50-498

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

January 16, 1996

LICENSEE: Houston Lighting and Power Company (HL&P), et al.

FACILITY: South Texas Project, Units 1 and 2 (STP)

SUBJECT: SUMMARY OF DECEMBER 12, 1995, MEETING ON HL&P'S APPLICATION FOR A SPECIAL TEST EXCEPTION (STE) FOR THE STANDBY DIESEL GENERATOR (SDG) AND ESSENTIAL COOLING WATER (ECW) SYSTEMS

On December 12, 1995, representatives of HL&P and NRC staff met to discuss the licensee's application for a proposed license amendment on the above subject. Meeting attendees are listed in Attachment 1. Handouts provided by the licensee are in Attachment 2.

The proposed amendment, dated May 1, 1995, as supplemented by letters dated August 28 and November 22, 1995, would provide an STE that would allow an extension of the SDG allowed outage time (AOT) for a cumulative 21 days on each SDG, and allow an extension of the ECW loop AOT for a cumulative 7 days on each ECW loop, once per fuel cycle. The staff had previously informed the licensee, by letter to the licensee dated November 22, 1995, of those items that the staff wanted to discuss at this meeting.

The meeting began with introductory remarks by the NRC staff and the licensee. The general purpose of the meeting was for the staff to obtain a better understanding of the application and to determine what additional information the licensee needed to provide for the staff to complete its review. The staff also assured the licensee that their application was receiving the appropriate review priority within the NRC, given the nature of the application and its complexity.

The licensee then provided an overview of the application and provided specific responses to the items in the staff's letter of November 22, 1995. The staff commented on and asked for additional clarification on both the licensee's overview and specific responses. During the discussions, the licensee agreed to propose more specific technical specification (TS) wording for controlling maintenance in the switchyard, and agreed to revise the proposed TSs to allow only 2 hours with no operable SDGs (the same time as the current TSs allow), during the STE.

At the end of the discussions, the staff identified the following additional information/clarification for the licensee to submit on the docket: (1) the single-train results for the small-break and large-break loss-of-coolant accidents (SBLOCAs and LBLOCAs), (2) a summary of the LBLOCA dose evaluation assuming only one train of containment spray is available, and (3) a summary of those situations where one safety train is not adequate to mitigate the consequences of a design basis accident, or where one safety train is not adequate to provide a safety function.

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The staff thanked the licensee for the meeting and indicated that it was extremely useful in understanding the application and identifying the additional information it needs to complete its review.

Thomas W. Alexion

Thomas W. Alexion, Project Manager
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Office of Nuclear Reactor Regulation

Docket Nos. 50-498 and 50-499

Attachments: 1. List of Meeting Attendees
2. HL&P Meeting Handouts

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ORIGINAL SIGNED BY:

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cc w/atts: See next page

DISTRIBUTION: Meeting on December 12, 1995

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MEETING BETWEEN HL&P AND NRC ON PROPOSED SPECIAL TEST EXCEPTION

December 12, 1995

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ATTACHMENT 1

SOUTH TEXAS PROJECT

21 DAY DIESEL GENERATOR TECHNICAL SPECIFICATION CHANGE

WORLD CLASS PERFORMANCE

COMPREHENSIVE RISK MANAGEMENT PROGRAM

December 12, 1995

ATTACHMENT 2

Agenda

- Introduction
- Technical Specification Change Summary
- South Texas Project Unique Design Features

Introduction

- Meeting Objectives:
  - Describe STP Technical Specification submittal.
  - Respond to Questions submitted by NRC
  - Tour Switchyard and Control Room.

BACKGROUND

Background

Proposed Technical Specification Change will allow STP to take advantage of our unique design features while still maintaining safety and reliability.

Technical Specification Change Proposal

- Present Technical Specification requires three (3) Standby Diesel Generators (SDG) OPERABLE in Modes 1-4.

- Present Technical Specification allows a 72 hour AOT

- Requested change will allow a 21 day AOT once per train per fuel cycle.

- Provide on-line diesel maintenance windows to remove substantial diesel scope from outage

Submittal Chronology

- May 1, 1995 - Original Submittal
- August 28, 1995 - Respond to initial set of questions
- November 22, 1995 - Respond to a second set of questions
- December 12, 1995 - Meeting with Electrical Systems Branch

LCO Requirements

- The requirements for two (2) of the onsite power sources specified in Specification 3.8.1.1.b AND the two (2) supporting ECW loops specified in Specification 3.7.4 are OPERABLE;

- The circuits required by Specification 3.8.1.1.a are OPERABLE;

- The equipment specified in ACTION 3.8.1.1.d is OPERABLE;

- The circuit between the 138 kV offsite transmission network, via the Emergency Transformer, and the onsite Class 1E Distribution System shall be functional and available;

- The technical support center diesel generator and the positive displacement pump are functional and available;

- Planned maintenance on the equipment specified in ACTION 3.8.1.1.d is suspended;

- Maintenance in the switchyard is controlled.

Required Action

24 Hour ACTION to restore an LCO requirement; otherwise

- Shutdown the plant, or
- Exit the STE and apply the appropriate Technical Specification

Assess the configuration using the Configuration Risk Management Program

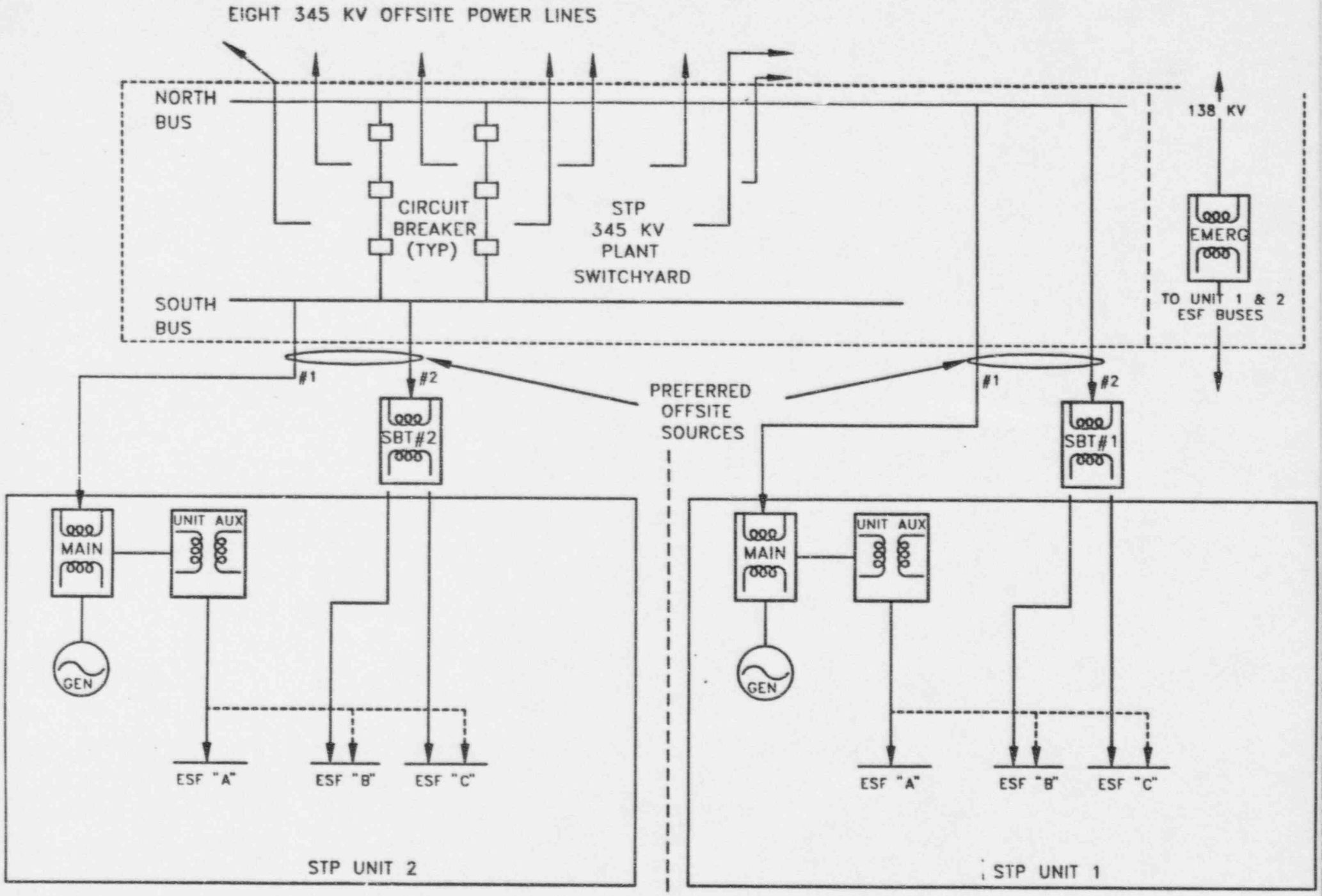
- Configuration Risk Management Program may require action in shorter time than specified by STE
- Based on risk significance of the specific configuration

SOUTH TEXAS DESIGN FEATURES AND REVIEW

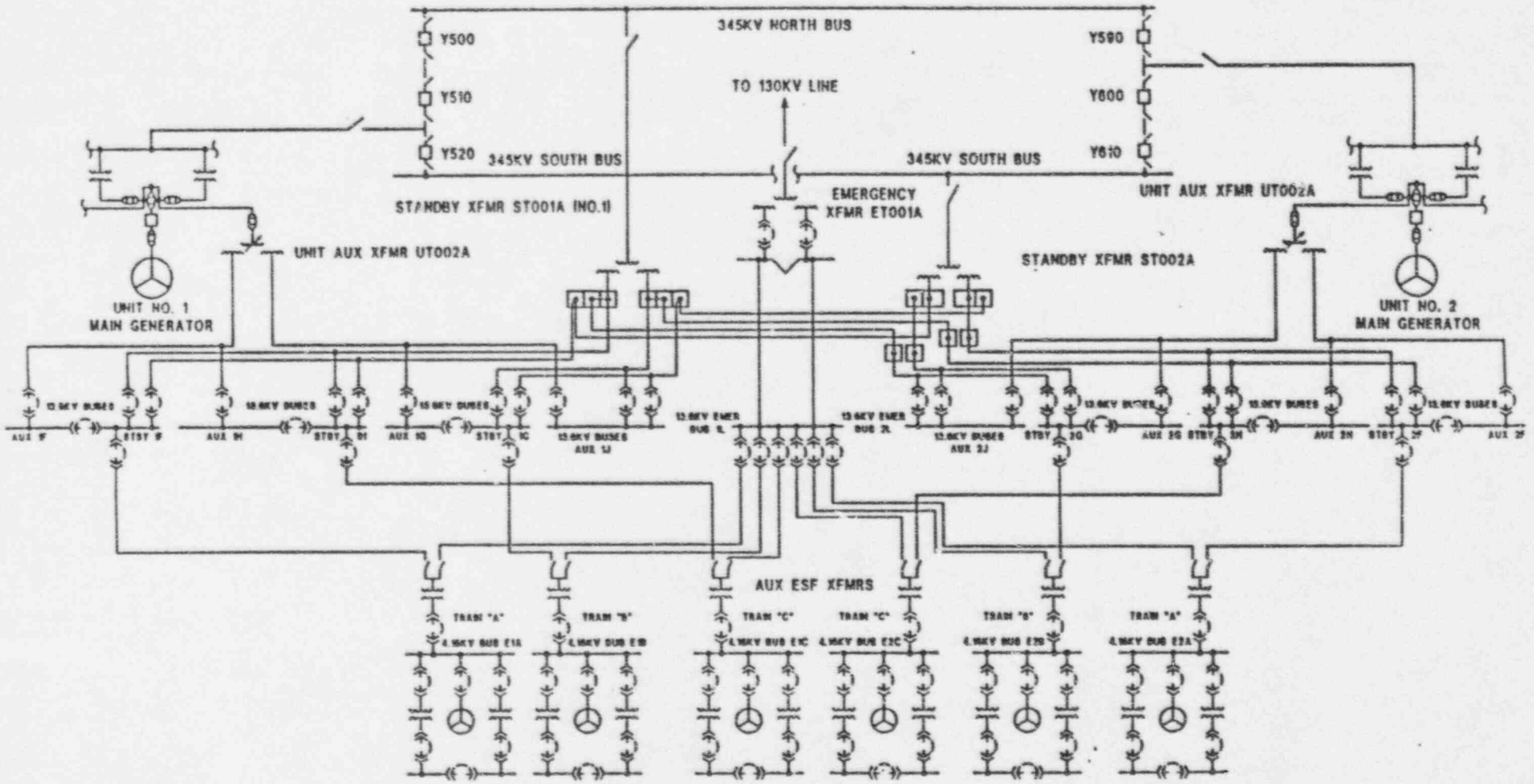
South Texas Project Unique Design Features

- Eight Offsite 345 kV Lines
- Equipment per Unit
  - Three 100% Capacity ESF Diesel Generators
  - Three Complete Mechanical ESF Trains
    - Three Low Head Safety Injection Pumps
    - Three High Head Safety Injection Pumps
    - Three Containment Spray Pumps
  - Three RHR Pumps (Not part of Safety Injection)
  - Two Charging Pumps (Non ESF)

DESIGN FEATURES: OFFSITE POWER



DESIGN FEATURES: OFFSITE POWER



SOUTH TEXAS PROJECT (STP) SPECIAL TEST EXCEPTION (STE)
FOR THE STANDBY DIESEL GENERATOR (SDG)/ESSENTIAL COOLING
WATER (ECW) SYSTEMS

DRAFT

BACKGROUND: STP Licensing Basis for SDG/Electric Power Operation

According to the STP Safety Evaluation Report (SER) Section 8.3.1 two out of three Engineered Safety Features (ESF) electrical power divisions are necessary to mitigate the consequences of a design basis accident. This is further supported by the following examples from the Updated Final Safety Analysis Report (UFSAR):

Examples: Section 15.1.5.2 - 2 high head safety injection (HHSI) trains needed for main steam line break (MSLB).

Section 9.2.2.2.1 - 2 component cooling water (CCW) trains are capable of performing the heat removal function during a design basis accident (DBA).

Section 9.2.1.2.2.3 - A minimum of 2 essential cooling water (ECW) trains is required to operate following a DBA.

The response to NRC Question 6 (August 28, 1995 supplement) indicates that in certain cases an update of the analysis of record was not performed to demonstrate that one safety train can mitigate accidents. One of the critical issues which must be resolved is whether the licensee's evaluation outlined in the May 1, 1995, application assumes that only one ESF electrical power division is needed to mitigate certain accidents. If this assumption is made, the staff needs to understand the basis for this assumption.

Questions/Comments:

1. **What is the minimum ESF electrical power division assumption(s) used in the evaluation as outlined in the May 1, 1995 application? In the cases where the number of ESF power divisions cited in the May 1, 1995, application is not consistent with the licensing basis, please identify and justify the methods and assumptions used to discount the consequences of certain postulated accidents. Also, when an SDG is taken out-of-service, did the licensee assume that the whole ESF electrical power division will be inoperable given a Loss of Offsite Power Event for the purpose of calculating the decrease in plant safety? If not, why not? The NRC staff expects to selectively examine, during the site visit, how the electrical power system was modeled in the STP evaluation outlined in the May 1, 1995 application.**

   The initial conditions used for the evaluation outlined in the May 1, 1995 application were:

   - Two (2) ESF electrical power divisions OPERABLE,
   - The Essential Cooling Water train inoperable for the first seven (7) days,
   - The third ESF electrical division having all ESF equipment OPERABLE after the ECW train is returned to service,
   - The Standby Diesel Generator inoperable all 21 days of the STE.

