

TEXAS UTILITIES GENERATING COMPANY
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January 5, 1985

JOHN W. BECK
MANAGER-LICENSING

Director of Nuclear Reactor Regulation
Attention: Mr. B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION
DOCKET NOS. 50-445 AND 50-446
ENGINEERING AND CONSTRUCTION STATUS
REPORT

Dear Mr. Youngblood:

As previously discussed with you and members of your staff please find attached a package describing the yet to be completed engineering and construction items which relate to licensing commitments or requirements for CPSES Unit 1. A discussion is provided of the present status and schedule for completion of each item and an evaluation of the significance of the item with respect to the safe operation of Unit 1.

All engineering or construction activities which are not anticipated to be complete prior to January 17, 1985 are included except those associated with:

1. Technical Review Team Inspection Items
2. ASLB Issues (e.g. Independent Assessment Program (CYGNA) Items)

Many other close out activities are being pursued with the NRC which do not currently involve significant engineering and construction activity and are not listed herein. These include:

1. Significant Deficiency Reports
2. Technical Specification Items
3. Reportable Deficiency Items (10CFR50.55e)
4. Non-conformance Reports
5. SER Open and Confirmatory Items
6. Test Deficiency Reports
7. Inspection Reports
8. I&E Bulletins and Notices
9. Pre-operational Test Deferrals.

Boo!

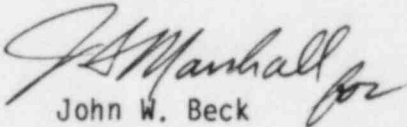
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All of these activities are the subject of separate correspondence or are items available to NRC Region IV in their review of project readiness for operation.

The Table of Contents for the attached package gives the title of each page and its item number. Each page describes a separate item. The item number is derived from the CPSES Master System Data Base which is used by project personnel to track and status project completion. TUGCO will periodically update the table of contents and the appropriate pages as items are completed or as their status changes significantly. Should additional incomplete items be defined, the new items will be added to the package in a similar fashion. It is our current intention to keep this document through the granting of a full power operating license.

It is possible that some of these items will require deferred implementation of portions of specific Technical Specification requirements. These deferrals will be addressed in separate correspondence. Based on the conclusions stated in each item of this package CPSES Unit 1 is sufficiently complete to load fuel.

Sincerely,



John W. Beck

JSM/grr

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0000-00003-D

TURBINE DRIVEN AUXILIARY
FEEDWATER PUMP

DETAILED DESCRIPTION: Turbine Driven Auxiliary Feedwater Pump does not meet the discharge head acceptance criteria as described in the draft Technical Specifications. Engineering evaluation is to be completed to determine resolution.

STATUS AND SCHEDULE: Schedule for resolution will be provided by January 17, 1985.

CONCLUSION: The deviation of discharge head from acceptance criteria is only a few percentage points and should prove adequate with additional analysis. Fission product inventory prior to exceeding 5% power is not significant due to the low power history. A fission product release is unlikely during this period. CPSES Unit 1 can be safely operated up to 5% power while the analysis being completed.

01DM-0445S-D

APPENDIX R
EMERGENCY LIGHTING

DETAILED DESCRIPTION: Add 8 hour battery packs for emergency lighting in UPS inverter room and adjacent corridor.

STATUS AND SCHEDULE: A schedule will be developed by 1/17/85 for completion of this item.

CONCLUSION: Fission product inventory prior to 5% exceeding power is not significant due to the low power history. Thus a fission product release due to a fire in this area is unlikely. CPSES Unit 1 can be safely operated up to 5% power while this modification is being completed.

APPENDIX R
NFPA-13 ISSUES

DETAILED DESCRIPTION: Because of ceiling congestion, placement of sprinkler heads in certain fire areas does not meet NFPA 13 Section 4-1.1.1 requirements. NFPA 13 Section 4.1.1.5 allows non-standard placement if analysis or test shows comparable sensitivity and performance. An analysis to justify non-standard placement of heads has been performed.

Also in several fire areas, head placements are being modified to meet the requirements of section 4-1.1.1.

STATUS AND SCHEDULE: A schedule will be developed by 1/17/85 for completion of the sprinkler modification.

CONCLUSION: Existing head locations have been designed to provide adequate sprinkler coverage but do not meet specific NFPA 13 guidance. Fission product inventory prior to exceeding 5% power is not significant due to the low power history. Thus a fission product release due to a fire in these areas is unlikely. CPSES Unit 1 can be safely operated up to 5% power while these modifications are being completed.

0613-0390S-D

APPENDIX R
FIRE DETECTION PANEL

DETAILED DESCRIPTION: NFPA 72D requires that the fire detection panels (main and local) be verified to be operable for their intended use. Factory Mutual (F.M.) has reviewed and approved the panels with one minor exception which is being researched for resolution. Also the panels must undergo an environmental testing for F.M. certification.

