

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

October 28, 1981

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555



Dear Mr. Denton:

In the Matter of the)
Tennessee Valley Authority)

Docket Nos. 50-259
50-260
50-296

On September 30, 1981, we met with representatives of your staff to discuss the impact of the workload resulting from NRC requirements at Browns Ferry Nuclear Plant. As discussed in this meeting, we have recently completed our review of onsite manpower predictions at Browns Ferry necessary to meet all current NRC commitments for the next two years. The purpose of our review was to integrate all the necessary work into a unified program of maximum effort that will in fact minimize safety concerns as promptly as possible.

The following is a list of enclosures which provide the results of our review. These enclosures were discussed in detail with your staff in the September 30 meeting.

- Enclosure 1 - Basis for Schedule Review
- Enclosure 2 - Manpower Allocations Before Deferrals
- Enclosure 3 - Effects of Modifications on our Operating Units
- Enclosure 4 - Criteria Utilized to Develop Proposed Deferrals
- Enclosure 5 - List of Commitment Items Scheduled for Completion
During the Next Two Years
- Enclosure 6 - Commitments Proposed for Deferral Beyond the Next
Two Years
- Enclosure 7A, 7B & 7C - Proposed Schedule
- Enclosure 8 & 9 - Manpower Summary After Deferral
- Enclosure 10 & 11 - Effect of the Deferrals on the Next Outages for
Units 3 and 2

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Mr. Harold R. Denton

October 28, 1981

As we have previously indicated, the modification requirements at Browns Ferry for the next two years are very extensive and require extremely high manpower levels. The effects of this workload were discussed in detail in the September 30 meeting and are delineated in Enclosure 3. Based on this fact and the above described review, we request your approval of our proposal as outlined in Enclosures 7A, 7B, and 7C. We must emphasize that our schedule through October 1983 is already super-saturated. Any new NRC requirements requiring modification completion during this time will require slipping an item already scheduled for completion in this timeframe beyond October 1983 or moving the new requirements out beyond October 1983.

Upon receipt of your concurrence, we intend to maintain our schedule with you as a "living document." Our ultimate goal would be to work closely with you to integrate all future NRC requirements into our schedule and provide you with quarterly updates of our schedules. New deferments may then be requested based on integrating new NRC requests, commitments, or regulations into our existing schedule.

We will make every possible effort to meet the schedules outlined in the enclosures. However, many things can happen that may impact these schedules. Such things as equipment procurement problems, undefined or changing design scopes, and unit outages could positively or negatively effect our future schedules. We will inform you of any such problems and if necessary we will request schedule adjustments on a case by case basis.

We believe that the integrated process described above will be very beneficial to TVA and NRC. Your cooperation in this matter will be greatly appreciated. We will be glad to meet with you to discuss these matters at your convenience.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills
L. M. Mills, Manager
Nuclear Regulation and Safety

Subscribed and sworn to before
me this 28th day of Oct, 1981.

Bryant M. Lowery
Notary Public

My Commission Expires 4/4/82

Enclosures

cc: See page 3

Mr. Harold A. Denton

October 28, 1981

cc:(Enclosures):

