS"). In the fall of 1988, I was aware that the purpose for adding the hydrogen peroxide was to create a change in chemistry in the RCS which would break up or "burst" radioactive contamination (referred to as "crud"). I also understood that the hydrogen peroxide addition for chemical cleaning was intentionally planned to occur at "mid-loop" elevations of water in the RCS.

I was licensed at the Joseph Farley nuclear plant, located near Dothan, Alabama, in 1985, and worked at the Plant during a refueling outage. I do not recall chemical cleaning of the RCS at Plant Farley.

On the night shift of October 10-11, 1988, I served as the OSOS. Mr. John Bowles served as my Shift Supervisor, as I recall and as confirmed by log entries. Reviewing the logs, I can recall preparation for drain-down of the RCS by installation of temporary level indication. This drain-down would be by procedure, specifically VEGP Procedure 12006-C, which sets out the steps for unit cooldown to Cold Shutdown (Mode 5).

On the night shift of October 11-12, 1988, I again served as OSOS. The principal operational evolution on this shift was the draining of the RCS to "mid-loop." As we went through Procedure 20006-C, the shift was watching tygon tube indications of RCS level, residual heat removal pump discharge pressure, and other activities preparatory to "mid-loop" operations. I knew that the addition of hydrogen peroxide to the RCS was a planned evolution and scheduled for this shift if "mid-loop" RCS levels were reached. I assume that, at shift turnover, we discussed the evolution because it was planned for our shift but I do not recall specifics of the shift turnover or any other shift briefings. I recall heightened awareness because the plant was going to "mid-loop operations." I, and I believe the other members of my shift, regarded the hydrogen peroxide addition as a new evolution which had not been executed before, since for VEGP this was the first refueling outage.

As OSOS I would typically coordinate activities between various plant departments, such as the Health Physics and

Chemistry Department and the Operations Department so that licensed operators in the Control Room were not distracted as they "maneuvered" the Plant. I do not believe, based on my practice, my recollection and my review of the Operations logs, that I was involved intimately in the actual addition of hydrogen peroxide to the RCS (e.g., opening and closing of valves). My recollection is that my shift was concerned with personnel accountability in the Auxiliary Building (due to the potential for "crud" to result in exposure to workers) and that Health Physics and Chemistry personnel were contacted to monitor radiation levels and prepare for the evolution. My personal attention between midnight and shift turnover on my shift relative to the "keep warm" heater on diesel generator "A" is more memorable than the hydrogen peroxide addition evolution because, during restoration of a clearance, the heater was not refilled with water prior to being re-energized and it was damaged as a result. I spent several hours at the diesel generator and making plans to replace the damaged heater, including locating a spare. I also recall difficulty encountered in pulling the pressurizer manway requiring my involvement. The details of the hydrogen peroxide addition, then, were peripheral to my primary attention on the diesel generator and the draining to "mid-loop."

I do not recall any discussions on my shift which specifically addressed the Reactor Make-up Water Storage Tank ("RMWST") discharge valves, or any concern raised relative to the opening of valves. I also do not recall discussion concerning how the hydrogen peroxide would be added to the RCS. I do remember that at the beginning of shift I considered generally the potential impact of the planned evolution on boron concentration in the RCS and that the addition of hydrogen peroxide with the relatively small amount of mixing water would not cause a significant change in boron concentration. This was basically a thought process, not an actual calculation, in light of sensitivity to shut down margin ("SDM"). I also have no recollection of discussions with on-shift or off-shift personnel prior to shift turnover that Technical Specification § 3.4.1.4.2 would be entered by filling of the Chemical Mixing Tank. Further, to the best of my recollection, the addition of hydrogen peroxide to the RCS was not accomplished on the night shift of October 11-12, 1988, and at shift turnover to the day shift the plant conditions required for the evolution (i.e. mid-loop levels of the RCS) still had not been achieved. Contrary to the suggestion in the Demand for Information, I was not involved in any of the other three chemical addition evolutions performed by the Day Shift on October 12 and 13, 1988.