With regard to removal from service of an ESF DG, a loss of offsite power during the DG out of service time would result in a loss of 4.16KV ESF electric power for the affected train. The remaining ESF DGs and other DGs within the scope of the PSA (e.g., TSC DG, BOP DG) would be assumed to function commensurate with their estimated unavailability and failure rates.

Since the most limiting set of conditions would be an accident concurrent with a loss of offsite power and the loss of an entire safety train, an analysis was performed to determine impact on plant safety under these conditions. With the loss of offsite power, no credit was taken for the ESF electrical power division with the inoperable Standby Diesel Generator. In general, for most postulated initiating events, only one ESF train of mechanical and electrical equipment is required. The exceptions to this are the "smart" break large LOCA, a small spectrum of small break LOCAs and an ATWS event. While there is no way to mitigate a "smart" break LOCA, the possibility of this event occurring is so small as to make it non credible. The Emergency Operating Procedures at the South Texas Project contain operator actions to allow successful mitigation of the small spectrum of small break LOCAs events with only one ESF train of mechanical equipment available by manually lowering pressure to the low head safety injection pump injection pressure. The ATWS event requires two (2) AFW pumps to provide the necessary heat removal capability. In the scenario under consideration, the ATWS event is unlikely since the loss of offsite power would de-energize the control rod system and drop the control rods into the core. Even if the ATWS event occurs, the turbine driven AFW pump and at least one motor driven AFW pump will be operable and available to provide flow to the Steam Generators to remove the postulated decay heat. In the PSA, the ATWS event causes core damage if only one (1) AFW pump of any type is operable since a "single" train of AFW would not provide sufficient feed flow.

The PSA, being a best estimate phenomenological and probabilistic model, evaluates the impact of initiating events and subsequent failures which may lead to a core damaging event. Since PSA is a best estimate of the likelihood of a severe accident, the accident progression and human interface are evaluated using actual capacities and capabilities of plant personnel and equipment. The phenomenology associated with accident progression is also a "best estimate" evaluation. In that regard, no assumptions or conservatisms are made with respect to plant equipment or operator actions that tend to maximize certain selected plant parameters in order to achieve theoretical maximum limits or to define constraints on recovery actions. For example, in deterministic analyses, certain boundary conditions are prescribed (e.g., loss of offsite power and a single active failure); however, in probabilistic analysis, many possible outcomes and their associated likelihoods of occurrence are evaluated. In many cases, the boundaries prescribed by deterministic analyses are bounded, such as in the case of a loss of offsite power and a single active failure, which in probabilistic analysis, is just one possible outcome out of many extending beyond design basis events. For cases where deterministic analyses are used to shape or maximize selected parameters, probabilistic analyses may conclude that the likelihood of such a scenario is highly unlikely and that other scenarios with identical outcomes are more likely. This leads to determinations of risk significance based on probabilistic quantifications which reflect the success criteria for important safety functions based on their actual capabilities.

The above discussion is intended to highlight some of the fundamental differences between probabilistic and deterministic analyses and how those differences translate into inconsistencies relative to assumptions and methods between design basis analysis and PSA analysis. The specific PSA success criteria for important safety functions is described in STP's Individual Plant Examination which has been reviewed and accepted by the NRC.

2. **What are the threshold trigger levels which will be used in the STP Planned Maintenance Program in order to decide whether or not to implement the proposed SDG/ECW STE? How will any potential decrease in safety due to the extended allowed outage times (AOTs) be controlled during future plant operation?**

STP plans to utilize the 21 day LCO outages to accomplish work which has in the past been performed during refueling outages, including the 18 month, 5 year, and 10 year inspection surveillances. As such, there are no "threshold trigger levels" which will be used. Rather, the extended LCO outages will be scheduled to support surveillance requirements, and will be planned to minimize impact on plant operation and maintenance, thus minimizing the impact on plant safety. The extended LCO outages will typically be scheduled during the normal associated train outage weeks, and will continue as necessary to complete the planned tasks. The Technical Specification Special Test Exception LCO prohibits planned maintenance work on redundant safety train equipment during these times.

Backward looking actual risk profiles will be used to monitor actual (i.e., as occurred) plant configurations and configuration durations. The actual risk profiles will be used to monitor the actual accrued cumulative risk levels to the target risk levels as defined by the station's IPE. Adjustments can be implemented by station management to maintain cumulative risk levels below the target in accordance with the station's On-Line Maintenance Program. The actual risk profiles are also used to show compliance with the Maintenance Rule, 10CFR50.65(a)(3).

3. **The NRC staff expects to selectively examine, during the site visit, how the "rolling" maintenance risk assessment process acts to prevent entry into potentially higher risk configurations involving the electrical system and its supporting systems.**

Plant configuration control is maintained using the Technical Specifications, the On-Line Risk Profiles and management approved work schedules. Once the On-Line Risk Profiles have been established for the work week, no other planned work activities are allowed on PSA related equipment. This strict plant configuration control ensures only unplanned events will render necessary equipment inoperable. In this way, only approved work activities which have been evaluated for their risk impacts are allowed to be performed during the work week and the overlapping of maintenance states is prevented. Emergent work items are re-evaluated relative to their impact on risk and an action plan is developed based on the overall risk profile.

4. **What value is the licensee assuming for the component failure rate for the ESF load sequencer? Is it different from the value listed in the South Texas SER (p. 8-8)? What is the source of the change (i.e., technical report or analysis)? Also, the NRC staff expects to selectively examine during the site visit, the technical documentation and/or analysis that supports the basis for the equipment component failure rates in Table 2.5-1 (Attachment 4 of the May 1, 1995 submittal).**

The STP PSA uses a mean value of 1.01E-4 failures per demand for the ESF load sequencer. This database variable was obtained through updating generic data with plant specific data by using Bayesian methodology. The generic data was developed from the cumulative experience of a large population of nuclear plants documented in the PLG proprietary database (Reference PLG-0500). The value listed in the STP SER (pg. 8-8) is 4.8E-4 failures per ***demand***. This value references a proprietary report from GA Technology, Reliability Analysis for ESF Sequencer (ST-HL-AE-1471) that concludes the 1E safety related load sequencer has a failure rate of 4.8E-4 failures per ***hour*** The STP PSA models the ESF load sequencer as failing on demand. Therefore, the value presented in the SER is not applicable to the STP PSA.

5. **The staff is of the opinion that the situation where the licensee would most likely need the majority of the 21-day AOT is for the 10-year SDG surveillance/inspection (as opposed to the 18-month or 5-year inspection). Would a more appropriate proposal for South Texas be a 21-day AOT for the 10-year SDG inspection, and a 14-day AOT once per train per cycle for other inspections? If not, why not?**

The 21-day AOT per train per cycle Special Test Exception is considered appropriate without specifically qualifying the types of planned maintenance work activities, based on the discussion in the following paragraphs.

Our goal is to remove ESF diesel work activities from plant refueling outages, while still achieving world class engine reliability performance and minimizing engine unavailability.

Based on our original evaluation we expected that the maximum amount of scheduled work for a DG LCO would be around 13 days. Since we do not as a practice schedule work to exceed approximately 60 percent of an Allowed Outage Time and we needed to include the potential for work scope growth as a result of inspection activities, we evaluated a 21 day AOT with our PSA. The 21 day AOT is supported by the PSA and the plant design as not being risk significant; therefore, we requested a 21 day AOT. Our expectation is that the majority of our DG outages will be less than 14 days and the Maintenance Rule and our Risk Management Program both require us to do everything reasonable to minimize the total DG outage times.

Additionally a 14 day AOT will place STP in the position of scheduling up to 80 or 90 percent of an AOT. In this case any small problems or scope changes during the DG outage could easily place us in a position were a plant shutdown or request for discretionary enforcement would be required. We do not believe it is appropriate to request a Technical Specification change that creates this potential when there is not a significant safety benefit to be gained.

We believe typical special test exception work windows will be seven to ten days in duration. As a result of scheduling the majority of preventative maintenance activities within these STE windows,

We believe typical special test exception work windows will be seven to ten days in duration. As a result of scheduling the majority of preventative maintenance activities within these STE windows, the need to schedule a 72-hour limiting condition for operation (LCO) work windows every 12 weeks, our normal functional equipment group cycle, will be reduced. While it is recognized that the ESF diesel unavailability during the operating cycle will increase, average unavailability on the ESF diesels will be maintained within the Maintenance Rule. The ESF diesel train availability during refueling outages will be significantly improved. Periods of unavailability during refueling outages will be much shorter. ESF diesel refueling outage unavailability could be limited to the duration of electrical bus outages, normally 36 to 48 hours in length, and ESF load start sequencer surveillance testing, about 6 hours in length.

The following is a discussion of the work activities that were considered for inclusion in the STE windows: In general, the expected durations of the 18-month, 5-year, and 10 year inspections are 4 days, 6 days, and 9 days in work window length, plus an additional one to two days of associated break-in runs, maintenance tests (PMTs) and operability tests. These window length durations were also benchmarked against the demonstrated performance of other members of the Cooper Bessemer Owner's Group (CBOG) and determined to be typical of the expected performance without unexpected scope expansion. These estimates also assume that the 24-hour load test surveillance is performed with the engine operable, and therefore, is not included in the test window. These durations reflect around-the-clock work scheduling. During the last two refueling outages, STP completed the work windows on or ahead of schedule for five of the six diesels, as reflected in the estimates provided above. The work window for the sixth engine, SDG-12 during 1RE05, was extended about an additional 4 days while troubleshooting a slow voltage start response caused by stray electronic interference between the manual and automatic voltage regulator circuits. In the last year, other utilities with Cooper Bessemer KSV engines have discovered the emergent need to replace turbochargers or cam shafts during these same types of maintenance surveillance inspections; both of these activities required about three days of additional work duration scope. Our request for 21 days includes a "float window" of about 7 days; we would not routinely schedule activity durations that exceed 14 days from removal to return to service (operability).

In addition to reviewing surveillance inspections, we also reviewed typical planned corrective maintenance activities and plant modifications that would be scoped during refueling outages to see how these activities would influence maintenance duration. The most extensive maintenance activity completed during recent outages is the piston lubrication improvement, consisting of removal of the wrist pin caps and lower oil rings on all twenty pistons on a diesel. During the last two refueling outages, we accomplished this improvement on two diesels in each unit, in about a 10 day work window duration for each engine that was performed in parallel with surveillance inspections. We feel our planning and work accomplishment reflect world class maintenance performance, based on our discussions with other CBOG members. This same type of preparation and accomplishment effort will be focused on our STE window preparations.

In 1995, we began a business plan initiative to review the need for modernizing the capabilities of the ESF diesel electronic governors, voltage regulators, and the safety and non-safety electronic engine control circuits. The modification evaluation package is currently in draft review and will be presented to management in December, 1995. Several members of the CBOG are either considering or have actually implemented some portion of the modification scope we are reviewing. These

modifications, if and when accomplished, will probably be the controlling activity for future ESF diesel work window durations and will probably require greater than 14 days to complete.

Therefore, it is determined that the 21 day AOT is appropriate due to the expected and potential DG workscopes which could challenge our ability to comply with a 14 day AOT on any given entry into the STE. Furthermore, the station's PSA, in conjunction with the On-Line Maintenance Program supports the 21 day AOT and provides the necessary mechanisms for monitoring and maintaining plant safety throughout the duration of the STE.

6. **A 24-hour AOT with no onsite power (no operable SDGs) is a significant departure from what is allowed in any U.S. plant. This issue appears to be independent of whether or not one is considering a 2-train or a 3-train plant. Please identify the special circumstances of the South Texas design that justifies this exception.**

It was never the intent of STP to operate for 24 hours with no operable SDGs. After discussions with the staff STP will submit a revision to the previous submittal to provide the necessary action statement in proposed TS 3.10.8 to only allow 2 hours with no operable SDGs, the same time currently allowed by TS 3.8.1.1.

7. **The proposed technical specifications (TSs) allows for Mode change during the STE. Please discuss why this flexibility is needed and the potential benefit. Given that Mode 1 represents one of the most stable plant operating modes other than Mode 6, what is the justification for extended preventative maintenance activities of the SDG and ECW systems while changing modes?**

The proposed technical specification does allow for mode changes during the STE. The capability to change modes was included to allow the unit the ability to respond to changing plant and grid conditions. The conditions that would require a Mode change during the STE are expected to be extremely infrequent and driven by plant or grid conditions, not station convenience. An example of such an event would be the return to power operation in the event a plant trip occurs during the STE. This capability is not unreasonable, since a Mode change with two (2) OPERABLE Standby Diesel Generators does not involve any greater risk than the operation of the plant in Mode 1 with two (2) OPERABLE Standby Diesel Generators. It is not the intent of STP to use the proposed technical specification STE as an extension of a planned refueling outage.
Since the requirements for the STE must be satisfied throughout the duration of the STE regardless of the plant's status, the level of defense-in-depth provided by the required equipment and compensatory actions during a Mode change is the same as that required for any other time during the STE.

The compensatory measures which are in place during the STE provide augmented station focus and management attention to ensure that important safety functions are available and operable to support a possible mode change.

8. **The staff notes that the wording for TS 3.10.8.g, "Maintenance in the switchyard is controlled," is not specific enough in that it does not provide a narrow scope and direction, given the intent in Section 3.2.2 of the licensee's evaluation (Attachment 4 of the May 1, 1995 submittal), that "maintenance activities or other events that could cause a loss of offsite power initiating event are minimized" during the STE period. Please discuss what is meant by controlled.**

Due to the amount of work required to be performed in the switchyard to ensure equipment reliability, it is not possible to eliminate all work in the switchyard during the performance of the STE. However, all work performed in the switchyard is controlled by the Unit 1 Shift Supervisor and the following additional control of activities in the switchyard during a 21 day standby diesel generator outage will be initiated.

1. Procedure 0PGP03-ZA-0104, Switchyard Access and Control of Vehicles Near Electrical Power Components, will be revised to indicate the Outage Coordinator, HL&P System Dispatching and T&D Substation personnel are responsible for coordinating all activities to be performed in the switchyard during the STE prior to entry into the STE.

2. The Administrative procedure that controls entry into the STE will require the STP outage coordinator to notify HL&P System Dispatching and T&D Substation Operations prior to planned entry into the STE. It will also require the HL&P System Dispatching and T&D Substation Operations to submit all work planned to be performed during the STE to the STP Outage Coordinator prior to entry into the STE. This will allow a PSA evaluation to be performed on the possible effects of this work on the electrical stability of the switchyard during the STE prior to entry into the STE.

9. **The NRC staff expects to examine the physical switchyard arrangement and any administrative control procedures for the switchyard during the site visit.**

10. **During the staff review of the licensee's previous TS amendment request (Reference: Amendment Nos. 59 and 47), Brookhaven National Laboratories (BNL) observed that the improvement in the safety assessment was due to changes in planned maintenance practices at the plant. BNL stated that STP changed maintenance for the standby diesel generators, auxiliary feedwater and essential chilled water systems from a quarterly to a semiannual schedule. Discuss how this impacts the balance between reliability and unavailability, and the effect on plant safety. Also, on page 4 of 4 of Attachment 2 to the May 1, 1995 application, a statement is made regarding the credit due to the compensatory actions. Please quantify the contribution to safety based on actual changes in plant procedures, equipment and other compensatory actions as discussed in the May 1, 1995 application.**

Monitoring of reliability and unavailability will be conducted under STP's implementation of the Maintenance Rule, 10CFR50.65. The Maintenance Rule implementation requires optimizing availability and reliability for risk significant systems. Adjustments shall be made, where necessary, to maintenance activities to ensure that the objective of preventing failures is appropriately balanced against the objective of assuring acceptable system availability.