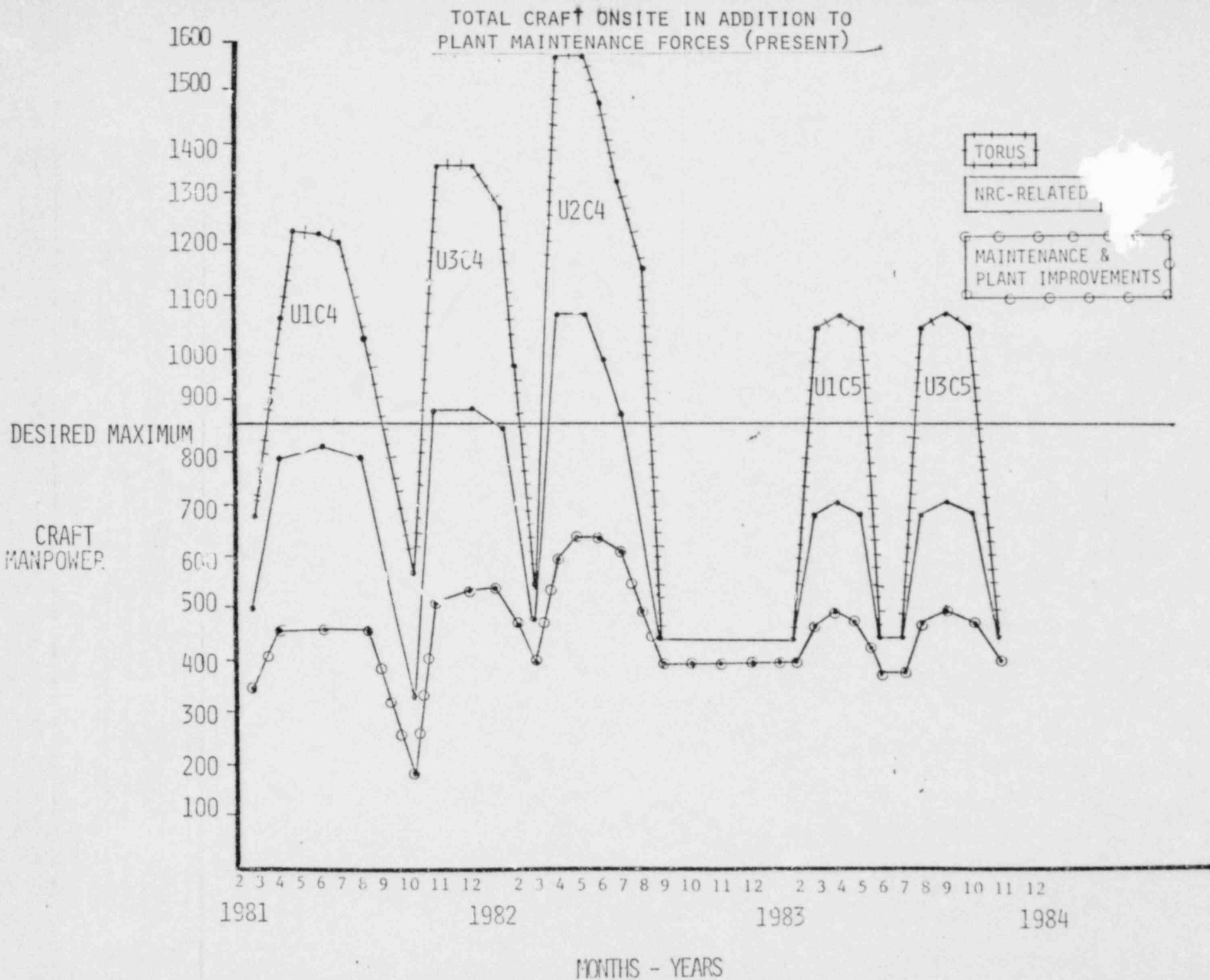
Mr. Victor Stello, Director
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Mr. James P. O'Reilly, Director
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Region II - Suite 3100
101 Marietta Street
Atlanta, Georgia 30303

ENCLOSURE 1

BASIS FOR SCHEDULE REVIEW

- . TVA AND NRC HAVE IDENTIFIED NEGATIVE TRENDS IN SAFELY
MANAGING THE AMOUNT OF WORK CURRENTLY BEING PERFORMED
- . AVAILABILITY OF QUALIFIED TECHNICAL AND MANAGERIAL
SUPPORT
- . COMPLEXITY OF SCHEDULE - MULTIPLE CRITICAL PATHS