STATUS AND SCHEDULE: To be completed by 3/31/86. (environmental test)

CONCLUSION: F.M. has found the panels to be operationally adequate with a minor exception concerning the recording of the time that the annunciator alarm is acknowledged. This does not affect the ability to detect and annunciate a fire condition.

Environmental testing verifies the ability of the panels to operate under adverse conditions which are unlikely to occur. It is expected that the panels will operate satisfactorily even in these adverse conditions.

Implementation of the defense-in-depth concepts has provided multi-layers of fire protection independent of the detection system.

CPSES Unit 1 can be safely operated through the first cycle while the environmental testing is being completed.

0701-0382S-W

EQUIPMENT QUALIFICATION
CONTROL ROOM AIR CONDITIONING UNITS

DETAILED DESCRIPTION: Make the modifications needed for the seismic qualification of the Control Room Air Conditioning Units.

STATUS AND SCHEDULE: Three of the four units have been modified. A schedule will be developed by 1/17/85 for completion of this item.

CONCLUSION: Three of the four units are operational. The seismic modifications have been completed on all but one unit. Based on the fact that there is no significant buildup of fission products prior to exceeding 5% power and the low probability of seismic event during this period, operation of CPSES Unit 1 is safe and acceptable up to 5% power while this modification is being completed on this last Control Room Air Conditioning unit.

0701-0802S-D

CHARCOAL FILTER HEATERS

DETAILED DESCRIPTION: The charcoal filter bed heater was oversized and trips on overload.

STATUS AND SCHEDULE: A schedule will be developed by 1/17/85 for completion.

CONCLUSION: Fission product inventory prior to exceeding 5% power is not significant. Thus a fission product release due to a failure of the filter system is unlikely. CPSES Unit 1 can be operated safely up to 5% power while this modification is being completed.

0701-0804S-D

CONTROL ROOM VENTILATION
EQUALIZATION PATH

DETAILED DESCRIPTION: The pressure between the Control Room and Equipment Room does not equalize during Control Room Emergency Recirculation.

STATUS AND SCHEDULE: A vent path with a fire damper will be added between these areas. A schedule will be developed by 1/17/85 for completion of this item.

CONCLUSION: Fission product inventory prior to exceeding 5% power is not significant due to the low power history. Thus a fission product release due to a failure of the control room ventilation is unlikely. CPSES Unit 1 can be safely operated up to 5% power while this modification is being completed.

0701-0820S-W

CHLORINE DETECTORS - SEISMICALLY QUALIFIED
RESET CARD

DETAILED DESCRIPTION: A seismically qualified card must be installed in the logic for the chlorine detectors to reset the detectors following a loss of power event.

STATUS AND SCHEDULE: The card is a reset card that allows the Control Room ventilation system to be shifted out of the isolation mode after a loss of power event. A schedule will be developed by 1/17/85 for completion.

CONCLUSION: Without this reset card, CPSES will not meet the LCO requirements of draft technical specification 3.7.3, in that the Control Room Ventilation System will not be capable of automatically shifting to emergency air cleanup following a loss of power event. This is easily resolved by manually resetting the chlorine detectors. In addition, this automatic function is designed to protect the control room operators from a radiation release which is not a major problem before 5% power. Therefore, the license should delay implementation of this tech. spec. until the qualified card is installed. CPSES can safely load fuel and operate up to at least 5% power while the Chlorine Detectors are being modified to correct this reset problem.

1101-0787S-D

CCW INTERSYSTEM LOCA

DETAILED DESCRIPTION: Ensure that the CCW surge tank will not experience an unacceptable pressure excursion.

STATUS AND SCHEDULE: A schedule will be developed by 1/17/85 for completion.

CONCLUSION: Design modifications will prevent over pressurization of the CCW system in the event of a RCP thermal barrier failure followed by a failure of an isolation valve. Fission product inventory prior to exceeding 5% power is not significant due to the low power history. A fission product release due to a CCW overpressurization is unlikely. CPSES Unit 1 can safely operate up to 5% power while this modification is being completed.

2202-0000S-W

EQUIPMENT QUALIFICATION
VALVE LIMIT SWITCHES

DETAILED DESCRIPTION: In the preparation of a Q-list for the use of operations, the limit switches for two valves were identified as class 1E but proper qualification documentation could not be located.

STATUS AND SCHEDULE: All the valves of concern have been identified. The limit switches for these valves will be replaced with switches that have the required qualification documentation. A schedule will be developed by 1/17/85 for completion.

CONCLUSION: CPSES can safely load fuel and operate up to 5% power based on the following: there is high confidence that the installed switches will operate; the switches are for indication only and do not have an active safety function; the probability of an event that would challenge the operability of these valves prior to exceeding 5% power is remote; and there is no significant buildup of fission products prior to exceeding 5% power.