In order to support Maintenance Rule implementation, performance criteria/goals are being established for risk significant systems by the Maintenance Rule Expert Panel using information from the PSA. The resulting availability and reliability goals for Maintenance Rule systems are based on the unavailability and reliability calculations contained in the PSA and on the Expert Panel reviews of equipment performance history. Maintenance activities performed on risk significant plant systems and equipment are to be tracked to ensure that the performance of maintenance activities does not exceed the targeted unavailability allowance. Thus, the frequency change for preventive maintenance from quarterly to semi-annual or from semi- annual to quarterly in and of itself would not impact plant safety since the total unavailability would be monitored and adjusted so as not to exceed the total allowed unavailability target as calculated by the PSA and as monitored by the Maintenance Rule. These measures are some of the mechanisms used at STP to optimize availability and reliability by properly managing the occurrence of systems being out of service for maintenance. This could be achieved by any of the following, as outlined in the draft Maintenance Rule Basis Document:

- Ensuring that appropriate preventative maintenance is performed to meet availability objectives as stated in the plant specific PSA, FSAR, or other reliability approaches to maintenance (if required);

- Focusing preventive maintenance activities on those tasks which monitor and predict equipment performance and reliability (e.g., pump vibration analysis instead of teardown);

- Reviewing work history to determine the acceptability of availability and reliability goals;

- Focusing maintenance resources on preventing those failure modes that affect the ability to successfully perform a safety function;

- Scheduling, as necessary, the amount, type, or frequency of preventive maintenance to appropriately limit the time out of service in accordance with the station's on-line maintenance programs;

- And, risk plots of availability and reliability that will be performed during the Maintenance Rule monitoring process.

In the May 1, 1995 submittal, a qualitative/quantitative evaluation for compensatory measures was presented in section 3.0 (Reference ST-HL-AE-5076). All compensatory measures that were quantified were presented. For example, entry into the STE allows no planned maintenance on the other two safety trains. The quantification for this was accomplished by configuring the STP PSA model to remove the system unavailability contributions due to planned maintenance (unplanned maintenance unavailability contributions were retained). The resulting quantification reflects a positive change in the risk associated with the STE.

Not all compensatory measures could be quantified. Those compensatory measures that are intended to reduce the likelihood of an initiating event challenging safety equipment during the proposed STE were not quantified. This is due to the uncertainty in the magnitude for changing certain initiating event frequencies based upon the compensatory measures.

11. In the licensee's evaluation (Attachment 4 of the May 1, 1995 submittal) one of the compensatory actions described on Page 3.1-8 is the following set of conditions:

Prior to commencement of maintenance under the proposed STE, containment integrity will be verified to ensure containment isolation penetrations are in their proper alignments. The reactor containment building supplemental purge valves will be verified to be OPERABLE and in their proper alignment. Additionally, containment purges that may be required during the STE will be strictly controlled.

Why was the above not included in proposed TS 3.10.8?

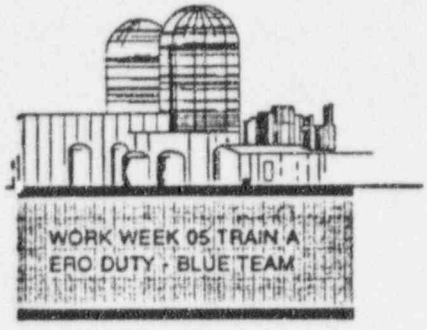
These statements were not included in the proposed TS 3.10.8 because compliance with these actions is already required by TS 3.6.3. This was included as a compensatory action to provide heightened awareness among the operating staff during the STE and to prevent entry into the STE while in an action statement associated with containment integrity.

DESIGN BASIS ACCIDENT	CURRENT DESIGN BASIS	SINGLE TRAIN RESULTS	OTHER MITIGATING EFFECTS
Steam Line Break	No DNB	No DNB	
	Containment structure temperature < 286°F	Temperature limit satisfied.	
	Containment atmosphere pressure profile < EQ limits	Pressure exceeds limit for short duration.	Sufficient margin exists in the EQ qualification to accommodate excursion.
	Containment atmosphere temperature profile < EQ limits	Temperature stays within limits.	
Feedwater System Pipe Break	Pressurizer does not go water solid with no operator action for 30 minutes.	Pressurizer may go water solid in less than 30 minutes with no operator action and failure of safety train C. All other cases would not be impacted.	Operator action using EOPs would preclude the pressurizer from going water solid.

DESIGN BASIS ACCIDENT	CURRENT DESIGN BASIS	SINGLE TRAIN RESULTS	OTHER MITIGATING EFFECTS
Loss of Coolant Accident	Meet 10 CFR 50.46 Acceptance Limits	Limits not met for Large Break "Smart" LOCA and small spectrum of small break LOCA. Limits satisfied for other LOCA cases.	For the small break LOCA case, operators would use the EOPs to depressurize the RCS which would provide acceptable results. For the Large Break LOCA case, the probability of such an event is 5.05E-5 events per reactor year.
	Meet 10 CFR 100 and GDC 19 dose limits	Offsite Limits are satisfied. Control Room limits are marginal. TSC limits are exceeded.	The TSC dose exceeds the limit by approximately 50%.
	Peak containment atmosphere pressure < 56.5 psig	Peak pressure remains below 56.5 psig.	
	Containment atmosphere pressure profile < EQ limits	Pressure exceeds limit.	Sufficient margin exists in the EQ qualification to accommodate excursion.
	Containment atmosphere temperature profile < EQ limits	Temperature exceeds limits for short duration.	Sufficient margin exists in the EQ qualification to accommodate excursion.
	Equipment Qualification doses do not exceed limits.	Equipment Qualification doses are marginal.	Analysis assuming 50% spray efficiency shows acceptable results.

NOMA/LIC.
1 5307

STP - UNIT 1



DAILY COMMUNICATION & TEAMWORK MEETING

MONDAY 04 DECEMBER 1995 08:00

NUCLEAR SAFETY - RELIABILITY - COST - PERFORMANCE

South Texas Project Electric Generating Station

DAILY

I. PLANT STATUS - *OPERATIONS*

A. PLANT CONDITIONS
B. REGULATORY NOTIFICATIONS
C. PRIORITY 1 & 2 DURING PAST 24 HOURS
D. LCOs/ACTION STATEMENTS
E. OAS DISCUSSION (TUES)

II. CHEMISTRY

III. HEALTH PHYSICS

IV. DAILY SCHEDULE

A. SURVEILLANCES-*(SHIFT SUPERVISOR)*
B. PRIORITY 2 WO'S-*(R. FAST)*
C. WEEKLY SCHEDULE-*(R.FAST)*

V. ISSUES

A. MATERIAL CONDITION ISSUES
B. MANAGEMENT/PROGRAMMATIC ISSUES
C. OTHER KEY EQUIPMENT OUT OF SERVICE ISSUES

SELF ASSESSMENTS & CORRECTIVE ACTIONS OF PEOPLE, PROCESSES & PROJECTS

MONDAY

A. RCB ENTRY CONTROL-*(R. LOGAN)*
B. PRA REVIEW OF SCHEDULE-*(P. MALDONADO)*

TUESDAY

A. T-MOD STATUS-*(D. STARK)*
B. FIRE PROTECTION STATUS-*(J. LABUDA)*
C. MCBs/IAFs-*(L. JONES)*
D. SCAFFOLDING/INSULATION STATUS-*(G. SCHINZEL)*

WEDNESDAY

A. WORK ORDER MANAGEMENT- *(1st)(R. FAST)*
B. WO PAPER CLOSURE- *(1st)(M. BERRENS)*
C. ECO'S > 120 DAYS OLD-*(3rd)(S. DUGGER)*
D. SCHEDULE PERFORMANCE-*(R. FAST)*

THURSDAY

A. UNRESOLVED WORK ORDER SUPPORT-*(J. MILLER)*
B. TOP TEN LIST-*(L. JONES)*
C. MOD INSTALLATION PROGRESS-*(2nd & 4th) (D. CLIFFORD)*
D. THERMAL PERF TEST RESULTS-*(2nd)(C. UHRICH)*
E. FORCED OUTAGE LIST-*(J. MILLER)*

UPDATES AND SUGGESTIONS
SUBMIT TO: JOE MILLER
EXT 7063, PGR 0552, FAX 7184
RMS FILE: Z14

STPEGS UNIT 1

Operations Report
December 4, 1995

1. PLANT CONDITIONS

A. GENERATION LAST 24 HOURS:

Reactor Power: 100% Thermal Power: 3800 MWt
On Line: 95 DAYS
Hourly Electrical Output (MWe) (Gross) 1315.4 (Net) 1263.6
24 Hour Total (MWe) (Gross) 31570 (Net) 30327

EFPD Used: 228.6 EFPD Remaining: 202.4

B. NSSS STATUS:

Removed Spent Fuel Pool (SFP) Cooling Pump 1A from service to perform a hydrostatic test as PMT for work done last week.

C. TRAIN STATUS:

Commenced an "A" Train LCO, removed Emergency Diesel Generator, Centrifugal Charging pump, RHR pump, Essential Chilled Water, Essential Cooling Water and Auxiliary Feedwater from service at 0400 12/4/95.

D. BOP STATUS:

The 12 South Main Condenser Waterbox has been isolated to repair a small tube leak. (CR#331382)

2. REGULATORY NOTIFICATIONS

None.

3. PRIORITY CONDITION REPORTS DURING PAST 24 HOURS

CR 324294 documents the failure of the Steam Generator 1A Main Steam Isolation Valve (MSIV) FSV-7414 test solenoid. The test solenoid has been replaced and the partial stroke test of MSIV FSV-7414 is scheduled for 12/4/95. The test circuitry is part of the non-safety portion of the MSIV FSV-7414 circuitry. MSIV FSV-7414 is capable of performing its safety function and is currently operable.

4. CONDITION REPORTS GENERATED DURING PAST 24 HOURS REQUIRING AN OPERABILITY OR REPORTABILITY REVIEW.

CR 95-13495 documents a 10CFR21 notification issued by Cooper Energy Services on the Standby Diesel Generator governor drive assembly. A governor drive assembly lube oil passage was discovered blocked following a vendor performed sleeve repair. An oil blockage could result in the failure of the governor drive assembly rendering the Standby Diesel Generator inoperable. An Operability Review has been requested for completion by 1730 on 12/7/95. OAS # 574

5. LCO/ACTION STATEMENTS

Removed Centrifugal Charging Pump 1B from service at 0400 12/4/95 for preplanned maintenance. The Charging Pump must be restored by 12/11/95 at 0400 or a plant shutdown will be required. OAS-582

Removed Auxiliary Feedwater Pump 1A from service at 0400 12/4/95 for preplanned maintenance. The Auxiliary Feedwater Pump does not have an associated LCO action time OAS-581 opened for tracking only.

Removed Residual Head Removal Pump 1A from service at 0400 12/4/95 for preplanned maintenance. The Residual Head Removal Pump must be restored by 12/11/95 at 0400 or a plant shutdown will be required. OAS-580

Removed Train "A" Essential Chilled Water from service at 0400 12/4/95 for preplanned maintenance. Essential Chilled Water must be restored by 12/07/95 at 0400 or a plant shutdown will be required. OAS-579

Removed Emergency Diesel Generator 11 from service at 0400 12/4/95 for preplanned maintenance. The Diesel Generator must be restored by 12/07/95 at 0400 or a plant shutdown will be required. OAS-578

Removed Train "A" Essential Cooling Water from service at 0400 12/4/95 for preplanned maintenance. Essential Cooling Water must be restored by 12/07/95 at 0400 or a plant shutdown will be required. OAS-577

Removed Spent Fuel Pool Cooling Pump 1A from service at 0300 on 11/27/95. This equipment is governed under Tech Spec 4.0.5, which has no LCO action time. OAS #564

6. PLANNED ACTIVITIES

Support scheduled maintenance and surveillance activities.

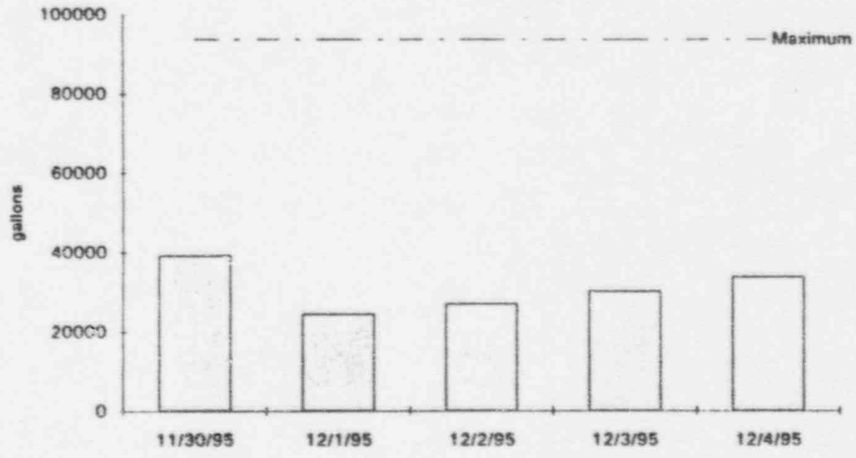
PREPARED BY: Royce J. Brown

12/4/95

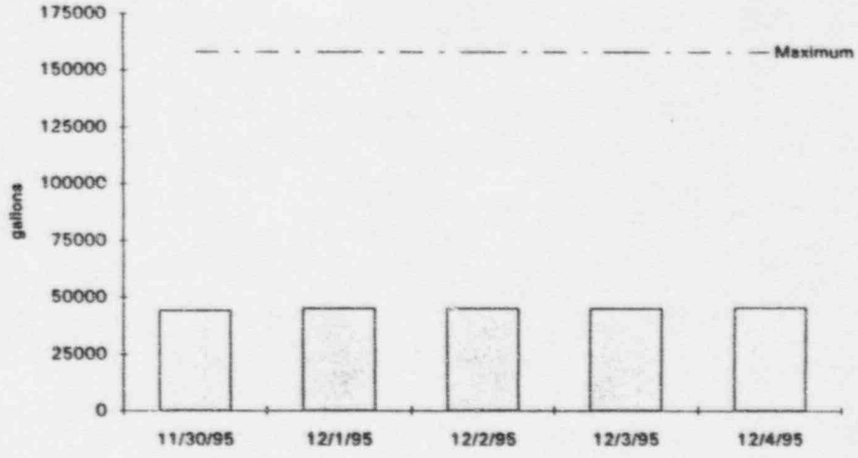
OPERATIONS DAILY REPORT

UNIT 1

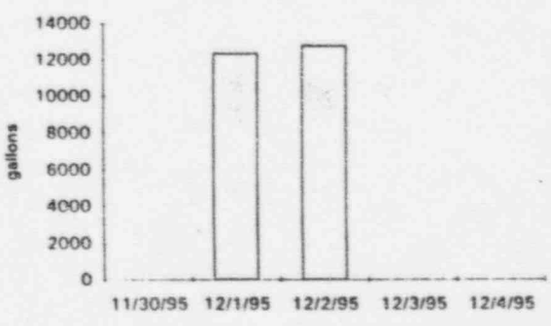
Front End Tanks
(MEAB/FHB Floor Drains and Leakage)