ENCLOSURE 3

EFFECTS OF EXECUTING PRESENT SCHEDULE ON OPERATING UNITS

- . SINCE NRC COMMITMENTS TAKE TOP PRIORITY, AVAILABILITY/RELIABILITY, PERSONNEL SAFETY, NEEDED PREVENTATIVE MAINTENANCE, AND OTHER PLANT MAINTENANCE PROGRAMS ARE TAKING SECOND PLACE AND ARE BEING DEFERRED.
- . EXTENDED PERIODS OF WORKING EMPLOYEES EXCESSIVE OVERTIME LEADS TO A DETERIORATION IN EMPLOYEE ALERTNESS RESULTING IN MORE PERSONNEL ERRORS.
- . PLANT STAFF'S PARTICIPATION IN MODIFICATION RELATED ACTIVITIES PLACES AN ADDITIONAL BURDEN ON PERSONNEL MANY TIMES TO THE DETRIMENT OF THE OPERATION OF THE UNITS.
- . THE HIGH LEVEL OF WORK ACTIVITY IMPOSES A NEAR IMPOSSIBLE PROCEDURAL, TESTING, AND MAINTENANCE CHANGE PREPARATION LOAD AS WELL AS ADDITIONAL TRAINING (OVER 1100 OPERATING PROCEDURE CHANGES WERE MADE LAST YEAR).
- . LARGE NUMBERS OF EMPLOYEES RESULT IN INCREASED SECURITY, HEALTH PHYSICS, AND QA DEVIATIONS AS WELL AS LER'S.
- . AVAILABILITY REDUCTIONS.
- . PERFORMANCE OF MODIFICATIONS ON OPERATING UNITS TO MEET SCHEDULES INCREASE PROBABILITY OF CHALLENGES TO REACTOR PROTECTION AND SAFETY SYSTEMS.
- . OPERATIONS PEOPLE REQUIRED TO OPERATE THE UNIT CANNOT SUPPORT THE MAGNITUDE OF THE MODIFICATION EFFORT IN PROGRESS.

TVA CRITERIA FOR COMMITMENT SCHEDULE REVIEW

- 1) THE TECHNICAL DESIGN (STATE-OF-THE ART, NRC CRITERIA, AND PHYSICAL DESIGN EFFORT), MATERIAL DELIVERY, AND PHYSICAL IMPLEMENTATION CANNOT SUPPORT THE REQUIRED COMPLETION DATE.
 - 2) THE WORK ACTIVITY CAN BE DEFERRED WITHOUT ADVERSE EFFECT ON NUCLEAR SAFETY.
-
- 3) THE REMAINING WORK ACTIVITIES WERE REVIEWED TO DETERMINE THOSE ACTIVITIES WHICH COULD BE WORKED WITHOUT SIGNIFICANTLY AFFECTING OUTAGE DURATION AND MANPOWER REQUIREMENTS.

ENCLOSURE 5

NRC COMMITMENTS SCHEDULED FOR COMPLETION

WITHIN THE NEXT TWO YEARS

(OCTOBER 1981 - OCTOBER 1983)

NUREG-0737 REQUIREMENTS

| | |
|------------|---|
| II.K.3.15 | MODIFY BREAK DETECTION LOGIC |
| II.F.1.6.A | REPLACE O ₂ /H ₂ SAMPLE RETURN PUMPS IN PANELS 25-336 AND -337 |
| II.E.4.2.6 | CONTAINMENT ISOLATION DEPENDABILITY |

MISCELLANEOUS COMMITMENTS

CONTROL ROOM CEILING TILE FLAMMABILITY

UNDervOLTAGE MODIFICATIONS

IE BULLETIN 79-02 AND 79-14
(INSPECTIONS AND INITIAL DEFICIENCIES)

TORUS INTEGRITY MODIFICATIONS
(EXCEPT ATTACHED PIPING)

IE BULLETIN 79-27

SUPPRESSION POOL TEMPERATURE
MONITORING SYSTEM (NUREG-0661)

