



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO.140

TO FACILITY OPERATING LICENSE NO. DPR-50

METROPOLITAN EDISON COMPANY
JERSEY CENTRAL POWER & LIGHT COMPANY
PENNSYLVANIA ELECTRIC COMPANY AND
GPU NUCLEAR CORPORATION

THREE MILE ISLAND NUCLEAR STATION, UNIT NO. 1

DOCKET NO. 50-289

1.0 INTRODUCTION

By letter dated July 13, 1987, and supplemented March 16, 1988, GPU Nuclear Corporation (GPUN, the licensee) submitted an application to amend the Three Mile Island Nuclear Station, Unit 1 (TMI-1) Operating License No. DPR-50, to incorporate the requirement to adhere to the "Plan for the Long Range Planning Program for the Three Mile Island Nuclear Station Unit 1". In the licensee's submittal of March 16, 1988, the licensee made several minor plan changes in response to the staff's request. The information submitted by letter dated March 16, 1988 provided clarification of the July 13, 1987 submittal.

The Program was developed by GPUN to enable GPUN to effectively manage implementation of significant changes to TMI-1 which have been required, or proposed by the NRC, as well as other measures to enhance plant safety and reliability which have been identified by GPUN or other agencies (e.g, the Institute for Nuclear Power Operations).

The primary program objectives are to (1) optimize the allocation of GPUN and NRC resources to those projects necessary to assure safe, reliable, and economic plant operation and (2) achieve the appropriate balance and prioritization among all proposed projects based on their relative value and effect regardless of source.

The "Plan for the Long Range Planning Program for the Three Mile Island Nuclear Station Unit 1" (Attachment 1) is the implementation vehicle for the Long Range Planning Program. The Plan describes how the program functions, mechanisms for changing the program and updating it, the interactions and responsibilities of the NRC and licensee staffs under the program, and its resultant assessments and schedules. The format and content of this Plan closely follows the previously approved Big Rock Point Plan.

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2.0 EVALUATION

2.1 Plan Description

The TMI-1 Long Range Planning Program is based on a list of over 300 major projects and their completion dates each of which is assigned a priority resulting from an established assessment method. In general, this list will exclude minor capital and specific Operations and Maintenance funding requests (under \$50,000) unless the project could have a critical impact on major planned activities (e.g., inspections with potential for adverse contingencies) or is mandated by the NRC. The assessment method involves ranking each project based on its importance relative to public safety (e.g., safe shutdown, radiological release potential), personnel safety, plant availability/capacity factor and economic incentive.

The scheduling of major projects takes into account projections for budgets and site manpower and engineering support requirements for up to five years, on an item-by-item basis covering all major plant projects.

The Plan submitted by the licensee organizes the projects into Categories A, B and C based upon their origin. Completion schedules and periodic status reports identify critical project tasks, target completion dates, progress and problem areas which enable management to develop contingency and/or schedule recovery plans. The three categories are described below:

Category A - All projects involving regulatory issues which have resolution dates mandated by NRC rules, orders or license conditions.

Category B - Projects involving issues identified by the NRC and/or GPUN for which commitments have been made to the NRC by GPUN. The issue resolutions would result in significant (a) plant modifications, (b) procedure revisions, or (c) changes in facility staffing requirements.

Category C - Other major projects, identified by GPUN or other regulatory agencies.

The Plan recognizes that projects, project scopes, and scheduled completion dates will need to be modified or deleted at times to reflect changes in regulatory requirements to accommodate those activities that GPUN finds necessary to improve plant efficiency and reliability, to incorporate the results of investigation into issues, and to take into account delays resulting from events beyond the licensee control.

2.2 Plan Implementation

The licensee's July 13, 1987 submittal (as supplemented March 16, 1988) incorporates a license condition requiring that GPUN follow the Plan and permits the licensee to make changes to the Plan and its issue resolutions

and schedule for certain categories of issues in accordance with the provisions of the Plan. The staff has reviewed the licensee's Plan and has determined that:

1. Changes to issue resolutions and/or schedules for completion of major issues imposed by rule, order or license condition (Category A projects) will require prior NRC approval.
2. Issue resolutions and/or schedules for completion of major issues by the NRC and/or GPUN for which commitments have been made to NRC by GPUN (Category B projects) are identified and provisions are made in the Plan to require GPUN to provide the NRC with notification of changes to Category B projects.
3. Schedules for completion of other major projects identified by GPUN or other regulatory agencies (Category C projects) are identified and provisions are made in the Plan to require GPUN to notify NRC on a semi-annual basis of changes, deletions or scheduling of Category C projects.
4. Provisions are made in the Plan for incorporating new or anticipatory major issues into Category A and B as these issues are identified by NRC and/or formalized by rule, order or license condition.