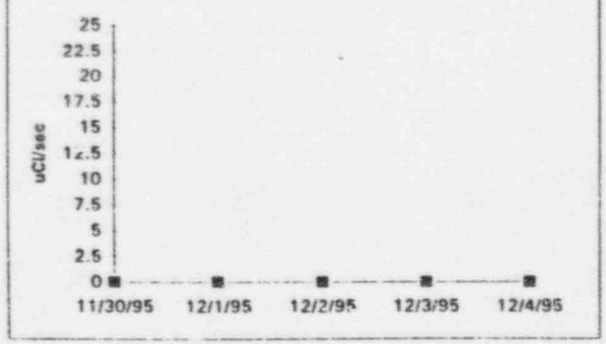
Recycle Holdup Tanks
(Primary RCS Letdown)



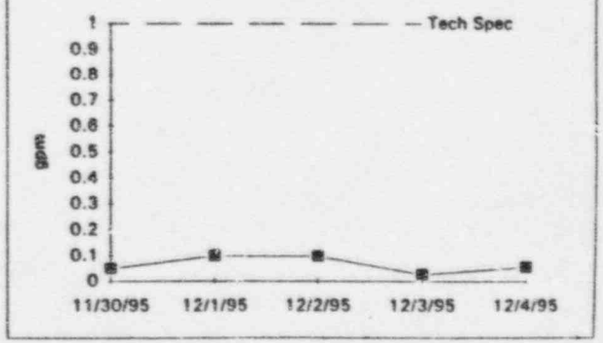
Liquid Release



Gaseous Release Rate



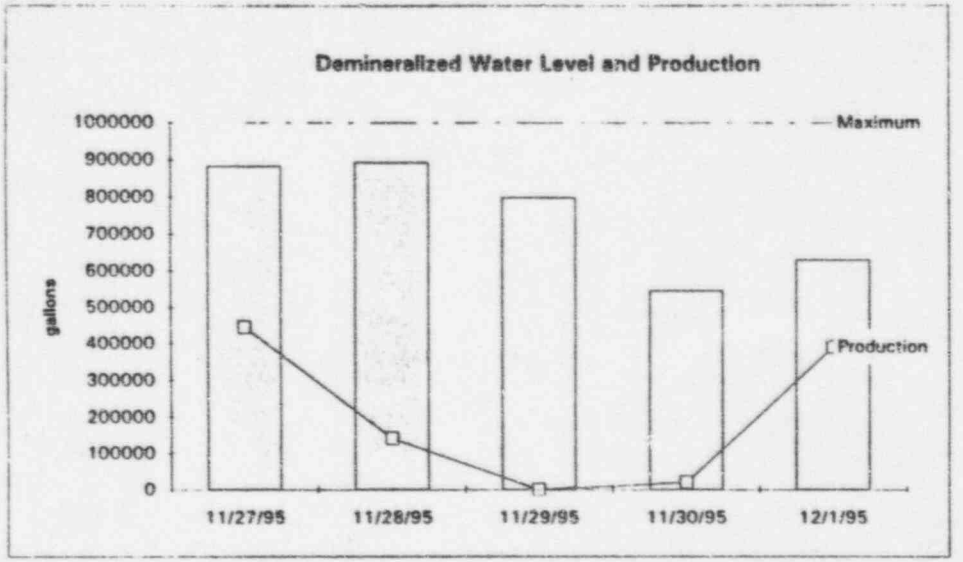
RCS Leakage

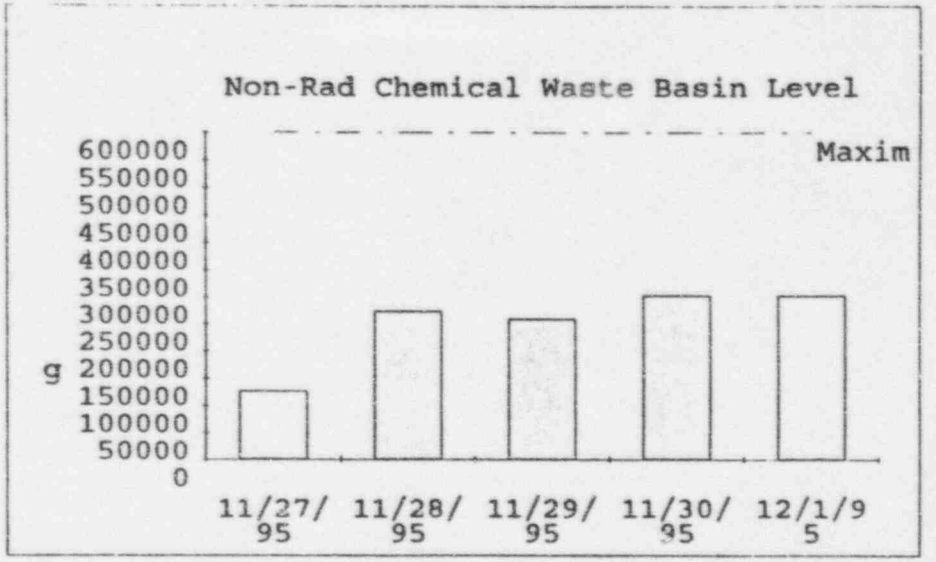


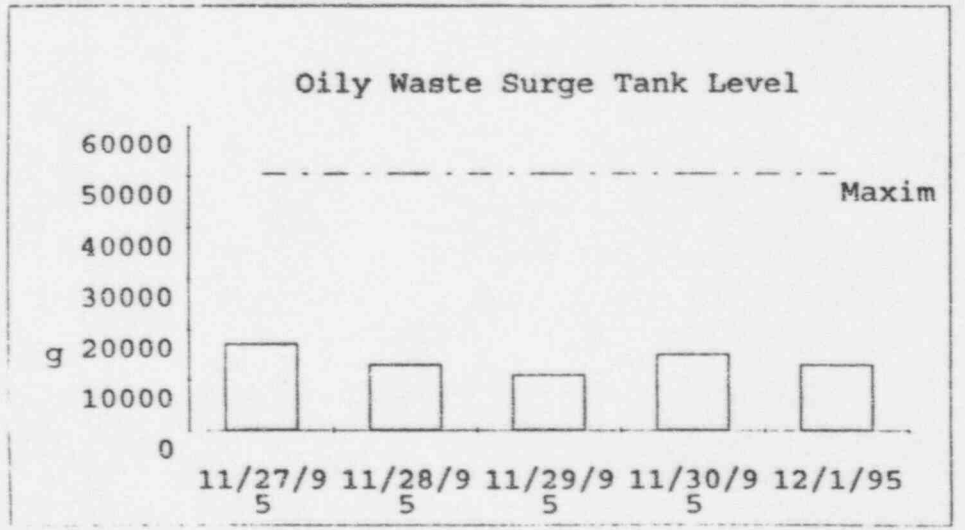
3

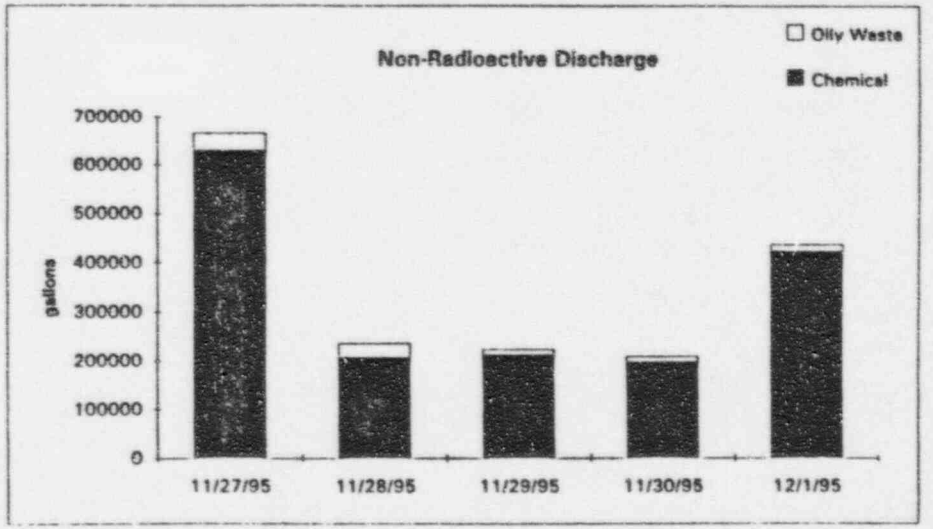
OPERATIONS DAILY REPORT

COMMON







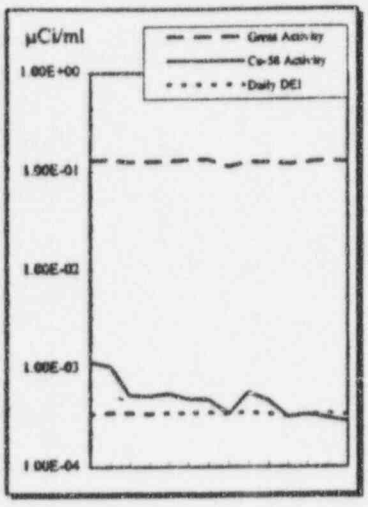


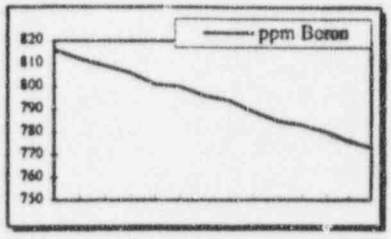
Unit 1 Chemistry Management Report

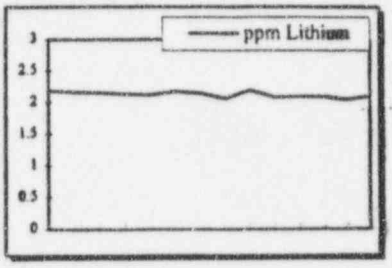
12/4/95

Primary

Analysis	Units	Spec	Normal	Result
Activity	µci/ml	≤ 2033	≤ 0.144	0.126
D.E.I-131	µci/ml	≤ 1.0	≤ 3.62E-04	3.37E-04
Co-58	µci/ml		≤ 5.35E-03	2.92E-04
Tritium	µci/ml	≤ 5.0	≤ 2.16	1.91
Boron	ppm			773
Lithium	ppm	2.05 - 2.35	2.05 - 2.35	2.1
pH				6.77
Fluoride	ppb	≤ 150	≤ 9.6	<2.0
Chloride	ppb	≤ 150	≤ 2.2	<2.0
Sulfate	ppb	≤ 50	≤ 7.6	6.0
Diss O_2	ppb	≤ 100	≤ 5	1.8
Diss H_2	cc/kg	25-50	25-50	41.9







Secondary

Analysis	Units	Spec	Normal	Result
Condensate				
Diss O_2	ppb	≤ 10	3.3 *	1.6
pH		9.0 - 9.6	9.0 - 9.6	9.27
Feedwater				
Cat Cond	µs/cm	≤ 0.2	≤ 0.104	0.076
Hydrazine	ppb	≥ 80	≥ 80	102
ETA	ppb	1800-2200	1800-2200	2095
pH		9.1 - 9.6	9.1 - 9.6	9.4
Iron	ppb	≤ 10	5.0 *	3.7

CARS Radiation Monitor RT-8027 (µCi/ml)	2.09E-07

1995 CPI Threshold Goals

Green <1.073 White 1.073-1.128 Yellow 1.128-1.184 Red >1.184

Monthly CPI for Period of 12/1 through 12/3

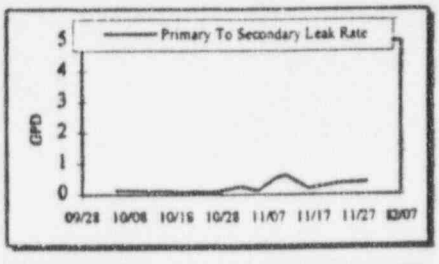
1.000 (Green)

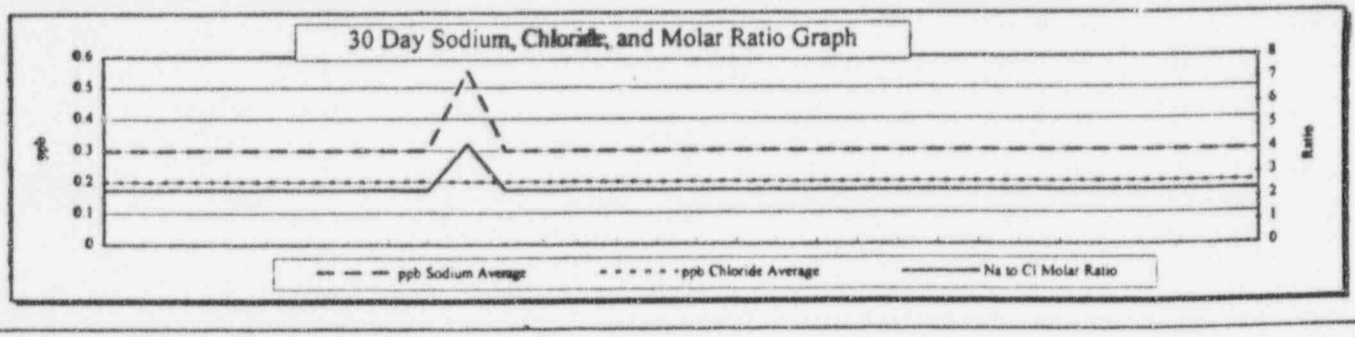
Chemistry Systems Status

All Systems Operational

Steam Generators

Analysis	Units	Spec	Normal	A	B	C	D
Cat Cond	µs/cm	≤ 0.8	≤ 0.136	0.093	0.105	0.103	0.115
Sodium	ppb	≤ 20	0.8 *	<0.30	<0.30	<0.30	<0.30
Chloride	ppb	≤ 20	1.6 *	<0.20	<0.20	<0.20	<0.20
Sulfate	ppb	≤ 20	1.7 *	<0.20	<0.20	<0.20	<0.20
Silica	ppb	≤ 300	≤ 108	56	57	53	57





* Indicates Industry Median Value used in CPI calculation. (Other normal values are calculated as 3 standard deviations from a 60 day mean.)