POST ACCIDENT SAMPLING SYSTEM

DETAILED DESCRIPTION: Two design concerns have been identified, associated with the Post Accident Sampling System (PASS):

- (1) PASS control switch and associated relay failure which potentially could cause the associated Containment Isolation Valves (IV) to fail open.
- (2) No continuous indication of bypass of containment isolation Phase "A" signal.

For item (1), the interposing relays for contacts of hand switches require modifications to eliminate the possibility of a failure to close the associated Containment IV's on a loss-of-power to the switch or due to relay malfunction.

For item (2), the shift supervisor does not know when Phase "A" isolation is bypassed at the remote PASS IV control panel. The potential exists that the bypass will not be manually overridden by control room personnel in the event of a phase "A" condition.

STATUS AND SCHEDULE: The design modifications are scheduled to be completed by 2/1/85.

CONCLUSION: For item (1), the single failure of one IV should not preclude the operation of the other train's IV. For item (2), procedures are in place to verify all IV's are closed under emergency conditions. Furthermore, administrative control is used with the removable handle of the bypass switch preventing unauthorized use. Based on the operability of the PASS and the lack of significant fission product buildup prior to exceeding 5%, CPSES Unit 1 can be safely operated up to 5% power while the design modifications are being completed.

2401-0213S-D

FUEL BUILDING ROLL-UP DOOR

DETAILED DESCRIPTION: There is excessive air leakage through the roll-up door in the fuel building.

STATUS AND SCHEDULE: A schedule will be developed by 1/17/85 for completion.

CONCLUSION: No spent fuel will be stored in the Fuel Building, therefore operation through the first cycle is acceptable.

2802-0800S-D

THERMAL EXPANSION REWORK

DETAILED DESCRIPTION: Dimensions on U-bar pipe whip restraints must be revised based on recent Hot Functional Testing. Evaluate thermal expansion tests for requirements for further modifications to pipe supports and restraints.

STATUS AND SCHEDULE: A schedule will be developed by 1/17/85 for completion of this item.

CONCLUSION: Required modifications will be made prior to entering the mode for which the system is required to be operable.

2904-0213S-W

DIESEL GENERATOR EXCITATION

DETAILED DESCRIPTION: Modifications were required to the maximum excitation limiters for the diesel generators.

STATUS AND SCHEDULE: Temporary modifications have been made to resolve the deficiency. Engineering approval of the changes and reconfirmation of the qualification still needs to be completed. A schedule will be developed by 1/17/85 for completion.

CONCLUSION: The changes are expected to be approved without further modification to the diesel generators. Qualification is not expected to be a problem since previously qualified hardware was used to make the modification. CPSES can be safely operated up to at least 5% power while these modifications are being reviewed and approved.

2904-0246S-D

APPENDIX R
DIESEL GENERATOR CURRENT TRANSFORMER

DETAILED DESCRIPTION: A fire could open the secondary in the current transformers for the diesel generator which could degrade the safety related bus.

STATUS AND SCHEDULE: An evaluation of this potential failure is underway. A schedule will be developed by 1/17/85 for completion.

CONCLUSION: Fission product inventory prior to exceeding 5% is not significant due to the low power history. A fission product release during this time due to a failure of the diesel current transformer is unlikely. CPSES can safely operate up to 5% power while this issue is being resolved.

DIESEL GENERATORS

DETAILED DESCRIPTION: The NRC staff has required that the maximum emergency load requirements for the Diesel Generators be limited to 5740 kW.

STATUS AND SCHEDULE: The detailed re-evaluation of the TDI diesel engines indicated a need to modify the rating for these machines. All the items that the NRC staff has required prior to fuel load with respect to the emergency diesel generators is listed under Conclusion in Section 9.5.9 of SSER #6. The 5740 kW limit is based on a limit of a 185 psig break mean effective pressure (BMEP) which is considered safe with respect to stress on the piston skirts and the reliability of the diesels cannot be guaranteed for the entire first cycle.

CONCLUSION: The adequacy of the CPSES design was confirmed during the Loss of Offsite Power (LOOP) testing and the LOOP/LOCA testing where actual readings of 4200 kW for Train A and 4350 kW for Train B were taken in the control room. The load limit is based on a long term reliability question. Prior to exceeding 5% power, there is no significant buildup of fission product. All of these arguments show that the emergency diesel generators at CPSES can be fully expected to adequately provide the ac power needed prior to exceeding 5% power and that operation until that time is fully justified.

Since the review in SSER #6 for CPSES, Shoreham completed a long term reliability test on the piston skirts and Catawba completed a long term reliability test on the crankshaft. Inspections following these tests showed that the crankshaft and piston skirts had performed adequately. Based on this additional testing, it is reasonable to assume that the diesel generators will perform adequately and reliably up to its initial power rating of 7000 kW. An analysis is being prepared to demonstrate that the 7000 kW load limit can be restored. This preliminary assessment clearly shows that it is reasonable to conclude that CPSES can safely load fuel and operate up to 5% power while the load limit for the CPSES diesel generators is being evaluated.