LPCI MODIFICATIONS

VARIOUS SECURITY MODIFICATION COMMITTED
BY TVA LETTER OF JUNE 12, 1981, TO NRC

CATEGORIES OF PROPOSED DEFERMENT COMPLETIONS

CRITERIA I: UNDEFINED SCOPE, TECHNICAL DESIGN OR MATERIALS INCOMPLETE

II.B.3 POSTACCIDENT SAMPLING
II.E.4.1 DEDICATED H₂ PENETRATIONS
II.F.1.1 ACCIDENT MONITOR
II.F.1.2 INSTRUMENTATION NOBLE GAS/IODINE MONITOR
II.F.1.3 CONTAINMENT HI-RANGE MONITOR
II.F.1.4 CONTAINMENT PRESSURE
II.F.1.5 CONTAINMENT WATER LEVEL
II.K.3.13 RCIC AUTO RESTART
III.A.1.2 UPGRADE EMERGENCY SUPPORT
CRD SYSTEM (IE BULLETIN 80-17)
ANTICIPATED TRANSIENT WITHOUT SCRAM (ATWS)
MODIFY REACTOR PROTECTION SYSTEM
IE BULLETIN 79-01B

CRITERIA II: NO ADVERSE AFFECT ON NUCLEAR SAFETY FOR WHICH COMPLETION WOULD CAUSE ADVERSE MANPOWER IMPACTS

CRD RETURN LINE NOZZLE CRACKING (NUREG-0619)
FW NOZZLE CRACKING (NUREG-0619)
YARD UNWATERING
EVACUATION ALARMS (IE BULLETIN 79-18)
RWCU LINE CONNECTION TO FW LINE A
TEMPERATURE INDICATION ON FEEDWATER NOZZLES
EIGHT-HOUR EMERGENCY LIGHTING (APPENDIX R)

| 1981 1982 1983 1984 1985 1986 | | | | | | | | | | | |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| D N O J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D | | | | | | | | | | | |
| CYCLE 4 127 | CYCLE 4 100 | CYCLE 5 100 | CYCLE 5 100 | CYCLE 6 100 | CYCLE 6 100 | CYCLE 7 100 | CYCLE 7 100 | CYCLE 8 100 | CYCLE 8 100 | CYCLE 9 100 | CYCLE 9 100 |
| BASED UPON NRC RULE-MAKING | | | | | | | | | | | |
| ANALYZE & MODIFY | | | | | | | | | | | |
| MODIFY | | | | | | | | | | | |
| SCHEDULED BEYOND 1000 | | | | | | | | | | | |
| DURATION WILL BE DETERMINED BY WATER SEEPAGE FINDINGS | | | | | | | | | | | |
| * COMPLETION DATE OF 7/1/87 IS BASED UPON APPROXIMATELY 2010 CURRENTLY IDENTIFIED ITEMS. | | | | | | | | | | | |
| ** PREVIOUSLY COMMITTED DATES, NO CHANGE FORSEEN | | | | | | | | | | | |
| NRC COMMITMENTS WITH COMPLETION BEYOND OCTOBER, 1983 | | | | | | | | | | | |
| NON-OUTAGE OUTAGE | | | | | | | | | | | |
| PAGE 2 OF 2 | | | | | | | | | | | |