The licensee identified each planned major NRC-required modification and major non-NRC modification as an individual line item in its list of Category Projects. Semi-annual reports of licensee progress towards implementation of NRC-identified and licensee-identified modifications are proposed by the licensee.

The licensee's proposal to incorporate a condition into the TMI-1 operating license provides an appropriate mechanism to ensure that the NRC is informed as to whether required safety-related issues are being completed in a timely manner. The Plan also provides a suitable mechanism for changes to completion dates (due to unforeseen circumstances) for modifications not imposed by rule or order and for keeping the NRC informed of such changes for its consideration. Thus, the degree of flexibility needed to assure effective program implementation is provided while at the same time ensuring the the NRC's responsibilities are not compromised.

The Plan and the proposed license condition submitted by the licensee are functionally identical to those approved by the staff in Amendment No. 82 to the Big Rock Point Plant operating license, Amendment No. 75 to the Pilgrim Nuclear Power Station operating license and Amendment No. 91 to the Duane Arnold Energy Center (DAEC) operating license. A copy of Amendment No. 91 was transmitted to all power reactor licensees by Generic Letter 83-20 on May 9, 1983. This letter identified the approach addressed by Amendment No. 91 as one which is acceptable to the NRC. Therefore, the staff has determined that (1) the Plan proposed by GPUN is equivalent to a previously approved plan, and (2) the license condition proposed by GPUN is equivalent to the previously approved license condition for Big Rock Point Plant on this subject.

2.3 Proposed Issues and Schedules

Attachment 2 to this enclosure provides GPUN's proposed list of major projects and schedules for completion of presently known GPUN-planned and NRC-required modifications.

For modifications imposed by rule or order, the utility proposes completion by the required dates, or has received an approval from the NRC for an extension of the deadline. GPUN has proposed completion of other GPUN and NRC initiated modifications not required by rule or order on a schedule consistent with its previous commitments. Based on our review of these projects, we find the dates proposed by the licensee for completion of these modifications to be acceptable.

2.4 Summary

Based on the considerations addressed herein, we find that:

1. The proposal by GPUN, that its Plan be implemented by a license condition requiring the licensee to follow the Plan, is acceptable.
2. The licensee's proposal stating that changes to implementation dates imposed by rule, orders or license conditions will require prior NRC approval is acceptable.
3. Based upon our review, the completion dates proposed by the licensee in the submittal are reasonable.
4. The license condition and the Plan submitted by GPUN are equivalent to that already approved in Amendment No. 82 to the Big Rock Point Plant.
5. GPUN and NRC should be cognizant that there are likely to be higher priority and more urgent safety issues that are not included in the list because the projects do not exceed the threshold cost of \$50,000 or are not mandated by the NRC. The licensee tracks these safety issues using the GPUN licensing action item system for TMI-1.

3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change to a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

4.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of the amendment will not be inimical to the common defense and security nor to the health and safety of the public.

Dated: May 27, 1988

Principal Contributor: Ronald W. Hernan

Attachments:

1. Plan for the Long Range Planning Program
2. List of Major Projects and Schedules

PLAN FOR THE LONG RANGE PLANNING

PROGRAM FOR THREE MILE ISLAND NUCLEAR STATION - UNIT 1

I. INTRODUCTION

GPU Nuclear Corporation (GPUN) has developed a comprehensive program which will enable GPUN to effectively manage implementation of significant changes to the Three Mile Island Nuclear Station - Unit 1 (TMI-1) which have been required, or proposed by, the NRC, as well as other measures to enhance plant safety and reliability which have been identified by GPUN or other agencies (e.g., the Institute of Nuclear Power Operations). The program is identified as the "GPUN Long Range Planning Program". This program was developed to assess, coordinate and schedule major work tasks or projects at TMI-1, including those mandated or proposed by the NRC, or identified by GPUN and others. The program objectives are to (1) satisfy regulatory requirements; (2) provide sufficient lead times for modifications; (3) minimize changes for operators; (4) effectively manage financial and human resources; and (5) specify the framework for changes to developed projects and associated schedules. This will be accomplished within the overall objective of plant safety and availability.