3401-1299S-D

MAIN STEAM LINE ISOLATION VALVE BYPASS VALVES

DETAILED DESCRIPTION: Main Steam Isolation Valve (MSIV) Bypass Valve pneumatic-hydraulic actuators are unreliable. Valves will be replaced with manual valves and appropriate administrative controls will be instituted to assure closure after MSIVs have been opened.

STATUS AND SCHEDULE: This condition was determined during recent hot functional tests. The schedule to resolve this issue will be determined by January 17, 1985.

CONCLUSION: These valves are only used to warm the Main Steam line to equalize pressure prior to opening the MSIVs. Manual operation of the existing bypass valves, with appropriate administration procedures, will be used until new valves are installed. Fission product inventory prior to 5% power is not significant due to the low power history. A fission product release during this period due to a failure of MSIV bypass valves is unlikely. CPSES Unit 1 can be operated safely while modifications are being completed.

3601-0151S-D

AUXILIARY AND SAFEGUARDS BUILDING VENTILATION

DETAILED DESCRIPTION: Design modifications and air flow balancing are required to the HVAC system in the Safeguards and Auxiliary Buildings to maintain environmental qualification parameters following a LOCA with loss of off-site power.

STATUS AND SCHEDULE: A complete description of the design deficiencies and proposed resolution will be supplied by separate correspondence.

CONCLUSION: The lack of significant amounts of fission product generated during low power testing would indicate the acceptability of power operation up to 5% while this item is being resolved.

4501-0062S-W

EQUIPMENT QUALIFICATION
18 INCH BUTTERFLY
CONTAINMENT PRESSURE RELIEF VALVES

DETAILED DESCRIPTION: Documentation must be obtained to show that these valves will close against LOCA loads (50 psig air pressure).

STATUS AND SCHEDULE: The NRC staff has indicated that the requested test/analysis documentation should be provided by fuel load. Interim operation for one cycle would be allowed if the valves were blocked so that they would not open any more than 30°. The required documentation is scheduled to be completed by February 28, 1985.

CONCLUSION: The 18 inch butterfly valves are fully expected to close during a LOCA. Our previous submittals provide evidence to support that conclusion. The NRC staff did not find this evidence conclusive for final acceptance but, when combined with blocking the valves to open no more than 30°, the evidence provides adequate justification for operation during the first cycle.

Prior to exceeding 5% reactor power, there is no significant buildup of fission products in the fuel. Therefore, the need for the safety function provided by these valves is greatly reduced. CPSES Unit 1 can be safely operated up to 5% power with no changes to the valves. CPSES Unit 1 can be safely operated for the first operating cycle if the valves are blocked such that they will not open more than 30°.

4802-0789S-D

CONTAINMENT SPRAY VALVES

DETAILED DESCRIPTION: Containment spray valves open in excess of 117 seconds to avoid a spray pump trip. The acceptance criteria for containment spray valves is 20 seconds maximum to open.

STATUS AND SCHEDULE: A schedule will be developed by 1/17/85 for completion of this item.

CONCLUSION: Fission product inventory prior to exceeding 5% power is not significant due to low power history. A fission product release during this period due to excessive time to open the spray valves is not likely. CPSES Unit 1 can be safely operated up to 5% while this modification is being completed.

4901-0624S-W

EQUIPMENT QUALIFICATION
BORON DILUTION DETECTION EQUIPMENT

DETAILED DESCRIPTION: The seismic qualification for Westinghouse specification ESE-47 is not complete.

STATUS AND SCHEDULE: A JIO was submitted by TXX-4288 of June 29, 1984. The JIO gave an estimated completion date of 2/28/85 and concluded that CPSES could safely operate until this package is completed.

CONCLUSION: The NRC staff has approved deferral of the completion of this package until 5% power (see NRR-6090 of December 4, 1984).

APPENDIX R
HYDROGEN PIPING

DETAILED DESCRIPTION: An analysis of the excess flow valve closure time is required to substantiate the assumptions made for the hydrogen concentration calculations.

STATUS AND SCHEDULE: To be completed by 4/1/85.

CONCLUSION: A hydrogen pipe break is a low probability event since it is not subject to corrosion, thermal expansion, process fluid shock or vibration. Additionally, the hydrogen concentration analysis did not consider the dissipation effects of normal plant ventilation so that the results are very conservative. The piping system is seismically supported where analysis shows hydrogen concentrations exceed 2%. Valve response time assumptions used for hydrogen calculations are considered to be conservative and only require final verification. Fission product inventory prior to exceeding 5% power is not significant due to the low power history. A fission product release during this period due to a hydrogen pipe failure is unlikely. CPSES Unit 1 can be safely operated up to 5% power while this analysis is being completed.