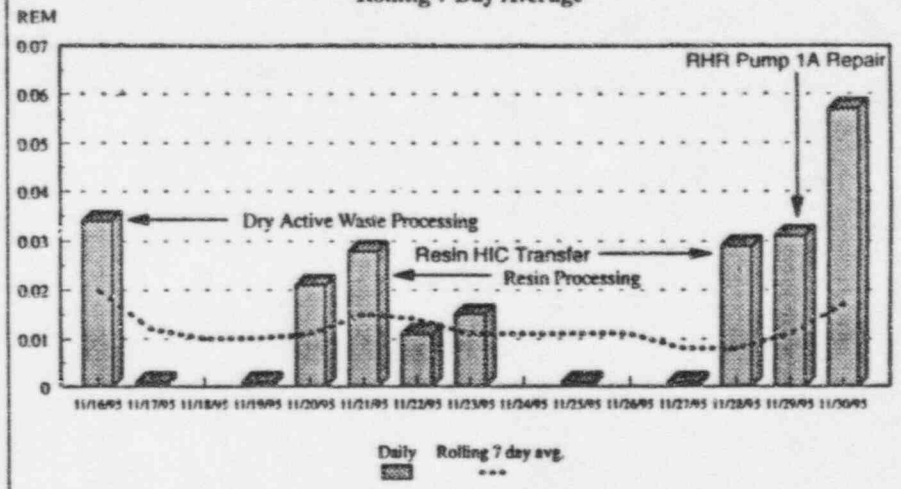
STP Unit 1 Health Physics Daily Report 12/04/95

Daily Departmental Exposure

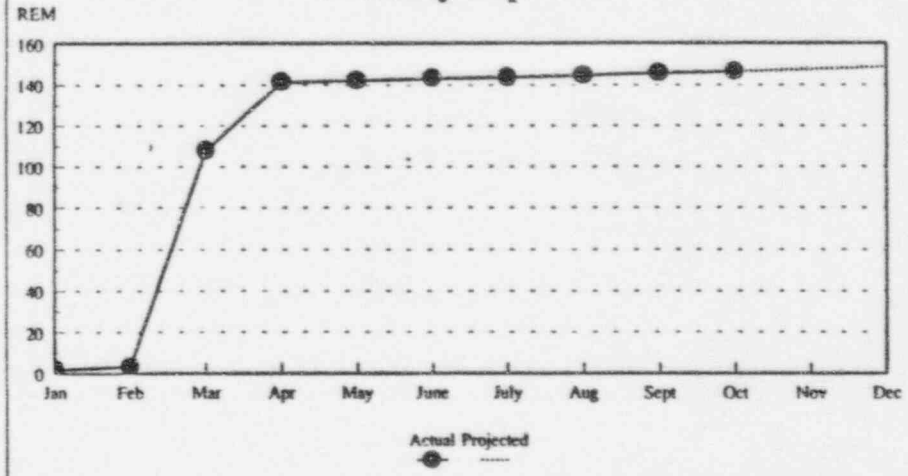
	Daily Exposure Actual	Daily Exposure Goal	Exposure YTD	Yearly Goal
Operations	0.001	0.002	5.906	5.80
Maintenance	0.012	0.003	26.761	26.90
Gen. Support	0.035	0.005	108.052	109.70
Engineering	0.008	0.000	3.149	3.25
Nuclear A&L	0.001	0.000	2.535	2.60
Other	0.000	0.000	0.244	0.30
Totals	0.057	0.010	146.648	148.55

All Figures in Person Rem
Data Current Through Noon Thursday

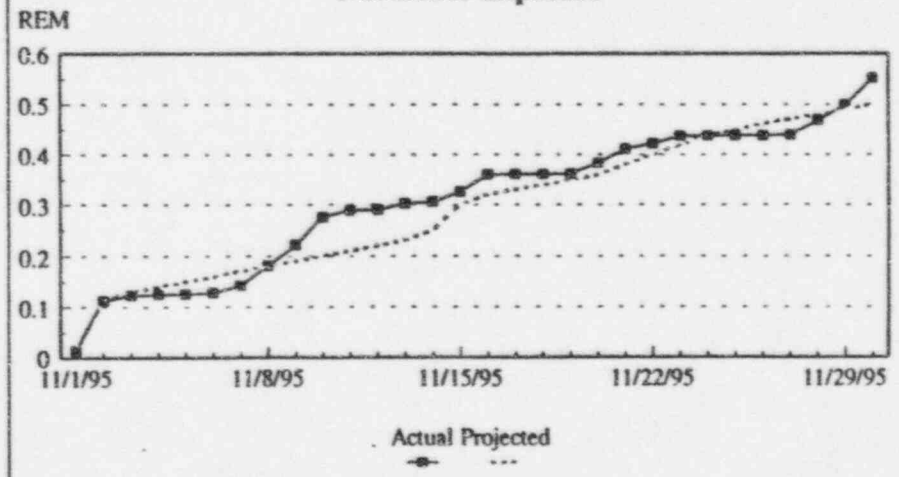
Rolling 7 Day Average



Monthly Exposure



November Exposure



Health Physics Notes:

* Residual Heat Removal Pump 1A Modification, Lubrication, and Repair - ***26 mRem***
* Transfer of Resin HIC to the On Site Storage Facility - ***16 mRem***
* Entry into Room 110 for Radiological Survey - ***10 mRem***

Personnel Contaminations

	Daily	YTD Total	1995 Goal
Skin	0	25	25
Clothing	0	78	N/A

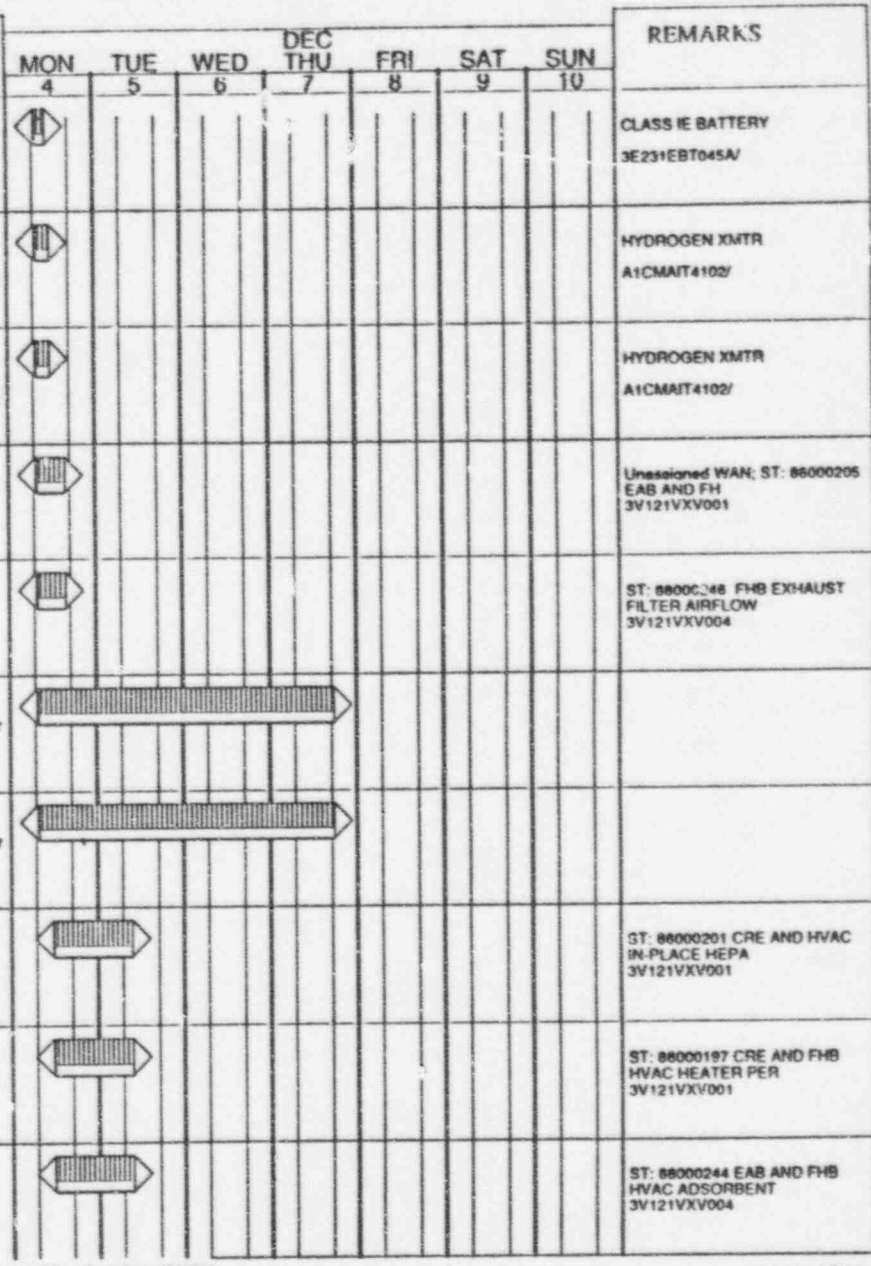
Unit 1 Authorized Surveillance Work Schedule

Printed: 04DEC95 05:52

Revision 0

Work Week 05 04Dec95 - 10Dec95 A-Train LCO

Item	PNT MNT SYS	WAN STATUS UCID ACTIVITY No.	Description	MLST/PRI MODES EOGP EG/WW	TRN-LCO EOOW/WP BLDG ELEV SCAFFNS	CRAFT OWNER	REMARKS
1	DJ	95010111 50C PDJS010111	ST:0PSP06-DJ-0001 (TW) 86001372-125 VOLT CLASS 1E BATTERY 7 DAY SURVEILLANCE TE ST WMS COMMENTS:ST: 86001372 125 VOLT CLASS 1E BATTERY	NN ..1 DJ0A..9	A - NNNNNNNN EAB.10 NO NO	EM00 Electrical Maintenance ERO Crew.	CLASS IE BATTERY 3E231EBT045A/
2	CM	95008289 50N PCMS008289	ST:0PSP02-CM-4102 (TM) 93000070-CNTMT H2 CONC. CHANNEL CHECK TRAIN A WMS COMMENTS:ST: 93000070 CONTAINMENT HYDROGEN ANALYZ	NN ..1 CM00..8	A - NNNN0141 MAB.60 NO NO	IC01 IC Crew 1<Crutcher(004 Valdos(0852)>	HYDROGEN XMTR A1CMAIT4102/
3	CM	95010777 50N CREDIT PCMS010777	ST:0PSP02-CM-4102 (TM) 86000230-CONTAINM ENT HYDROGEN ANALYZER ACOT TRAIN A WMS COMMENTS:Unassigned WAN; ST: 86000230 CONTAINMEN	NN N..1 CM00..8	A - NNNN0141 NNN.NNNN NO NO	IC01 IC Crew 1<Crutcher(004 Valdos(0852)>	HYDROGEN XMTR A1CMAIT4102/
4	L HF	95006996 50N PHFS006996	0PSP11-ZH-0009(R)86000205 EAB AND FHB HV AC IN-PLACE ADSORBER LEAK TEST WMS COMMENTS:	NN N..1 HF10..	A - NNNN0141 NNN.NNNN NO NO	PS PSD - Plant Support (G. Erskine/M. Ebel)	Unassigned WAN; ST: 86000205 EAB AND FH 3V121VXV001
5	L HF	95007200 50N PHFS007200	0PSP11-HF-0001(R)86000246 FHB EXHAUST FI LTER AIRFLOW CAPACITY TEST WMS COMMENTS:	NN N..1 HF20..	B - NNNNNNNN NNN.NNNN NO NO	PS PSD - Plant Support (G. Erskine/M. Ebel)	ST: 86000246 FHB EXHAUST FILTER AIRFLOW 3V121VXV004
6	I	86000083 50N PIIS00008303	OPSP10-II-0005 (C) INCORE-EXCORE CROSS C ALIBRATION WMS COMMENTS:	2.1D.. II00..12	- N.N NO NO	RE NFA - Reactor Engineering Dunn(b0621)	
7	SF	86000000 50N PSFS00000002	FUEL INVENTORY OF THE SPENT FUEL POOL (R EPORT OTF) WMS COMMENTS:	2.1D.. RS00..12	- NNNNNNNN N.N NO NO	RE NFA - Reactor Engineering Dunn(b0621)	
8	L HF	95006992 50N PHFS006992	0PSP11-ZH-0008(R)86000201 CRE AND HVAC I N-PLACE HEPA FILTER LEAK TEST WMS COMMENTS:	NN ..1 HF10..	A - NNNN0141 FHB.36 NO NO	PS PSD - Plant Support (G. Erskine/M. Ebel)	ST: 86000201 CRE AND HVAC IN-PLACE HEPA 3V121VXV001
9	L HF	95007079 50N PHFS007079	0PSP11-ZH-0007(R)86000197 CRE AND FHB HV AC HEATER PERFORMANCE TEST WMS COMMENTS:	NN ..1 HF10..	A - NNNN0141 FHB.36 NO NO	PS PSD - Plant Support (G. Erskine/M. Ebel)	ST: 86000197 CRE AND FHB HVAC HEATER PER 3V121VXV001
10	L HF	95007192 50N PHFS007192	0PSP11-ZH-0010(R)86000244 EAB AND FHB HV AC ADSORBENT TEST WMS COMMENTS:	NN ..1 HF20..	B - NNNN0141 FHB.36 NO NO	PS PSD - Plant Support (G. Erskine/M. Ebel)	ST: 86000244 EAB AND FHB HVAC ADSORBENT 3V121VXV004



Unit 1 Authorized Surveillance Work Schedule

Revision 0

Work Week 05 04Dec95 - 10Dec95 A-Train LCO

Printed: 04DEC95 05:52

Item	PLNT SPCT SYS	WAN STATUS UC02 ACTIVITY No.	Description	MLST/PRI MODES EOOP HEGAVW	TRN-LCO ECO/RWP BLDG ELEV SCAF/INS	CRAFT OWNER	DEC MON 4 / TUE 5 / WED 6 / THU 7 / FRI 8 / SAT 9 / SUN 10	REMARKS
11	L HF	95007222 50N PHFS007222	0PSP11-HF-0002(R)87000078 FHB EXHAUST AI R SYSTEM FUNCTIONAL TEST . WMS COMMENTS:	NN ..1 ..	N - NNNNNNNN EAB.60 NO NO	PS PSD - Plant Support (G. Erskine/M. Ebel)		ST: 87000078 FHB EXHAUST AIR SYSTEM FUNC .
12	L HF	00058857 50N PHFS058857	0PSP11-HF-0001(R)86000184 FHB EXHAUST FI LTER AIRFLOW CAPACITY TEST . WMS COMMENTS:	NN N..1 HF10..	A - NNNNNNNN NNN.NNNN NO NO	PS PSD - Plant Support (G. Erskine/M. Et sl)		ST: 86000184 FHB EXHAUST FILTER AIRFLOW 3V121VXV001
13	L NI	00058877 50N PNIS058877	ST:0PSP02-NI-0031 (TO) 86000331-SOURCE R ANGE NI QUARTERLY ACOT CHANNEL A . WMS COMMENTS:ST: 86000331 SOURCE RANGE NEUTRON FLUX	NN N..1 NI0A..9	N - NNNNNNNN NNN.NNNN NO NO	IC01 IC Crew 1<Crutcher(004 Vajdos(0852)>		NUCLEAR INSTRUMENTATION SYSTEM CONTROL P 5Z111ZCP011/
14	RA	95014670 50N PRAS014670	ST:0PSP03-RA-0031 (TO) 87000008-RA SYSTE M VALVE OPERABILITY TEST . WMS COMMENTS:	NN ..1 RA00..5	B - NNNNNNNN RCB.52 NO NO	RO Reactor Operations - Jones (b0009)		ST: 87000008 CONTAINMENT RADIATION MONIT B1RAMOV0001/SV148V00017 #1
15	DG	95008830 50N ADGLCO PDGS008830	ST:0PSP03-DG-0001 (TSA) 91000085-DG #11 FAST START VERIFICATION . WMS COMMENTS:ST: 91000085 STANDBY DIESEL 11 (21) OPER	NN ..1 DG0A..1	A - NNNNNNNN DGB.25 NO NO	RO Reactor Operations - Jones (b0009)		DIESEL GENERATOR #11 N/N
16	DG	95010131 50N ADGLCO PDGS010131	ST:0PSP03-DG-0001 (TM) 86000847-DIESEL 1 1 OPERABILITY TEST . WMS COMMENTS:ST: 86000847 STANDBY DIESEL 11 (21) OPER	NN ..1 DG0A..1	A - NNNNNNNN DGB.25 NO NO	RO Reactor Operations - Jones (b0009)		DIESEL GENERATOR #11 N/N
17	DG	95010456 50N ADGLCO PDGS010456	0PSP03-ZQ-0025 (TM) ST:87000087-9510-DIE SEL GENERATOR STARTING CLASSIFICAT ION . WMS COMMENTS:	NN ..1 ..00	A - NNNNNNNN TGB.83 NO NO	RO Reactor Operations - Jones (b0009)		ST: 87000087 DIESEL GENERATOR STARTING C /
18	DJ	00058946 50C PDJS058946	ST:0PSP06-DJ-0001 (TW) 87000042-no descr iption . WMS COMMENTS:ST: 87000042 125 VOLT CLASS 1E BATTERY	NN N..1 DJ0B..2	B - NNNNNNNN NNN.NNNN NO NO	EM00 Electrical Maintenance ERO Crew.		CLASS IE BATTERY 3E231EBT045C/
19	BS	95008425 50N PBSS008425	ST:0PSP02-SI-0060 (TM) 87000503-ACCUMULA TOR 1B PRESSURE ACOT (P-0962) . WMS COMMENTS:	NN ..1 BS00..12	N - NNNNNNNN NNN.NNNN NO NO	IC01 IC Crew 1<Crutcher(004 Vajdos(0852)>		ST: 87000503 SI ACCUMULATOR PRESSURE A 9Z121ZRR012/5N129F05016 #1
20	L HF	95006860 50N PHFS006860	0PSP11-ZH-0007(R)86000251 CRE AND FHB HV AC HEATER PERFORMANCE TEST . WMS COMMENTS:	NN ..1 HF20..	B - NNNN0141 FHB.36 NO NO	PS PSD - Plant Support (G. Erskine/M. Ebel)		ST: 86000251 CRE AND FHB HVAC HEATER PER 3V121VXV004