At the time of my shift on October 11-12, 1988, I was aware of Technical Specification § 3.1.4.2.1's provision applicable to RMWST valves with "loops not filled." As I understood the status of the Unit during my shift, a RCS level of 188 feet 0 inches was

viewed as "mid-loop" levels of the RCS and I viewed that level as synonymous with "loops not filled." During my shift it appears that the RCS level was decreased from 194 feet when my shift came on. The enclosed "Operations Supervisor Relief Checklist" for October 11, 1988 (when I came on) confirms my recollection that the RCS evolution of "mid-loop" condition was my shift's focus: my entry at turnover noted that we would have to "drain to 188' (Mid-loop +1/f).". A similar checklist for the October 11-12, 1988 shift change (when I went off) confirms my recollection that my shift had not completed draining to mid-loop and that the hydrogen peroxide had not yet been added to the RCS at shift turnover. Consequently, as I understood the status of the Unit as I turned over to the day shift, the "loops" were "filled"; the RCS level was above the top of the loops. In other words, as I understood plant conditions and the definition of "loops not filled" on October 11-12, 1988 during my shift, Technical Specification § 3.4.1.4.2 did not apply to the activities on my shift.

Contrary to the implication on page 2 of the Demand for Information, as of October 12, 1988 I did not view the addition of hydrogen peroxide to the Chemical Mixing Tank preparatory to the hydrogen peroxide addition to the RCS on my shift as entrance into the Technical Specification's "Action Statement." Historic log entries, in particular a late entry on the Shift Supervisor's Log between 0507 and 0533 made by the Shift Supervisor, Mr. John Bowles, indicate that RMWST valves 1-1208-U4-176 and 1-1208-U4-177, among others, were opened at 0400 on my shift under a functional clearance to allow the addition of water from the RMWST to "load" the hydrogen peroxide into the Chemical Mixing Tank. I do not remember this level of detail (i.e. opening and closing of valves) on my shift. I do not recall Mr. Bowles placing the late entry in the Shift Supervisor Log nor do I know his exact reasons for the entry. Looking at the entry itself, it may be that the late entry by my Shift Supervisor reflects his and my awareness that the planned entry at mid-loop would constitute an entry into the action statement under Technical Specification 3.4.1.4.2. Again, I do not recall the Technical Specification discussed during our shift but I assume that Mr. Bowles and I were aware, at the time of the late entry, that the Technical Specification would apply to the opening of the RMWST discharge valves if loops were not full.

In addition to my understanding of "loops not filled" and that condition's inapplicability to my shift, another reason why I am sure that I did not think that any Technical Specification constrained the actual operations on my shift of October 12th was because those activities were performed by procedure, specifically VEGP 12006-C and the chemical addition procedure for the RCS. These procedures, I assumed, had been reviewed thoroughly for compliance with Technical Specifications, FSAR and other commitments.

During my interview on February 7, 1990, NRC representatives appeared interested in operational practices at the VEGP in order to understand the hydrogen peroxide addition evolution subject to their investigation. As a result, aspects of my discussion do not differentiate between my recall of the evolution and my then-current understanding of general practice. For example, while I assume that the planned activities associated with the hydrogen peroxide addition were discussed, I have no recollection of that fact. Similarly, while I also assume that, as is typically the case, before performing the functional test under VEGP Procedure 00304-C my shift evaluated the possible application of the Technical Specification and potential impact on personnel safety, I do not actually recall such an evaluation.

I believe that my recollection of the hydrogen peroxide evolution arises from the fact that, apparently during shift turnover and after the RMWST valves had been manipulated on my shift, the Shift Supervisor for the oncoming shift concluded that Technical Specification § 3.4.1.4.2 was applicable. Only after the valve manipulation on our shift, then, did I become specifically aware that the planned addition of chemicals at reduced inventory levels above "mid-loop" could constitute entry into the Action Statement of Technical Specification § 3.4.1.4.1. This awareness arose, in part, from additional guidance on the meaning of "loops not filled" provided by my employer, Georgia Power, to Operations personnel. The guidance was based, in part, on input from the NSSS vendor long after the event.