5201-1022S-W

EQUIPMENT QUALIFICATION
NSSS AUXILIARY RELAY RACK

DETAILED DESCRIPTION: The seismic qualification of the NSSS Auxiliary Relay Rack (ESE-XX) is incomplete.

STATUS AND SCHEDULE: This item is scheduled to be completed by 2/16/85. A JIO was submitted by TXX-4304 of September 20, 1984. The JIO gave an estimated completion date of 1/31/85 and concluded that CPSES could safely operate until this package is completed. The NRC staff has stated that the proposed wiring changes must be complete prior to fuel load. The remainder of the qualification must be completed prior to exceeding 5% power.

CONCLUSION: The NRC staff has approved deferral of completion of this qualification package until 5% power (see NRR-6090 of December 4, 1984). Also see Item 5201-1039S.

EQUIPMENT QUALIFICATION
NSSS AUXILIARY RELAY RACK
WIRING CHANGES

DETAILED DESCRIPTION: In order to properly establish the seismic qualification of the NSSS Auxiliary Relay Rack, the wiring must be slightly rerouted within the rack to provide the best possible separation.

STATUS AND SCHEDULE: A JIO was submitted on the NSSS Auxiliary Relay Racks by TXX-4304 of September 20, 1984. In NRR-6090 of December 4, 1984, the NRC staff provided a draft license condition that required that the wiring changes be completed prior to fuel load. The changes are scheduled to be completed by 1/26/85.

CONCLUSION: Separation is provided within the NSSS Auxiliary Relay Racks without the proposed modifications. The modifications are being made to provide the greatest degree of separation possible within the as built racks. None of the circuitry within this rack is involved in protective functions and none of the equipment served provides a safety related function. However, certain circuits within the rack were routed and treated as Class 1E. Therefore, the separation within the rack is being maximized to protect against the remote possibility that a fault would occur in a non-safety circuit within the rack of such magnitude and of such a nature that one of the train designated circuits within the rack would be affected in a manner that the train designated circuit would in turn jeopardize a safety related component or power supply. Considering these facts as well as the fact that there is no significant buildup of fission products in the core below 5% power, it can be concluded that CPSES can safely load fuel and operate up to 5% power without completion of the proposed wiring changes.

5501-0866S-W

EQUIPMENT QUALIFICATION
PRESSURIZER SAFETY VALVE

DETAILED DESCRIPTION: The environmental qualification (HE-7) for position detection devices (Unit 1) for the Pressurizer Safety Valves is not complete.

STATUS AND SCHEDULE: A JIO was submitted by TXX-4209 of June 29, 1984. The JIO gave an estimated completion date of 2/28/85 and concluded that CPSES can be safely operated until this qualification package is completed. The NRC staff has indicated that deferral until November 1985 will be allowed as provided by 10CFR50.49.

CONCLUSION: These position switches do not actually perform a safety function. The failure of these switches will not affect the integrity of any class 1E circuits or safety related systems. The qualification and operability of these switches is a backfit required by TMI Action Plan Item II.D.3 and Regulatory Guide 1.97, Rev. 2. Because of the qualification problems experienced, it is reasonable to extend the deadline for this backfit to November 1985. CPSES can be safely operated until November 1985 while this backfit is being completed.

5801-0431S-W

EQUIPMENT QUALIFICATION
RHR MINIFLOW DIFFERENTIAL PRESSURE
INDICATING SWITCHES

DETAILED DESCRIPTION: The installed switches need to be replaced with switches that are fully qualified.

STATUS AND SCHEDULE: A JIO was submitted by TXX-4208 of June 29, 1984. The JIO gave an estimated completion date of 11/30/84 but concluded that CPSES could safely operate until this package (ESE-40) is completed. The needed replacement switches are being procured. A schedule will be developed by 1/17/85 for completion.

CONCLUSION: The NRC staff has approved deferral of completion of this qualification package until 5% power (see NRR-6090 of December 4, 1984).

5801-0432S-D

APPENDIX R
RHR VALVE

DETAILED DESCRIPTION: Fire could cause a loss of instrument air to the RHR heat exchanger control valves causing them to fail in a position which results in a plant cooldown rate in excess of tech spec limits.

STATUS AND SCHEDULE: The electrical system is scheduled to be modified by 3/1/85 to allow usage of a portable air compressor powered from either train "A" or "B" to supply operating air to these valves.

CONCLUSION: Fission product inventory prior to exceeding 5% power is not significant due to the low power history. Thus a fission product release due to a fire in this area is unlikely. CPSES Unit 1 can be safely operated while this modification is being completed.

7801-0062S-H

ERF COMPUTER

DETAILED DESCRIPTION: Minor deficiencies in the ERF computer equipment and software have been identified.