UNIT 1
UNIT 2
UNIT 3

BFNP
OUTAGE
SCHEDULE

IE BULLETINS

79-18 EMER EVACUATION
80-17 CRD SDIV
80-17 PIPING MODS
79-81B QUAL. HTLS
79-82 & 79-14

UNDERVOLTAGE MODS

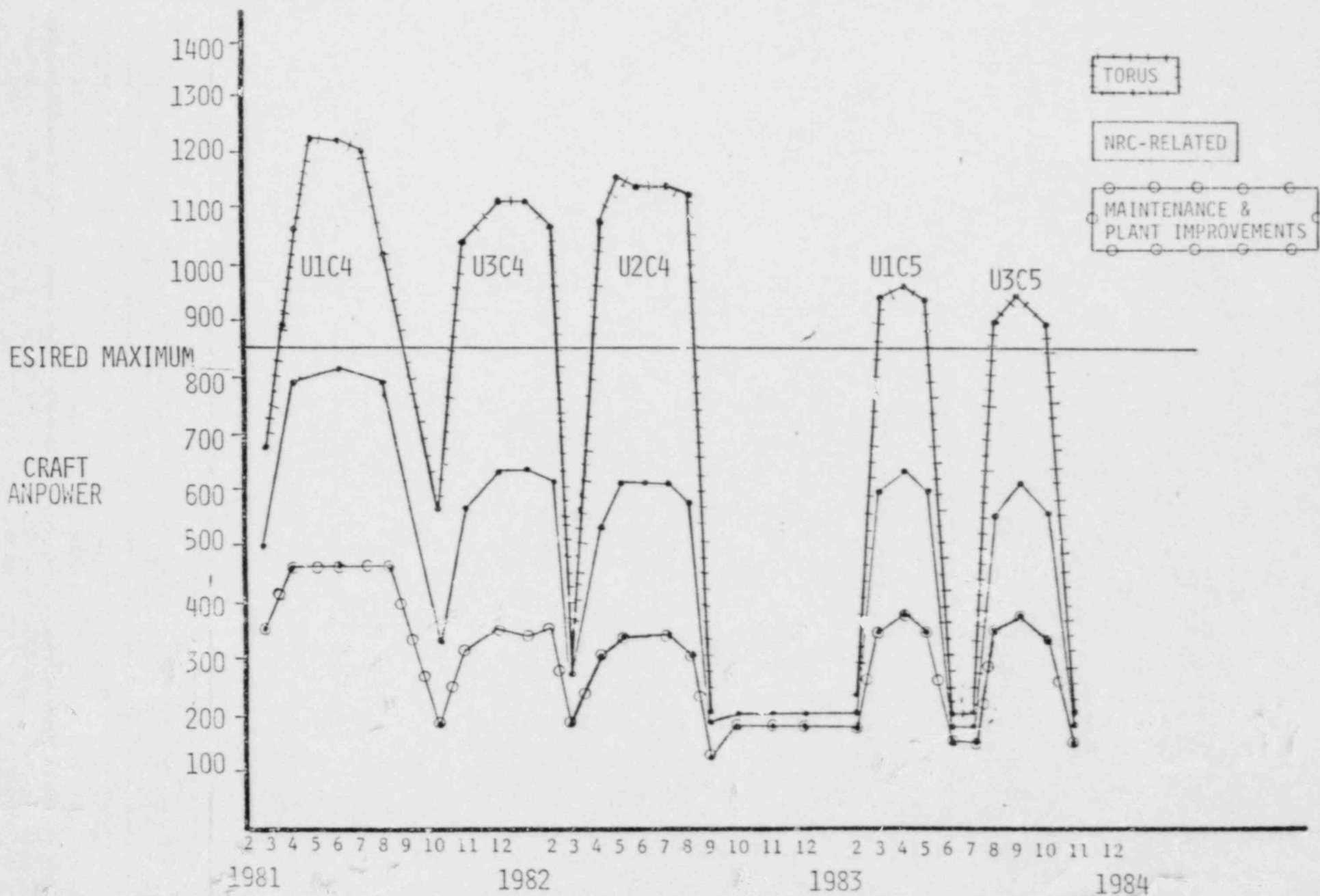