This program reflects the recognition by GPUN and the NRC that fiscal and manpower resources are finite and that a limit on the onsite manpower is necessary. Routine functional plant operations and maintenance require a substantial portion of available resources, further limiting resources which can be applied to the resolution of non-routine but important regulatory and non-regulatory issues that arise. The program integrates a significant portion of presently planned **non-routine work** at TMI-1 over a nominal five-year period to ensure that tasks associated with issue resolution are properly assessed and effectively scheduled and coordinated. It provides a means for new requirements to be accommodated taking into account schedule and resource constraints, as well as the importance of implementing a new requirement. The purpose of this document is to describe the plan used to implement the program. It describes how the program functions, mechanisms for changing the program and updating it, the interactions and responsibilities of the NRC and licensee staffs under the program, and its resultant assessments and schedules.

The term project as used herein refers to the projected allocation of significant fiscal and manpower resources at TMI-1. The term issue resolution as used herein refers to the actions necessary to resolve concerns (safety related or otherwise) which have been identified by the NRC or GPUN.

II. SUMMARY OF PROGRAM DEVELOPMENT

The program is based on a list of projects and their projected completion schedules each of which is assigned a priority resulting from an established assessment method. The assessment method involves ranking each project based on its importance relative to public safety (e.g., safe shutdown, radiological release potential), personnel safety, plant availability/capacity factor and economic incentive.

The scheduling of projects takes into account projections for budgets and site manpower and engineering support requirements for up to five years, on an item-by-item basis covering significant plant projects. The list represents that significant portion of the TMI-1 work list and commitment list which is regularly modified and updated to meet changing conditions, including new NRC regulatory requirements. The final product of this program is the assessment of projects and the development of associated schedules as discussed below.

III. ASSESSMENT AND SCHEDULING

A first step in the development of this program involves the identification and listing of significant open issues and their associated resolutions. Following initial screening and evaluation of identified issues, those whose proposed resolution will require significant planning or resources are defined as proposed projects to be considered in development of the list of projects approved and proposed for approval by GPUN for TMI-1 over the next 5 years. An assessment of all proposed projects is required to determine their appropriate value/worth and relative priority. Upon completion of the project prioritization and subsequent ranking, the tasks are scheduled based on assigned priority, available resources and scheduler constraints. The projects are organized into Categories A, B and C based upon their origin. Completion schedules and periodic status reports identify critical project tasks, target completion dates, progress and problem areas which enable management to develop contingency and/or schedule recovery plans. The three categories are briefly described below:

Category A - All projects involving regulatory issues which have resolution dates mandated by NRC rules, orders or license conditions.

Category B - Projects involving issues identified by the NRC and/or GPUN for which commitments have been made to the NRC by GPUN. The issue resolutions would result in significant a) plant modifications, b) procedure revisions, or c) changes in facility staffing requirements.

Category C - Other major projects, identified by GPUN or other regulatory agencies.

Projects and/or implementation dates in Category A may be modified or deleted only with prior approval of the NRC. Changes to project scope and/or completion dates in Categories B and C require notification to the NRC as described in Section V. Categories A, B and C, taken together, provide a basis for assessing the overall effects of changes to projects and/or schedules, and a departure point for discussion between the NRC and the licensee regarding such changes, as discussed below.

IV. ISSUE RESOLUTION AND SCHEDULE MODIFICATIONS

Project schedules for each planning cycle include required milestones for engineering, procurement and, where appropriate, regulatory review and approval. Inability to meet these milestones may require changes to previous plans and schedules.

Accordingly, an important aspect of GPUN's planning effort is the recognition that projects, project scopes, and scheduled completion dates may need to be modified or deleted at times to reflect changes in regulatory requirements, to accommodate those activities that GPUN finds necessary to improve plant efficiency and reliability, to incorporate the results of investigations into issues, and to take into account delays resulting from events beyond GPUN's control[†]. The method used by GPUN for changing or deleting projects or scheduled completion dates is established and will be incorporated in the Corporate Procedures.

V. GPUN AND NRC RESPONSIBILITIES

The proper functioning of the Long Range Planning Program requires that GPUN apply consistent criteria to the assessment of projects, monitor the progress of work undertaken, manage its activities to maintain the schedule, and act promptly to take necessary actions when a project scope or schedule change is needed. As set forth herein the NRC will treat projects consistently and recognize that, when necessary, ranking, project scope, and/or scheduled completion date changes are based on a comparison of the project scopes and/or completion dates being changed to all projects, and also account for resource constraints.