B. Explain Why NRC Sanctions Are Inappropriate.

First, on October 11-12, 1988 I was aware that the hydrogen peroxide addition to the RCS was scheduled for my shift and my general responsibilities under Vogtle procedures extended to assuring compliance with Technical Specifications on my shift; however, formal enforcement action against me individually is not appropriate since I was not specifically responsible for the actual implementation of the evolution. As the work day unfolded, I was not specifically aware of the manner and method by which the scheduled and pre-planned hydrogen peroxide addition would be carried out. In fact, the Support Shift Supervisor on my crew, judging from the Functional Test form under the clearance for the RMWST valves, appears to have been delegated the responsibility for carrying out this pre-planned task. At the time of the opening of the RMWST valves, at approximately 5:00 a.m. (Eastern) on October 12th, my attention was directed principally at restoring the diesel generator keep warm jacket water heater (the Unit 2 B diesel generator jacket water immersion heater was removed for this purpose on October 12, 1988; the maintenance work order for the Unit 1 diesel "A" train repair indicates that I ordered the MWO be treated as "URGENT" at 2245 (Eastern) on October 11, 1988.

Moreover, I was unaware at the time of the hydrogen peroxide addition that the plant was in a "loops not filled" condition, as previously indicated. At the start of the shift, and during the shift, my focus was reaching "mid-loop" elevations of the RCS. I did not know, and did not consider, that this chemical cleaning activity was being conducted in Mode 5 "loops not filled." Only in hindsight have I become aware that Unit 1 was technically in a "loops not filled" condition during my shift of October 11-12, 1988.

In addition to my lack of specific responsibility over the functional test and my lack of awareness of the Technical Specification applicability during my shift due to inadequate understanding of "loops not filled," I also do not feel enforcement sanctions are appropriate because I would never intentionally or willfully violate Technical Specifications. As an SRO at Plant Vogtle I have served as a Unit Shift Supervisor, On-Shift Operations Supervisor, and as a Unit Superintendent. In each job I strove to foster a safety conscious, team-oriented culture. I stressed that our most important job is to ensure the safety of the public, the reactor, and plant personnel. I worked extremely hard to set an example for my subordinates and to my peers that a licensed person must take seriously his duties and responsibilities. I would never knowingly violate Technical Specifications, nor would I allow such an event to occur. I believe that I have earned the respect of my fellow ROs and SROs, other plant personnel and our NRC Resident Inspectors. I am a dedicated, competent SRO who has always done his job to the best of his ability.

C. Technical Specification Decision-Making.

The first step I take when I have a significant question about the meaning of a Technical Specification is to review the Technical Specification Clarification Book. This document has a record of questions that have already been resolved after significant review.

If the answer to my question is not in the Technical Specification Clarification Book, the next step is to consult with plant management. The facility licensee encourages this consultation, both in training and by procedure (VEGP-10000-C). During normal working hours (7-4, Monday - Friday) this means a call to the Operations Manager. If it is after hours or on a weekend this would be a call to the Operations Duty Superintendent. The Operations Manager or Duty Superintendent would then consult with Engineering, Licensing, and other management, as necessary, to resolve the question. Oftentimes on more difficult questions, this includes input from corporate representatives, vendors and the NRC Resident Inspectors. Other unusual conditions also would be addressed first by consulting

the Operations Manager or Duty Superintendent as appropriate. They would resolve the situation by calling upon the appropriate plant personnel and management.

My method of instructing subordinates in resolving questions has two parts: practice and performance. First, I spend a large amount of time with new licensees discussing actual and hypothetical situations. I describe a situation and ask them how they would address it. This approach requires these fellow workers to consider: 1) plant conditions, 2) potential safety implications, and 3) an appropriate response. A questioning attitude is nurtured this way: What is the plant's condition? What are the potential implications of the situation, including compliance and personal safety concerns? What is the safe, technically appropriate response which is in compliance and protects the plant and its workers? I then critique their response. This is practice in resolving problems.

Performance, the second part of teaching subordinates how to resolve problems, is to involve them in the actual resolutions. When a question or unusual situation occurs I have always taken great pains to explain how the question was resolved as well as what the answer is. Whenever possible, I also involved my subordinates in any discussions with management so they would better understand the process of resolving technical issues. As a Shift Supervisor, I believe that this involvement is extremely important. Care must be taken so that unskilled or unprepared employees do not make decisions beyond their ability, but at the same time you need to motivate them to perform or participate in tasks within their ability. This builds teamwork and teaches, by example, a conservative, safety-oriented approach to resolving problems.