Unit 1 Authorized Surveillance Work Schedule

Revision 0

Work Week 05 04Dec95 - 10Dec95 A-Train LCO

Printed: 04DEC95 05:53

Item	PLNT SYS	WAN STATUS UC02 ACTIVITY No.	Description	MLST/PRI MODES EOGP HEGAWW	TRN-LCO FCO/RWP BLDG ELEV SCAF/INS	CRAFT OWNER	DEC MON 4	TUE 5	WED 6	THU 7	FRI 8	SAT 9	SUN 10	REMARKS
21	DO	00058847 50N ADGLCO PDOS058847	STANDBY DIESEL FUEL OIL SURVEILLANCE 'A' WMS COMMENTS:	NN N..1 ..	N - NNNNNNNN NNN.NNNN NO NO	CA Chemistry - Citzler(b0957)								ST: 86000126 STANDBY DIESEL FUEL OIL SU
22	BS	95009895 50N PBSS009895	ST:0PSP02-SI-0950 (TM) 87000497-ACCUMULATOR 1B LEVEL ACOT (L-0952) WMS COMMENTS:	NN N..1 BS00..12	N - NNNNNNNN NNN.NNNN NO NO	IC01 IC Crew 1<Crutcher(004 Vajdos(0852)>								ST: 870004b7 SI ACCUMULATOR LEVEL ACOT 9Z121ZRR012/
23	L BS	00058864 50N PBSS058864	ST:0PSP02-HC-0001 (TQ) 86000296-CONTAINMENT PRESSURE ACOT CHANNEL B (P-0935) WMS COMMENTS:	NN N..1 BS00..12	B - NNNNNNNN NNN.NNNN NO NO	IC01 IC Crew 1<Crutcher(004 Vajdos(0852)>								ST: 86000296 CONTAINMENT PRESSURE ACOT 3Z121ZRR018/5V149V00017 #1
24	CV	95014737 50N PCVS014737	ST:0PSP03-CV-0008 (TQ) 86000834-BAT PUMP 1B INSERVICE TEST WMS COMMENTS:	NN N..1 CV04..5	N - NNNNNNNN NNN.NNNN NO NO	RO Reactor Operations - Jones (b0009)								ST: 86000834 BORIC ACID TRANSFER PUMP 3R171NPA103B/5R179F05008 #1
25	DJ	95008713 50C PDJS008713	ST:0PSP06-DJ-0001 (TW) 87000043-125 VOLT CLASS 1E BATTERY 7 DAY SURVEILLANCE TEST WMS COMMENTS:ST: 87000043 125 VOLT CLASS 1E BATTERY	NN ..1 DJ0C..7	C - NNNNNNNN EAB.60 NO NO	EM00 Electrical Maintenance ERO Crew.								CLASS IE BATTERY 3E231EBT045D/
26	L HF	95007196 50N PHFS007196	0PSP11-ZH-0006(R)86000240 CRE AND HVAC IN-PLACE HEPA FILTER LEAK TEST WMS COMMENTS:	NN N..1 HF20..	B - NNNNNNNN NNN.NNNN NO NO	PS PSD - Plant Support (G. Erskine/M. Ebel)								Unassigned WAN; ST: 86000240 CRE AND HV 3V121VXV004
27	HF	95010402 50N PHFS010402	ST:0PSP03-HF-0001 (TM) 87000072-TRAIN A FHB EMERGENCY EXHAUST SYSTEM OPERABILITY WMS COMMENTS:	NN ..1 ..	A - NNNNNNNN RCB.68 NO NO	RO Reactor Operations - Jones (b0009)								ST: 87000072 TRAIN A FHB EMERGENCY EXHAU N/N
28	L HF	95007209 50N PHFS007209	0PSP11-ZH-0009(R)86000242 EAB AND FHB HVAC IN-PLACE ADSORBER LEAK TEST WMS COMMENTS:	NN N..1 HF20..	B - NNNNNNNN NNN.NNNN NO NO	PS PSD - Plant Support (G. Erskine/M. Ebel)								Unassigned WAN; ST: 86000242 EAB AND FH 3V121VXV004
29	HF	95008191 30N PHFS00819101	Support - 0PSP03-HF-0001 (TM) ST:8600073 7-9507-TRAIN A FHB EMERGENCY EXHAUST SYSTEM OPERABILITY WMS COMMENTS:	NN ..1 HF00..00	A - NNNNNNNN EAB.35 NO NO	RA Rad Monitoring <Lala(0385)>								
30	HF	95008191 50N PHFS008191	0PSP03-HF-0001 (TM) ST:86000737-9507-TRAIN A FHB EMERGENCY EXHAUST SYSTEM OPERABILITY WMS COMMENTS:	NN ..1 ..00	A - NNNNNNNN EAB.35 NO NO	RO Reactor Operations - Jones (b0009)								ST: 86000737 TRAIN A FHB EMERGENCY EXHAU /

Unit 1 Authorized Surveillance Work Schedule

Revision 0

Work Week 05 04Dec95 - 10Dec95 A-Train LCO

Printed: 04DEC95 05:53

Item	SYS	WAN STATUS UC02 ACTIVITY No.	Description	MLST/PRI MODES EOGP PEG/WW	TRN-LCO ECO/RWP BLDG ELEV SCAFFNS	CRAFT OWNER	DEC MON 4	TUE 5	WED 6	THU 7	FRI 8	SAT 9	SUN 10	REMARKS
31	M PK	95008904 50N PPKS008904	ST:0PSP08-PK-0006 (TQ) 86000162-4.16KV CLASS 1E DEGRADED VOLTAGE RELAY CHANNEL C ALIBR ATION/TADOT-CHANNEL 2 WMS COMMENTS:ST: 86000162 4.16KV CLASS 1E DEGRADED VO	NN ..1 PK0A..1	A - NNNNNNNN EAB.10 NO NO	EM02 EM Bowles(b0246) Sauer(b0141) (EM02)								4.16KV SWGR E1A 3E151ESG0E1A/
32	L BS	95008265 50N PBSS008265	ST:0PSP02-RC-0465 (TQ) 86000467-PRESSURIZER LEVEL SET 2 ACOT (L-0468) WMS COMMENTS:	NN ..1 BS00..12	A - NNNNNNNN EAB.35 NO NO	IC01 IC Crew 1<Crutcher(004 Vajdos(0852)>								ST: 86000467 PRESSURIZER LEVEL ACOT D 3Z121ZRR018/5R149F05003 #1
33	DJ	95008632 50C PDJS008632	ST:0PSP06-DJ-0001 (TW) 87000041-125 VOLT CLASS 1E BATTERY 7 DAY SURVEILLANCE TEST WMS COMMENTS:ST: 87000041 125 VOLT CLASS 1E BATTERY	NN ..1 DJ0D..4	D - NNNNNNNN EAB.10 NO NO	EM00 Electrical Maintenance ERO Crew.								CLASS IE BATTERY 3E231EBT045B/
34	WG	95009189 50N PWGS009189	ST:0PSP02-WG-4655 (TM) 86000576-GASEOUS WASTE PROCESSING OXYGEN MONITOR ACOT WMS COMMENTS:	NN N..1 WG00..4	N - NNNNNNNN NNN.NNNN NO NO	IC01 IC Crew 1<Crutcher(004 Vajdos(0852)>								Unassigned WAN; ST: 86000576 GASEOUS WA N1WGASH4655/
35	L PK	95009337 50N PPKS009337	ST:0PSP08-PK-0002 (TQ) 86000071-4.16KV CLASS 1E UNDERVOLTAGE RELAY CHANNEL CALI B RATION/TADOT-CHANNEL 2 WMS COMMENTS:ST: 86000071 4.16KV CLASS 1E UNDERVOLTAG	NN ..1 PK0A..1	A - NNNNNNNN EAB.10 NO NO	EM02 EM Bowles(b0246) Sauer(b0141) (EM02)								4.16KV SWGR E1A 3E151ESG0E1A/
36	M MS	95008755 50N PMSS00875501	Support - 0PSP03-MS-0003 (TM) ST:8700043 2-9507-MAIN TURBINE STEAM INLET VOT . WMS COMMENTS:	NN.2..1 MS00..08	N - NNNNNNNN TGB.83 NO NO	IC00 IC ERO Crew (IC00)								
37	AF	95010200 50N PAFS010200	ST:0PSP03-AF-0001 (TM) 86000591-AFW TRAIN 11 MONTHLY OPERABILITY TEST WMS COMMENTS:	NN N..1 AF01..5	A - NNNNNNNN NNN.NNNN NO NO	RO Reactor Operations - Jonas (b0009)								Unassigned WAN; ST: 86000591 AUXILIARY 3S141MPA01/5S141F00024 SHT 1
38	M MS	95008755 50N PMSS008755	0PSP03-MS-0003 (TM) ST:87000432-9507-MAIN TURBINE STEAM INLET VOT WMS COMMENTS:	NN ..1 MS00..08	N - NNNNNNNN TGB.83 NO NO	RO Reactor Operations - Jones (b0009)								ST: 87000432 MAIN TURBINE STEAM INLET VA 7S101XMS0501/F00017
39	M SP	95008293 50N PSPS008293	ST:0PSP03-SP-0006B (TQ) 86000063-SSPS TRAIN B SLAVE RELAY TEST (OB) WMS COMMENTS:	NN N..1 ..	N - NNNNNNNN NNN.NNNN NO NO	RO Reactor Operations - Jones (b0009)								ST: 86000063 SSPS TRAIN B SLAVE RELAY N/N
40	M SP	95010458 50N PSPS010458	ST:0PSP03-SP-0007B (TQ) 86000522-SSPS TRAIN B MASTER RELAY TEST WMS COMMENTS:	NN ..1 ..	B - NNNNNNNN TGB.83 NO NO	RO Reactor Operations - Jones (b0009)								ST: 86000522 SSPS ACTUATION TRAIN B MA N/N