STATUS AND SCHEDULE: All deficiencies are scheduled to be completed by 3/1/85.

CONCLUSION: The ERF computer is a backfit required by TMI Action Plan Item III.A.1.2 and is not specifically required for fuel load. The deficiencies have no effect on the operability of the SPDS or on the safe shutdown of the plant. Accident monitoring functions can be performed with the identified deficiencies. CPSES Unit 1 can safely be operated up to 5% power while these deficiencies are corrected.

7801-0096S-W

SPDS ISOLATORS

DETAILED DESCRIPTION: The NRC staff has requested specific information on the SPDS isolators.

STATUS AND SCHEDULE: The information requested is being sought from the equipment vendor. If it cannot be obtained, some testing will probably be required. The NRC staff has indicated that fuses may be acceptable as an interim solution for the first cycle. A schedule will be developed by 1/17/85 for installation of these fuses.

CONCLUSION: A letter has been sent (TXX-4384) that provides for the installation of fuses as an interim solution and justifies the safe operation of CPSES Unit 1 through the first cycle.

8801-0103S-W

EQUIPMENT QUALIFICATION
BOP ANALOG CONTROL SYSTEM

DETAILED DESCRIPTION: Some minor seismic qualification problems with the BOP Analog Control System need to be resolved. Several minor hardware modifications must be made (card replacement).

STATUS AND SCHEDULE: A JIO (MS 611B) was submitted by TXX-4208 of June 29, 1984. The JIO gave an estimated completion date of 12-31-84 but concluded that CPSES could safely operate until this package is completed. A schedule will be developed by 1/17/85 for completion.

CONCLUSION: The NRC staff has approved deferral of completion of this qualification package until 5% power (see NRR-6090 of December 4, 1984).

8802-0200S-W

EQUIPMENT QUALIFICATION
PROCESS PROTECTION SYSTEM

DETAILED DESCRIPTION: The environmental qualification testing for this equipment had some anomalies that needed to be resolved.

STATUS AND SCHEDULE: A JIO was submitted by TXX-4208 of June 29, 1984. The JIO gave an estimated completion date of 11-30-84 but concluded that CPSES Unit 1 can be safely operated until this qualification package (ESE-13) is completed. Final acceptance of this qualification package is schedule for 2/1/85.

CONCLUSION: The NRC staff has approved the deferral of the completion of this qualification package to 5% power (see NRR-6090 of December 4, 1984).

8900-0064S-W

ELECTRICAL SEPARATION

DETAILED DESCRIPTION: When cable wrap is used as a separation barrier, the minimum separation distance recommended by R. G. 1.75 between wire and barrier could not always be maintained.

STATUS AND SCHEDULE: This item was discussed with the NRC staff on 8/23/84 and feedback was sent to engineering. A schedule will be developed by 1/17/85 for the completion of this item.

CONCLUSION: The fire wrap is 1.5 inches of fire rated B&B HEMYC Blanket. The wrap is only used where the only hazard is fire. The separation distance is less than the recommended values in areas where it was physically not possible to separate the cables any further such as at wall or floor penetrations. Even though one cable touches the barrier of a second cable, the two cables are separated by 1.5 inches (the width of the barrier). Based on these facts, interim acceptance of this separation is reasonable for up to 5% power. CPSES Unit 1 can be safely operated up to 5% power while this analysis is being completed.

8904-0586S-W

CONTROL ROOM DESIGN REVIEW

DETAILED DESCRIPTION: The Control Room Design Review is TMI Action Item I.D.1 which is required by NUREG-0737 Supplement 1.

STATUS AND SCHEDULE: CPSES has been reviewed and has submitted several reports. The NRC evaluation requires that several items be completed by 5% power and several more prior to startup for the second operating cycle. Among the items to be completed by 5% power is the installation of Control Room carpet, the performance of the Control Room environmental surveys, and the submission to the NRC staff of a report on the results of these surveys.

CONCLUSION: The NRC staff has allowed (see SSER #6) that CPSES can be safely operated through 5% power based on our present design.

8924-0784S-D

APPENDIX R
TURBINE BUILDING 111 ROOF SLAB

DETAILED DESCRIPTION: HVAC ducts penetrating the E&C building through 3-hour fire barriers contain dampers not rated as three hour barriers. Credit has been given for the integrity of the duct. This integrity is compromised if the turbine deck collapses due to a fire in the area of the deck structural supports. The supports are being protected with a three hour fire barrier.

STATUS AND SCHEDULE: A schedule will be developed by 1/17/85 for completion of this item.