D. Involvement in Post-Event Review by the PRB.

I am aware the Plant Review Board ("PRB") reviewed the event and I know that there was some research done for this review. However, I was not involved in this effort. I do not remember being questioned or supplying information for this review.

Cash.Res

**ATTACHMENTS TO RESPONSE
TO DEMAND FOR INFORMATION**

1. Operations Supervisor Relief Checklist, October 10, 1988
(1 page) (Night to Day Shift Turnover)
2. Operations Supervisor Relief Checklist, October 11, 1988
(1 page) (Day to Night Shift Turnover)
3. Operations Supervisor Relief Checklist, October 11, 1988
(1 page) (Night to Day Shift Turnover)

Approved <i>W. J. [Signature]</i> Date <u>5-16-88</u>	Logtite Electric Generating Plant NUCLEAR OPERATIONS FOR INFORMATION ONLY Unit <u>COMMON</u> Georgia Power	Procedure No 11870-C Revision No 7 Page No 1 of 1
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MANUAL SET NO. 12

OPERATIONS SUPERVISOR RELIEF CHECKLIST

Date 10-10-88 Unit 1 Mode 5 Power Rx 4C (1-A-CPS)
 Tavg 95 °F (591°F) RCS Press 65 psig (222 psig) (Mode 1)
 OFF-GOING OSOS JIMMY PAUL CASH SHIFT NIGHT
 ON-COMING OSOS John Hopkins SHIFT DAY

☒ Unit 2 Status
HFT-CV #4 Opening problem (2 BTRs) [Signature] 11:55
① Safety lifted on #3 Stm Line

☒ Special Watches Required (Location And Type)
Fire Watches

☒ Special Conditions Surveillance Log
☒ Off Normal Conditions/Major Equipment Outage Status
① Hot well draining in progress ② Leak Testing
Tygon Tube ③ I+C Working on Conversions for
Temp RV I S ④ Channel heads flushed & N2 Connected

- | | |
|---|---|
| <input checked="" type="checkbox"/> Tech Spec Surveillance In Progress Status | <input checked="" type="checkbox"/> Shift Briefing Book |
| <input checked="" type="checkbox"/> Tech Spec Surveillance Testing Overdue Report | <input checked="" type="checkbox"/> Standing Orders |
| <input checked="" type="checkbox"/> LCO Status Log | <input checked="" type="checkbox"/> Daily Work Schedule |
| <input checked="" type="checkbox"/> Shift Manning | <input checked="" type="checkbox"/> Waste Management Status |
| <input checked="" type="checkbox"/> Switching Orders/ Tagging In Progress | <input checked="" type="checkbox"/> Unit Control Log |
| <input checked="" type="checkbox"/> Lifted Wires And Jumpers in Progress | <input checked="" type="checkbox"/> Caution Tag Log |
| <input checked="" type="checkbox"/> Temporary Mods in Progress | <input checked="" type="checkbox"/> Record Of Pulled Annunciator Cards |
| <input checked="" type="checkbox"/> Night Order Book | <input checked="" type="checkbox"/> Beeper Turned Over |
| | <input checked="" type="checkbox"/> Received OSOS Key Ring and 3 VA Masters |

REMARKS: No [Signature]

ON-COMING OSOS [Signature] 10-11-88 10513
 Initials Date Time
 OFF-GOING OSOS [Signature] 10-11-88 0513
 Initials Date Time
 REVIEWED BY [Signature] 10-14-88
 Operations Supt Date

10/10/88
 0208

Approval <i>W. B. Williams</i>	Vogtle Electric Generating Plant NUCLEAR OPERATIONS FOR INFORMATION ONLY Unit <u>COMMON</u> Georgia Power	Procedure No 11870-C
Date 5-16-88		Revision No 7
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MANUAL SET NO. 12