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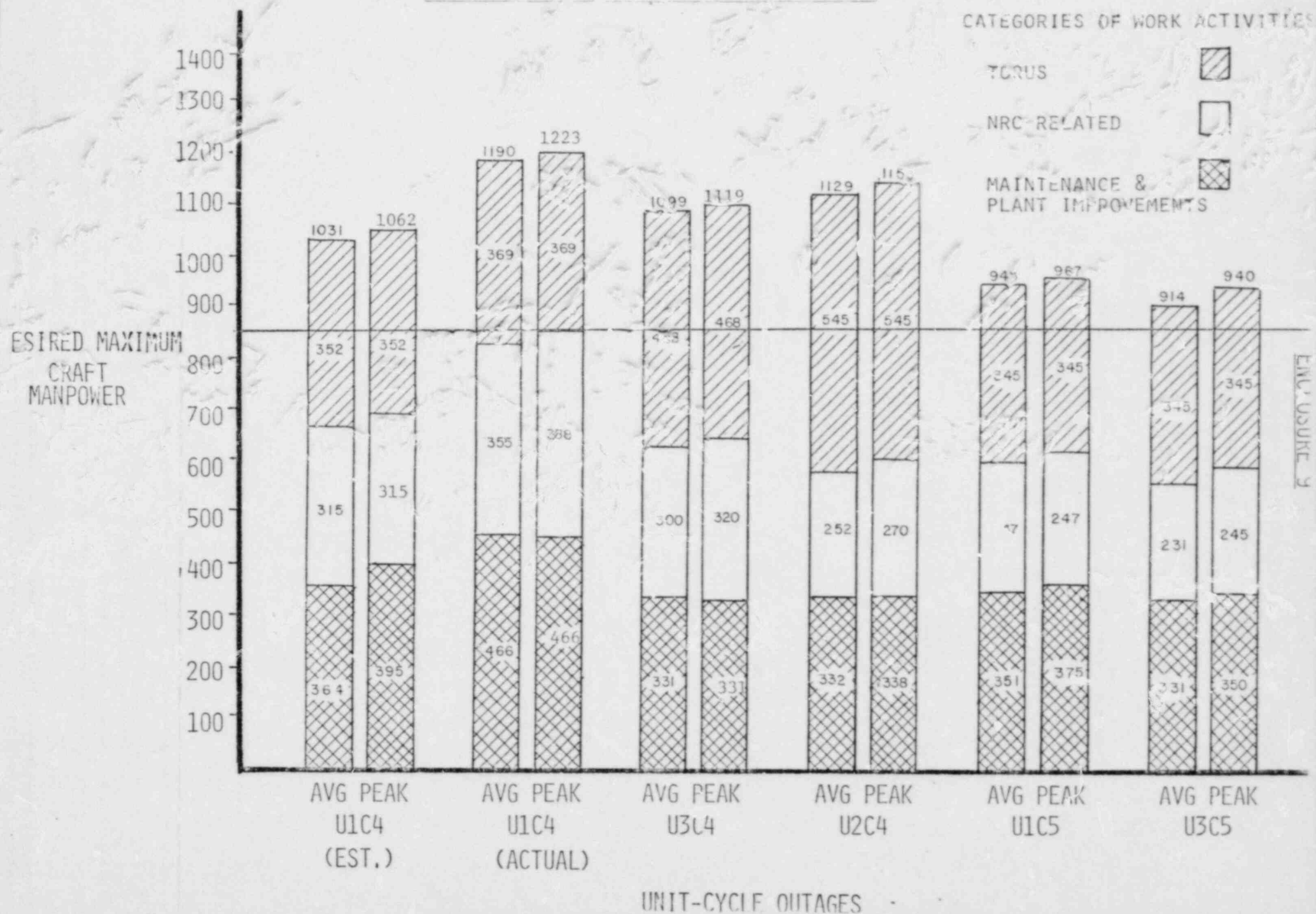
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APPENDIX R
BLOC EMER LIGHTING