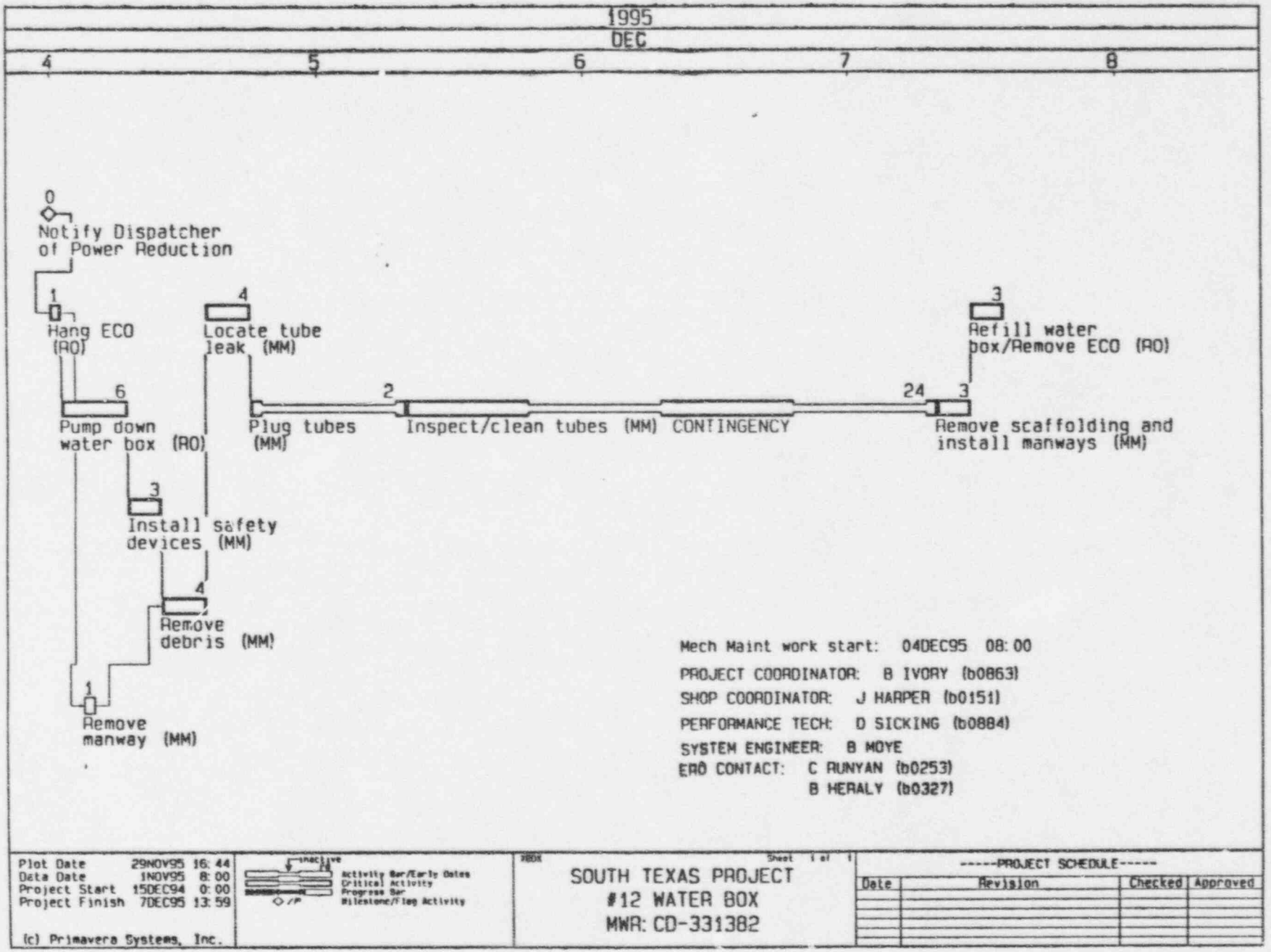
S . PEGS

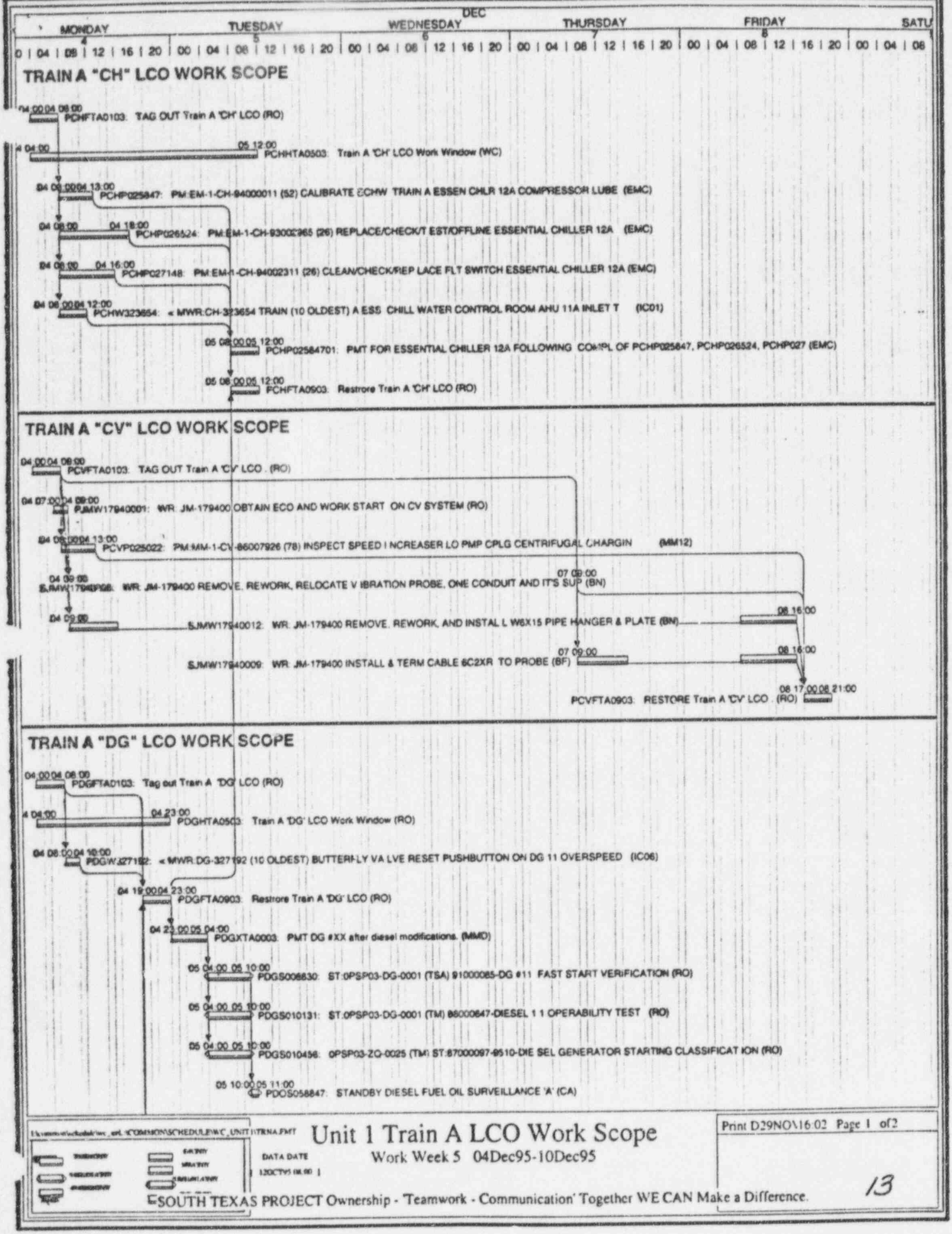
OPEN UNIT 1 PRIORITY 2 SR's BY CRAFT BY SYSTEM

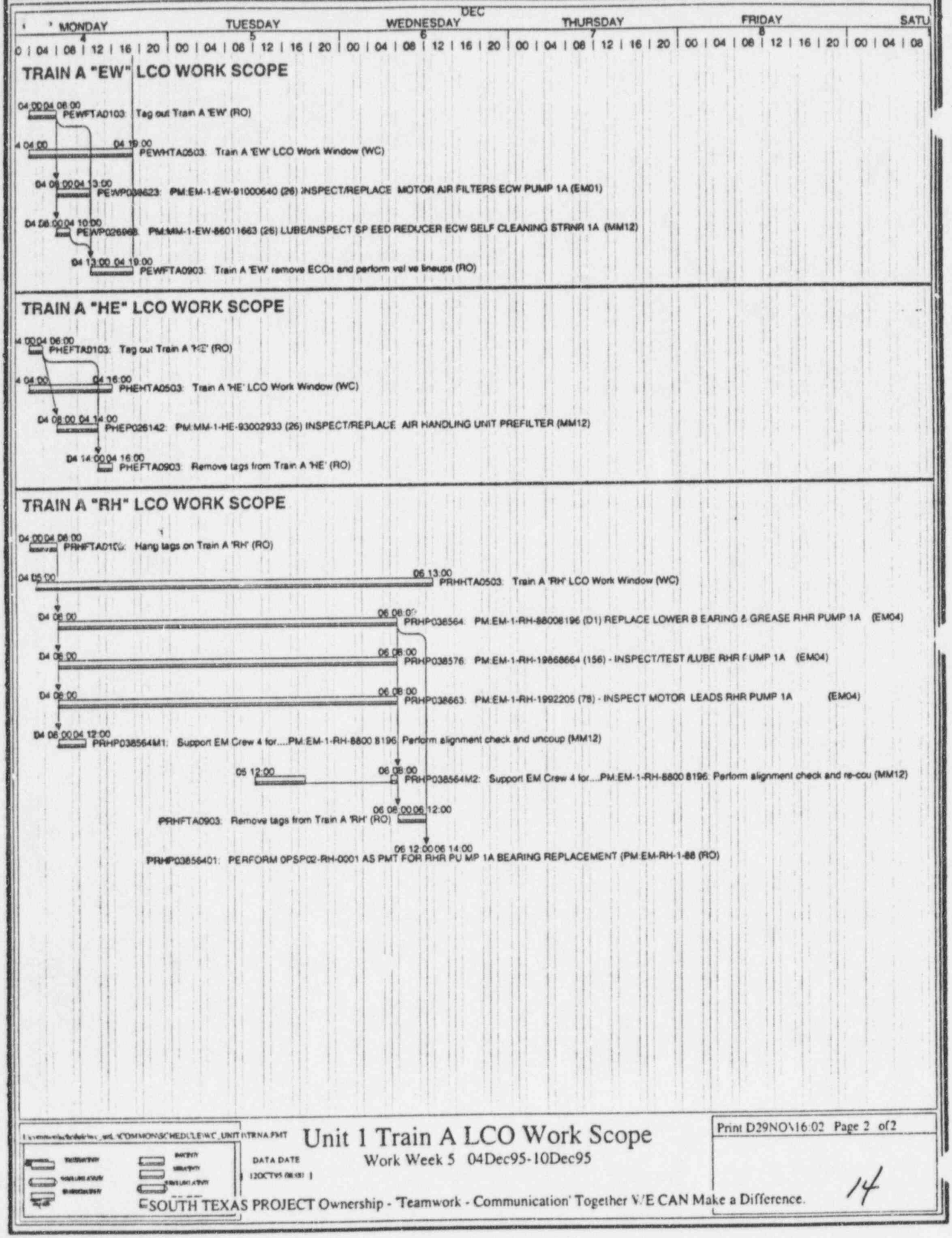
BATCH

12/04/1995 01:25

	WAN / ACTIVITY NO. / TAGTPNS / P&ID / COMP. OUTAGE MODE / TRAIN / SYSTEM	STATUS	UNIT / FEG / BLDG / ELEV / FEGWW	DESCRIPTION / COMMENTS / STATUS COMMENTS / SDESC / COMP. DESC	START/ FINISH DATE	CR / MM / IP / PRI - WCC / ECO LCO / MS - OI / REC DATE	CFT - #MEN-HRS	PART STATUS / PARTNO / PO NUMBER / LONGEST ETA / ONHAND QTY
CRAFT = IC								
1	71290	60	1	1A MSIV DID NOT STROKE WHILE PERFORMING OPS903-MS-0001	11/30/1995	C / R / N	IC - 2 - 12	N
	324294		MS-09	USING THE TEST PUSHBUTTON. INVESTIGATE AND REPAIR.		2 -	IC - 2 - 4	
	A1MSFSV7414		IVC	ORIG. M.A. SCHAEFFER X8595		Y		
	5S109F00016 #1		58	TO MANITENANCE SHOP JBF...		9N - AP01M		
	OWCG1R		8	STEAM GENERATOR 1A MAIN STEAMIORC ISOLATION VALVE		11/30/1995		
	ALL / A / MS							


1995
DEC
4
5
6
7
8
0
Notify Dispatcher of Power Reduction
1
Hang ECO (RO)
4
Locate tube leak (MM)
3
Refill water box/Remove ECO (RO)
6
Pump down water box (RO)
2
Plug tubes (MM)
Inspect/clean tubes (MM) CONTINGENCY
24
3
Remove scaffolding and install manways (MM)
3
Install safety devices (MM)
4
Remove debris (MM)
1
Remove manway (MM)
Mech Maint work start: 04DEC95 08:00
PROJECT COORDINATOR: B IVORY (b0863)
SHOP COORDINATOR: J HARPER (b0151)
PERFORMANCE TECH: D SICKING (b0884)
SYSTEM ENGINEER: B MOYE
ERO CONTACT: C RUNYAN (b0253)
B HERALY (b0327)
Plot Date 29NOV95 16:44
Data Date 1NOV95 8:00
Project Start 15DEC94 0:00
Project Finish 7DEC95 13:59
(c) Primavera Systems, Inc.
Inactive
Activity Bar/Early Dates
Critical Activity
Progress Bar
Milestone/Flag Activity
Sheet 1 of 1
SOUTH TEXAS PROJECT
#12 WATER BOX
MWR: CD-331382
-----PROJECT SCHEDULE-----
Date
Revision
Checked
Approved


DEC
MONDAY 4
TUESDAY 5
WEDNESDAY 6
THURSDAY 7
FRIDAY 8
SATU
0 | 04 | 08 | 12 | 16 | 20 | 00 | 04 | 08 | 12 | 16 | 20 | 00 | 04 | 08 | 12 | 16 | 20 | 00 | 04 | 08 | 12 | 16 | 20 | 00 | 04 | 08 | 12 | 16 | 20 | 00 | 04 | 08
TRAIN A "CH" LCO WORK SCOPE
04 00 04 08 00 PCHFTA0103: TAG OUT Train A 'CH' LCO (RO)
4 04:00 05 12:00 PCHHTA0503: Train A 'CH' LCO Work Window (WC)
04 08:00 04 13:00 PCHP025847: PM:EM-1-CH-94000011 (52) CALIBRATE ECHW TRAIN A ESSEN CHLR 12A COMPRESSOR LUBE (EMC)
04 08:00 04 18:00 PCHP026524: PM:EM-1-CH-93002365 (26) REPLACE/CHECK/T EST/OFFLINE ESSENTIAL CHILLER 12A (EMC)
04 08:00 04 16:00 PCHP027148: PM:EM-1-CH-94002311 (26) CLEAN/CHECK/REP LACE FLT SWITCH ESSENTIAL CHILLER 12A (EMC)
04 08 00 04 12:00 PCHW323654: < MWR:CH-323654 TRAIN (10 OLDEST) A ESS CHILL WATER CONTROL ROOM AHU 11A INLET T (IC01)
05 08:00 05 12:00 PCHP02584701: PMT FOR ESSENTIAL CHILLER 12A FOLLOWING COMPL OF PCHP025847, PCHP026524, PCHP027 (EMC)
05 08:00 05 12:00 PCHFTA0903: Restrore Train A 'CH' LCO (RO)
TRAIN A "CV" LCO WORK SCOPE
04 00 04 08 00 PCVFTA0103: TAG OUT Train A 'CV' LCO . (RO)
04 07:00 04 09:00 PJMW17940001: WR JM-179400 OBTAIN ECO AND WORK START ON CV SYSTEM (RO)
04 08:00 04 13:00 PCVP025022: PM:MM-1-CV-86007926 (78) INSPECT SPEED I NCREASER LO PMP CPLG CENTRIFUGAL CHARGIN (MM12)
07 09:00
04 09:00 SJMW17940008: WR JM-179400 REMOVE, REWORK, RELOCATE V IBRATION PROBE, ONE CONDUIT AND IT'S SUP (BN)
08 16:00
04 09:00 SJMW17940012: WR JM-179400 REMOVE, REWORK, AND INSTAL L W6X15 PIPE HANGER & PLATE (BN)
07 09:00 08 16:00
SJMW17940009: WR JM-179400 INSTALL & TERM CABLE 6C2XR TO PROBE (BF)
08 17:00 08 21:00
PCVFTA0903: RESTORE Train A 'CV' LCO . (RO)
TRAIN A "DG" LCO WORK SCOPE
04 00 04 08 00 PDGFTA0103: Tag out Train A 'DG' LCO (RO)
4 08:00 04 23:00 PDGHTA0503: Train A 'DG' LCO Work Window (RO)
04 08:00 04 10:00 PDGW327192: < MWR:DG-327192 (10 OLDEST) BUTTERFLY VA LVE RESET PUSHBUTTON ON DG 11 OVERSPEED (IC06)
04 19:00 04 23:00 PDGFTA0903: Restrore Train A 'DG' LCO (RO)
04 23:00 05 04:00 PDGXTA0003: PMT DG #XX after diesel modifications. (MM0)
05 04:00 05 10:00 PDGS006830: ST:0PSP03-DG-0001 (TSA) 91000065-DG #11 FAST START VERIFICATION (RO)
05 04:00 05 10:00 PDGS010131: ST:0PSP03-DG-0001 (TM) 86000647-DIESEL 1 1 OPERABILITY TEST (RO)
05 04:00 05 10:00 PDGS010456: 0PSP03-ZQ-0025 (TM) ST:87000097-9510-DIE SEL GENERATOR STARTING CLASSIFICAT ION (RO)
05 10:00 05 11:00 PDOS058847: STANDBY DIESEL FUEL OIL SURVEILLANCE 'A' (CA)
DATA DATE
Unit 1 Train A LCO Work Scope
Work Week 5 04Dec95-10Dec95
Print D29NOV16:02 Page 1 of2
SOUTH TEXAS PROJECT Ownership - 'Teamwork - Communication' Together WE CAN Make a Difference.
13