CONCLUSION: The structural supports for the turbine building roof slab are located in areas where the primary fixed combustibles are IEEE 383 qualified cables and a small amount of office area combustibles. Unprotected structural steel has been known to survive intensive fires without losing load carrying ability. However, should a fire cause a collapse of the deck only the HVAC duct integrity for the E/C Building will be affected. This duct penetrates to the hallway adjacent to the cable spreading room. The hallway itself has no safety equipment and the 3-hour CSR boundary is unaffected. Fission product inventory prior to 5% power is not significant due to the low power history. Thus a fission product release due to a fire in this area is unlikely. CPSES Unit 1 can be safely operated while this modification is being completed.

9800-0112S-W

HELB SUPERHEAT

DETAILED DESCRIPTION: An HELB in a Main Steamline outside containment could result in temperatures that exceed current qualification values in the room where the break occurs.

STATUS AND SCHEDULE: A full status of this issue was submitted to the NRC on September 28, 1984, in TXX-4320. This status showed that, based on typical data, the accident environment is such that all electrical equipment that is required to operate will not exceed its current qualification limits. A final analysis cannot be performed until final CPSES data on the break is received from Westinghouse.

In an NRR letter dated December 21, 1984, additional information was requested by the NRC staff. A schedule will be developed by January 17, 1985 to respond to this request.

CONCLUSION: The submittal of September 29, 1984, contained evidence that the CPSES design will adequately mitigate the HELB and allow for safe shutdown. When this evidence is coupled with the fact that there is no significant buildup of fission products prior to 5% power, it can be concluded that CPSES can be safely operated up to at least 5% power while the additional information requested by the NRC staff is being provided.

9800-01815-W

EQUIPMENT QUALIFICATION
INCORE THERMOCOUPLES, CONNECTORS, ADAPTORS AND
REFERENCE JUNCTION BOX

DETAILED DESCRIPTION: The environmental qualification packages (ESE-43/44) for this equipment are not complete.

STATUS AND SCHEDULE: A JIO was submitted by TXX-4209 of June 29, 1984. The JIO gave an estimated completion date of 2-28-85 and concluded that CPSES Unit 1 could be safely operated until this qualification program is completed. The NRC staff has indicated that deferral will be allowed until November 1985 as allowed by 10 CFR 50.49. The work is scheduled by Westinghouse to be completed by 3/85 so that qualification should be completed by about 4/85.

CONCLUSION: This deferral should extend until November 1985. The JIO is correct except that some hardware is being replaced. This hardware will be replaced prior to exceeding 5% power.

This equipment is part of the NUREG-0737 (Item II.F.2) backfit for Inadequate Core Cooling. The system is not required for any active safety related functions. All hardware changes will be completed prior to exceeding 5% power. Based on these facts and the fact that there is no significant buildup of fission products in the fuel prior to exceeding 5% power, CPSES Unit 1 can be safely operated until November 1985 while this environmental qualification program is being completed if the hardware changes are completed prior to exceeding 5% power.

9800-01835-W

EQUIPMENT QUALIFICATION
ACTIVE VALVES

DETAILED DESCRIPTION: In preparation of the CPSES Tech. Specs., several valves were identified as active that were previously classified as passive.

STATUS AND SCHEDULE: This effort primarily involves the generation of seismic qualification documentation and, in several cases, the addition of additional stiffeners. These valves are similar to valves that have already been seismically qualified. A schedule will be developed by 1/17/85 for completion.

CONCLUSION: The seismic qualification of these valves and the installation of any additional stiffeners will be accomplished prior to exceeding 5% power. Based on the conservative seismic design at CPSES, the low probability of an earthquake between fuel load and 5% power, the lack of significant fission product buildup prior to 5% power and the high confidence that exists for these valves, it can be concluded that CPSES Unit 1 can safely load fuel and operate up to 5% power while the seismic documentation is finalized and the installation of the additional stiffeners is completed.

9800-0185S-D

APPENDIX R
FIRE DOORS

DETAILED DESCRIPTION: Four fire doors (E-14, E-15, E-43, S-111) to be replaced by U.L. listed doors.

STATUS AND SCHEDULE: Installation dependent on delivery. Scheduled to be completed by 1/25/84. The existing doors in (E-14, E-15, E-43, S-111) were designed as 3-hour rated fire doors, however, they lack a U.L. listing.

CONCLUSION: The existing doors will remain in place until listed doors can be installed. For the short duration after fuel loading that the unlisted doors remain, safety of the plant will not be degraded. Fission product inventory prior to exceeding 5% power is not significant due to the low power history. A fission product release due to a fire at these doors is unlikely. CPSES Unit 1 can be safely operated up to 5% power while this modification is being completed.

9800-0190S-D

APPENDIX R
CHILLER PACKAGE

DETAILED DESCRIPTION: A fire in the cable spreading room could cause the loss of the Diesel Generator Sequencer. A loss of the sequencer could prevent operation of the safety related chiller package.

STATUS AND SCHEDULE: Design modifications have been approved to provide the capability of manually loading the chiller package on the diesel in the event of loss of sequencer. A schedule will be developed by 1/17/85.