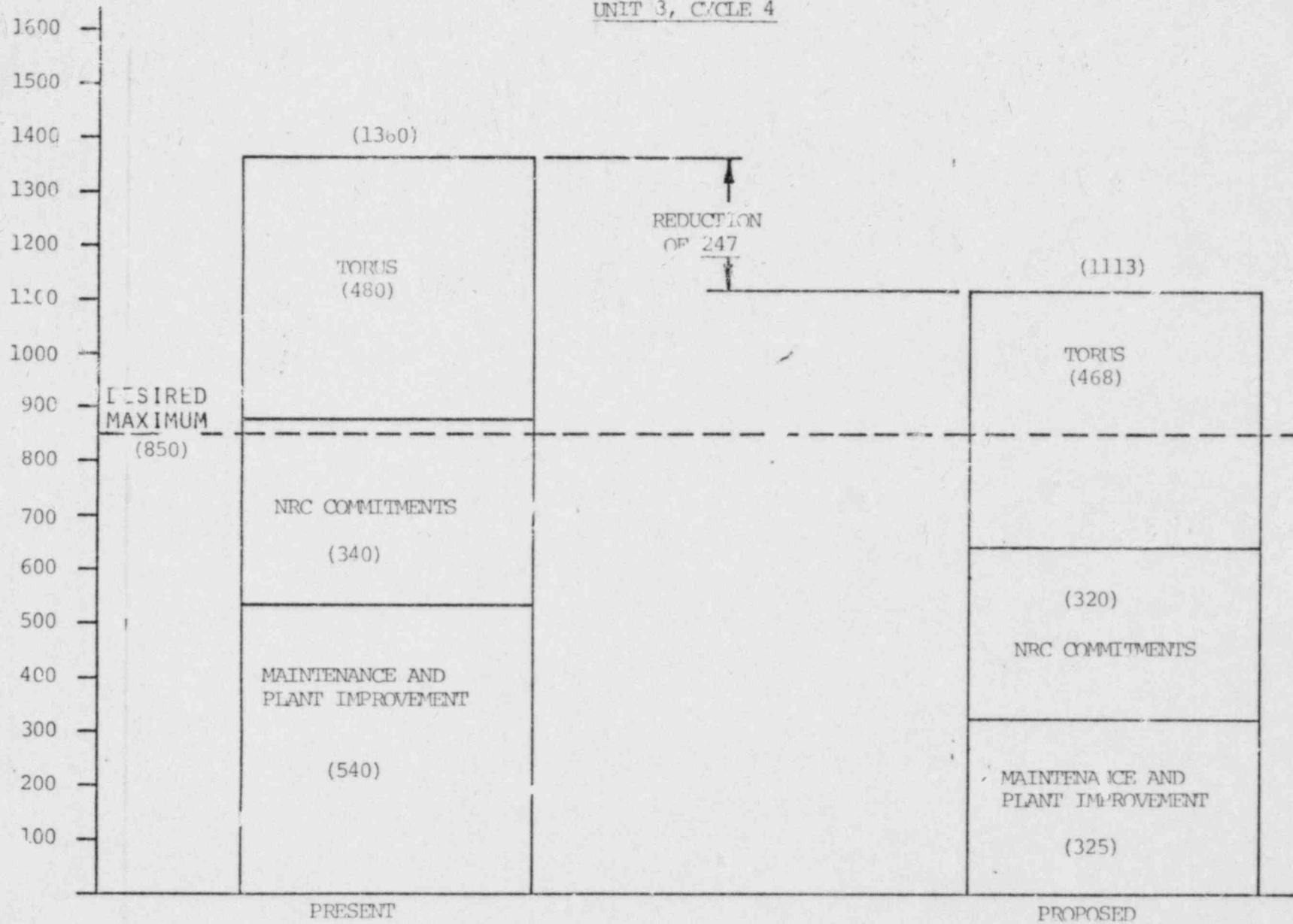
TOTAL CRAFT ONSITE IN ADDITION TO PLANT MAINTENANCE FORCES (PROPOSED)



TOTAL CRAFT ONSITE IN ADDITION TO PLANT MAINTENANCE FORCES



UNIT 3, CYCLE 4



UNIT 2, CYCLE 4