DEC
MONDAY
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WEDNESDAY
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TRAIN A "EW" LCO WORK SCOPE
04 00 04 06 00 PEWFTA0103 Tag out Train A 'EW' (RO)
4 04 00 04 19 00 PEWHTA0503 Train A 'EW' LCO Work Window (WC)
04 08 00 04 13 00 PEWP038623 PM:EM-1-EW-91000640 (26) INSPECT/REPLACE MOTOR AIR FILTERS ECW PUMP 1A (EM01)
04 08 00 04 10 00 PEWP026968 PM:MM-1-EW-86011663 (26) LUBE/INSPECT SP EED REDUCER ECW SELF CLEANING STRNR 1A (MM12)
04 13 00 04 19 00 PEWFTA0903 Train A 'EW' remove ECOs and perform val ve lineups (RO)
TRAIN A "HE" LCO WORK SCOPE
4 00 04 06 00 PHEFTA0103 Tag out Train A 'HE' (RO)
4 04 00 04 16 00 PHEHTA0503 Train A 'HE' LCO Work Window (WC)
04 08 00 04 14 00 PHEP026142 PM:MM-1-HE-93002933 (26) INSPECT/REPLACE AIR HANDLING UNIT PREFILTER (MM12)
04 14 00 04 16 00 PHEFTA0903 Remove tags from Train A 'HE' (RO)
TRAIN A "RH" LCO WORK SCOPE
04 00 04 06 00 PRHFTA0103 Hang tags on Train A 'RH' (RO)
04 05 00 06 13 00 PRHHTA0503 Train A 'RH' LCO Work Window (WC)
04 08 00 06 08 00 PRHP038564 PM:EM-1-RH-88008196 (D1) REPLACE LOWER B EARING & GREASE RHR PUMP 1A (EM04)
04 08 00 06 08 00 PRHP038576 PM:EM-1-RH-19868664 (156) - INSPECT/TEST /LUBE RHR P UMP 1A (EM04)
04 08 00 06 08 00 PRHP038663 PM:EM-1-RH-1992205 (78) - INSPECT MOTOR LEADS RHR PUMP 1A (EM04)
04 08 00 04 12 00 PRHP038564M1 Support EM Crew 4 for....PM:EM-1-RH-8800 8196 Perform alignment check and uncoup (MM12)
05 12 00 06 08 00 PRHP038564M2 Support EM Crew 4 for....PM:EM-1-RH-8800 8196 Perform alignment check and re-cou (MM12)
06 08 00 06 12 00 PRHFTA0903 Remove tags from Train A 'RH' (RO)
06 12 00 06 14 00 PRHP03856401 PERFORM 0PSP02-RH-0001 AS PMT FOR RHR PU MP 1A BEARING REPLACEMENT (PM:EM-RH-1-88 (RO)

UNIT 1
PREVENTIVE AND CORRECTIVE - WORKLOAD
STATUS LESS THAN 64

DATE	11/27	11/28	11/29	11/30	12/01	12/02	12/03	INCOMING
DISTRIBUTION BY OUTAGE/NON-OUTAGE								
TOTAL WO'S	465	463	477	478	480	480	**	**
NON-OUTAGE	289	286	298	299	298	298	**	**
FORCED OUTAGE	26	26	26	26	25	25	**	**
REFUELING OUTAGE	150	151	153	153	157	157	**	**
INCOMING	0	1	19	11	5	5	**	**
DISTRIBUTION BY CRAFT (NON-OUTAGE)								
EM	41	41	42	42	43	43	**	**
IC	75	71	78	73	76	76	**	**
MM	138	137	146	153	149	149	**	**
PMPI	11	11	11	11	11	11	**	**
OTHER	24	23	21	20	19	19	**	**
DISTRIBUTION BY POWER PRODUCTION(OUTAGE/NON-OUTAGE)								
POWER PRODUCTION SAFETY RELATED	179	178	184	185	184	184		
POWER PRODUCTION NON-SAFETY RELATED	236	235	241	242	245	245		
POWER PRODUCTION NON-POWER BLOCK	26	26	28	28	28	28		
NON-POWER PRODUCTION	24	24	24	23	23	23		
DISTRIBUTION BY WORK ORDER SUPPORT TYPE(NON-OUTAGE)								
ENGINEERING	4	3	3	4	3	3		
PARTS	37	38	38	39	39	39		
PLANNING	30	25	32	40	38	38		
DISTRIBUTION BY STATUS(NON-OUTAGE)								
READY TO WORK	199	203	206	200	211	211		
WORK ON HOLD	13	11	11	12	12	12		
WORK IN PROGRESS	11	12	14	12	13	13		
PMT'S	5	5	5	4	4	4		
MCB	1	1	1	1	1	1		
IAF	3	3	3	3	3	3		

** NOT AVAILABLE

UNIT 1 ISSUES

#	MATERIAL CONDITION ISSUES	OWNER
1	Failure of Test Circuitry for Steam Generator 1A MSIV FSV-7414.	IC-Childers

#	MANAGEMENT/PROGRAMMATIC/QUALITY ISSUES	OWNER
1	None.	

#	OTHER KEY EQUIPMENT OUT OF SERVICE	OWNER
1	None.	

Unit One Reactor Containment Building Entries

U1 WEEKLY RCB ENTRY LIST

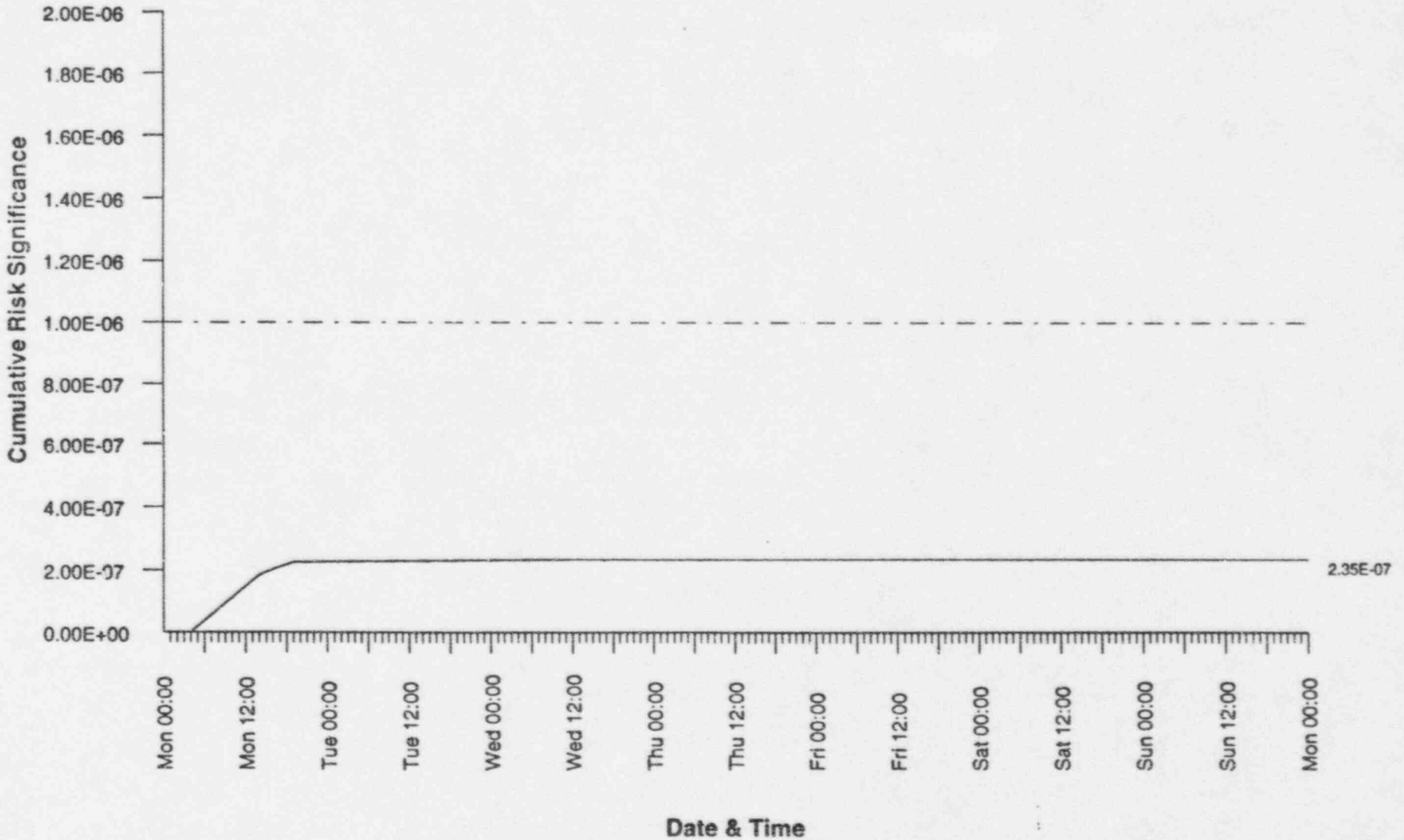
Day Date	Group Supervisor Extension	Location	WAN Number Description RWP#
RCB Entry#1 Monday- Wednesday Dec/04-06/1995 08:00-14:00	MM12, Bannick X7711 EM04, Hammons (b0177)	1-RCB-002-109	RHR Pump 1A lower bearing replacement, lube/inspect, run test as required. WAN# 93038564, 94038576, and 94038663 RWP# 95-1-2336 Rev.0 Est. Dose = 232 mRem Est. Man-Hrs = 170
RCB Entry#2 Monday Dec-04-1995 08:00-11:00	Reactor Engineering Roland Dunn X7743	1-RCB-011-003	Count Thimble tags to inventory Thimble Tubes in storage. WAN# 9710 RWP# 95-1-2322 Rev.0 Est. Dose= 0 mRem Est. Man-Hrs = 3
RCB Entry#3 Monday Dec-04-1995 08:00-10:00	MOV Test/Maint Don Pennington X7076	1-RCB-002-105	MOV to clean boric acid off of SI-MOV-0006C to determing cause of leak for future repairs. WAN# 95014946 RWP# 95-1-2065 Rev.1 Est Dose=5 mRem Est. Man-Hrs = 2
RCB Entry#4 Tuesday Dec-05-1995 08:00-17:30	I&C, Reed X7740	1-RCB-GEN	Fire Protection System Modification PMTs. WAN# 94030336 RWP# 95-1-2065 Rev.1/95-1-0130 Rev.5 Est. Dose = 35 mRem Est. Man-Hrs = 345
RCB Entry#5 Wednesday Dec-06-1995 14:00-18:00	MOV Test/Maint Don Pennington X7076	1-RCB-052	Lube/Inspect (MOV-HBC-0) (ICIV) RCB Atmosphere Rad Monitor Isolation/Return Isolation Valve. WAN# 95014525/95014533 RWP# 95-1-2065 Rev.1 Est. Dose = 0 mRem Est. Man-Hrs = 4

NOTES:

*RCB Entry #2&3 not listed on schedule for this week.

*Estimated Person Hours and Person Rem is time at the job site for all Mod activities including PMTs.

Unit 1 Cumulative Risk Significance for Week of 12/04/95



11/30/95 2:42:23 PM dbV\ 1.09

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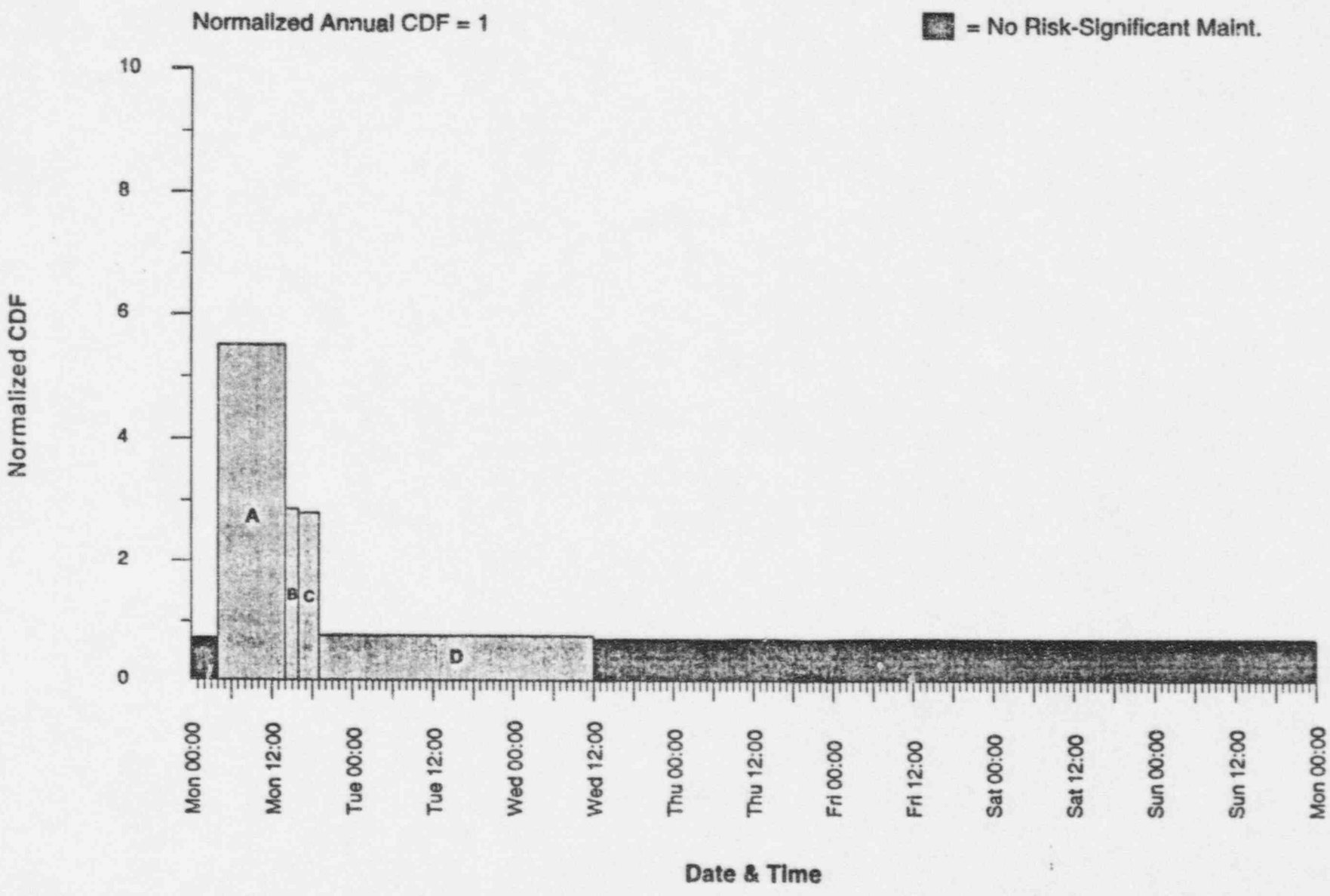
Unit 1 Risk Profile for Week of 12/04/95



Unit 1 Planned Maintenance Schedule for Week of 12/04/95

SCHEDULE:

System	Time Out of Service	Time In Service	Duration
AFA	12/04/95 04:00	12/04/95 14:00	10
CHA	12/04/95 04:00	12/04/95 19:00	15
CVB	12/04/95 04:00	12/04/95 14:00	10
DGA	12/04/95 04:00	12/04/95 19:00	15
EWA	12/04/95 04:00	12/04/95 19:00	15
HEA(EAB)	12/04/95 04:00	12/04/95 16:00	12
RHRA	12/04/95 04:00	12/06/95 12:00	56

MAINTENANCE STATES:

Maintenance State Label	PRA Systems Affected	Maintenance State Start	Maintenance State End
No Risk-Significant Maint.	No Risk-Significant Maintenance	12/04 00:00	12/04 04:00
Maintenance State A	AFA CHA CVB DGA EWA HEA(EAB) RHRA	12/04 04:00	12/04 14:00
Maintenance State B	CHA DGA EWA HEA(EAB) RHRA	12/04 14:00	12/04 16:00
Maintenance State C	CHA DGA EWA RHRA	12/04 16:00	12/04 19:00
Maintenance State D	RHRA	12/04 19:00	12/06 12:00
No Risk-Significant Maint.	No Risk-Significant Maintenance	12/06 12:00	12/11 00:00