CONCLUSION: Fission product inventory prior to 5% power is negligible due to the low power history. Thus a fission product release due to fire in this area is unlikely. CPSES Unit 1 can be safely operated up to 5% power while this modification is being complete.

APPENDIX R
FPPR DESIGN VERIFICATION

DETAILED DESCRIPTION: Fire Protection Program Review (FPPR) design verification includes review of 20 foot separation, 1 hour barriers, suppression and detection commitments. Follow-up work, if any, may include:

1. deviation submittal
2. update of FHA
3. additional physical work (thermolag, seals, sprinklers, etc.)

STATUS AND SCHEDULE: The design verification is being expedited and is expected to be complete by 4/1/85. Schedules for any resulting work will be supplied after completion of verification.

CONCLUSION: Fission product inventory prior to exceeding 5% power is not significant due to the low power history. A fission product release during this period is unlikely. CPSES Unit 1 can be safely operated up to 5% while the verification is being completed. Follow-up work resulting from the verification, if any, will be evaluated and appropriate justification provided at that time.

APPENDIX R
BREAKER/FUSE COORDINATION

DETAILED DESCRIPTION: In a request for additional information, the ASB of NRR has requested confirmation of proper breaker/fuse coordination for associated circuits.

STATUS AND SCHEDULE: A partial breaker/fuse coordination audit was performed as part of the fire protection review for CPSES. This aspect of the CPSES design was also inspected by the NRC staff and their consultants during the Fire Protection Walk-down. The audit and inspection revealed areas that warrant additional investigation. The investigation is complex and could take a considerable amount of time. The confirmation of CPSES breaker/fuse coordination will be completed and required modifications, if any, will be implemented prior to startup for the second operating cycle of CPSES Unit 1.

CONCLUSION: A high confidence level exists in the CPSES design. Breaker coordination has been considered in the past and was an element of the initial design of the CPSES electrical systems. Based on the NRC staff questions, TUGCO intends to examine this issue until complete and proper compliance is adequately confirmed. CPSES can be safely operated during the first operating cycle while this issue is being resolved.

9800-0219S-D

APPENDIX R
PORTABLE COMMUNICATION FOR OPERATORS
AND FIRE BRIGADE

DETAILED DESCRIPTION: Lack of adequate portable communications restricts the ability of the fire brigade and operators to coordinate manual actions required during a fire. FCC licensing and a design to upgrade the current 40 watt operator channel to a 250 watt channel capable of communication inside plant buildings is being implemented. Also a new 250 watt channel is being installed for the use of the plant fire brigade.

STATUS AND SCHEDULE: To be completed by 7/30/85 contingent on the approval of the FCC license application.

CONCLUSION: The independent operator channel and fire brigade channel may not be available until after 5% power. During the interim the backup security channel will be shared by the fire brigade and the operators in the event of a fire in which portable communications are required. CPSES can be safely operated in this condition while this modification is being completed.

9800-0220S-D

APPENDIX R
RADIO REPEATER SYSTEMS

DETAILED DESCRIPTION: Resolve portable communication dead spots in the radio repeater system due to plant as-built walkdown.

STATUS AND SCHEDULE: A schedule will be developed by 1/17/85 for completion of this item.

CONCLUSION: Fission product inventory prior to exceeding 5% power is not significant due to the low power history. Thus, a fission product release during this period due to a fire is unlikely. CPSES Unit 1 can be safely operated up to 5% power while this modification is being completed.

9800-0230S-D

APPENDIX R
THERMOLAG

DETAILED DESCRIPTION: Additional thermolag required as a result of the FPPR problems identified. Identification of areas requiring thermolag not yet complete.

STATUS AND SCHEDULE: A schedule will be developed by 1/17/85 for completion of this item.

CONCLUSION: Fission product inventory prior to exceeding 5% power is not significant due to the low power history. Thus a fire in non-thermolagged cabling is unlikely to cause a fission product release during this period. CPSES Unit 1 can be safely operated up to 5% power while this modification is being completed.

9800-0247S-W

EQUIPMENT QUALIFICATION
NSSS INTERFACE DOCUMENT

DETAILED DESCRIPTION: This document provides interface information needed to assure that the NSSS equipment is properly interfaced in the field to assure that the environmental qualification of that equipment is maintained.

STATUS AND SCHEDULE: A revision to this document has been received. This issue is scheduled to be resolved prior to 1/26/85.

CONCLUSION: This effort is confirmatory in nature. The NSSS equipment of concern was installed based on the installation and interface requirements provided by Westinghouse. The installation and interface requirements were included as an input into the equipment qualification programs. This final confirmatory effort will verify that the interface requirements of the qualification program are adequately met by the CPSES installation. CPSES can safely operate through November 1985 (as allowed by 10 CFR 50.49) while this confirmatory effort is being completed.