OPERATIONS SUPERVISOR RELIEF CHECKLIST

Date 10-11-88 Unit 1 Mode 5 Power Rx 40 CPS (I-A-CPS)
 Tavg 109 °F (591°F) RCS Press 0 psig (2224 psig) (Mode 1)
 OFF-GOING OSOS JOHN HOPKINS SHIFT DAY
 ON-COMING OSOS SPC A, H SHIFT NIGHT

- ☒ Unit 2 Status
HFT
Shell Waring
MSR SKV set in prog
- ☒ Special Watches Required (Location And Type)
Fire
Tygon Tube - RCS @ 194°F
- ☒ Special Conditions Surveillance Log
- ☒ Off Normal Conditions/Major Equipment Outage Status
Hand drained, RCS @ 194°F B' RHR in SDC.
A'D/G
Drain #4 Accum, Hot
- ☒ Tech Spec Surveillance In Progress Status
- ☒ Tech Spec Surveillance Testing Overdue Report
- ☒ LCO Status Log
- ☒ Shift Manning
- ☒ Switching Orders/Tagging In Progress
- ☒ Lifted Wires And Jumpers in Progress
- ☒ Temporary Mode in Progress
- ☒ Night Order Book
- ☒ Shift Briefing Book
- ☒ Standing Orders
- ☒ Daily Work Schedule
- ☒ Waste Management Status
- ☒ Unit Control Log
- ☒ Caution Tag Log
- ☒ Record Of Pulled Annunciator Cards
- ☒ Beeper Turned Over
- ☒ Received OSOS Key Ring and 3 VA Masters

REMARKS: Run A' D/G oil Jacket H₂O Asap (Recirculation System)
Vent remaining in accumulator, 10 a time Notify CMT Hr?
Tag #4 Accum when drained
* Vent PRR, Rx head, remove manway, drain to 188' (Mid loop + 1 ft)

ON-COMING OSOS JH 110-11-88 1720
 OFF-GOING OSOS JH 110-11-88 1720
 REVIEWED BY W. B. Williams 11-14-88
 Operations Supt Date

10-11-88 Rev
W. B. Williams

Approval
[Signature]
Date
5-16-88

Loggite Electric Generating Plant
NUCLEAR OPERATIONS

FOR INFORMATION
UNIT COMMON
Georgia Power

Procedure No
11870-C
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MANUAL SET
NO. *12*

OPERATIONS SUPERVISOR RELIEF CHECKLIST

Date *10/11/88* Unit *1* Mode *5* Power Rx *40* (2-A-25)
Tavg *85* °F (591°F) RCS Press *0* psig (2224 psig) TMode *1*

OFF-GOING OSOS *JIMMY PAUL CASH* SHIFT *NIGHT*
ON-COMING OSOS *John Hopkins* SHIFT *DAY*

☒ Unit Status

HFT
BBOS (LPR)
Turbine in run

☒ Special Watches Required (Location And Type)

Fire Watches
Tygon Tube

☒ Special Conditions Surveillance Log

☒ Off Normal Conditions/Major Equipment Outage Status

0.4" DG Jacket Water, Keep main Heater burned up
0.2" DG Jacket Water, Keep main Heater burned up
0.2" DG Jacket Water, Keep main Heater burned up

☒ Tech Spec Surveillance In Progress Status

☒ Shift Briefing Book

☒ Tech Spec Surveillance Testing Overdue Report

☒ Standing Orders

☒ Daily Work Schedule

☒ LCO Status Log

☒ Waste Management Status

☒ Shift Manning

☒ Unit Control Log

☒ Switching Orders/ Tagging In Progress

☒ Caution Tag Log

☒ Lifted Wires And Jumpers in Progress

☒ Record Of Pulled Annunciator Cards

☒ Temporary Mods in Progress

☒ Beeper Turned Over

☒ Night Order Book

☒ Received OSOS Key Ring and 3 VA Masters

REMARKS: *None*

ON-COMING OSOS *SD 10-12-88 0508*
Initials Date Time

OFF-GOING OSOS *SD 10-12-88 0508*
Initials Date Time

REVIEWED BY *WJ Smith* *10-14-88*
Operations Supt Date