A. PERIODIC UPDATING

GPUN will update Categories A, B and C semi-annually and submit the revised listing of projects and completion schedules to the NRC, beginning six months following NRC approval of this plan. The revised project listing will include the following:

- o Summarize progress in completing or implementing projects.
- o Identify changes since last update report.
- o Summarize the reasons for project scope and/or schedule changes associated with regulatory requirements.

[†] The listing of projects in Categories A, B and C will contain sufficient detail to identify those projects with tasks and/or completion dates keyed to refueling outages. In such cases, a change in outage period (i.e., initiation or duration) shall not be considered a schedule change.

B. CHANGES TO ISSUE RESOLUTIONS AND/OR SCHEDULES

Changes to the project listing may arise from a variety of reasons, such as new projects identified; modifications to the scope of scheduled work; unplanned outages; results of investigations into an issue (e.g., PRA findings); problems in delivery, procurement, etc; changes in NRC rules and regulations; or other NRC or GPUN actions.

Where it is necessary to add a new project or to change the schedule for a project, the following general guidance will be utilized to the extent appropriate:

- o Assess the priority of the project relative to all existing projects.
- o Schedule the new or changed project to avoid rescheduling other projects, if it can be reasonably achieved.
- o Select a schedule for the new or changed project which will help in maintaining an optimum integrated program of work.

Addition of activities to Category A requires GPUN to propose appropriate projects and/or completion dates and requires NRC approval of such proposals. Changes to previously established Category A resolutions and/or resolution implementation dates will be proposed only after GPUN has determined that changing Category B and C items will not significantly assist in maintaining Category A without change; or that safety, resource or schedule penalties from rescheduling Category B and C activities significantly outweigh the consequences of a change in a Category A completion date. As with proposals to add Category A activities, proposals to change previously existing Category A activities also requires NRC approval.

GPUN will inform the NRC Project Manager when serious consideration is given to requesting a change in Category A. When GPUN determines that a change in Category A is necessary, it will submit a written request for NRC approval.

Projects in Category B or C may be modified, deleted or rescheduled, or new projects may be added to Category C by GPUN without NRC approval; however, GPUN will inform the NRC Project Manager once a change, deletion, or addition to Category B is necessary. GPUN will provide the NRC with written notification of changes or deletions of Category B projects or completion dates associated with NRC initiated issues at a minimum in each semi-annual update but in any event at least 30 days prior to the scheduled completion date. Such notification will also include the reasons for the change and describe any compensatory actions which GPUN determines to be appropriate.

The change, addition or deletion in Category B will go into effect upon evaluation by GPUN, unless the NRC, in writing, requests further explanation or discussion. NRC requests will be made within 15 days of receipt of GPUN written notification. In this event, discussions will be initiated to promptly develop a project scope and/or schedule which is mutually acceptable to GPUN and the NRC Project Manager while considering overall program impact. The written notification by the NRC will serve to extend the schedule date for the period of time required for such discussion. If a revised project scope and/or schedule is established in these discussions, such project scope and/or schedule will supersede the project scope and/or schedule set forth in Category B. The revised project scope and/or schedule will be incorporated in a revised Category B in the next update submitted to the NRC. If a revised project scope and/or schedule cannot be established in these discussions, GPUN changes to projects scope and/or schedule will be effective unless subsequently modified by NRC Order.

In the event of unplanned delays, delays which become manifest within 30 days of the scheduled completion date or in the event of circumstances beyond GPUN's control, GPUN shall provide timely notification to the NRC Project Manager of the revised project an/or schedule date and incorporate it in a revised Category B in the next update submitted to the NRC.

GPUN will provide notification of changes, deletions, additions or rescheduling of Category C projects to NRC semi-annually. This is for information purposes.

VI. NRC REVIEW

As pointed out in Section V.B above, changes to project scope and/or schedules are inevitable. Action required by the NRC is discussed below:

A. GPU NUCLEAR ORIGINATED CHANGES

1. Upon receipt from GPUN of a request for modification of Category A, the NRC will act promptly (consistent with resource availability and priority of other work) to consider and decide on the request.
2. If the request for a modification of Category A is denied, NRC shall promptly inform GPUN and provide the reasons for denial.
3. NRC consideration of GPUN changes to non-Category A projects and/or schedules is covered by Section V.B.

B. NRC ORIGINATED CHANGES (CATEGORY A)

It is recognized that formal NRC regulatory actions (i.e., NRC rules, orders, or license conditions) may: (1) impose a new regulatory requirement with a fixed date, or (2) establish a firm date for a previously identified regulatory requirement. In taking any such action, the NRC, to the extent consistent with its overall regulatory responsibilities and, unless public health, safety, or interest require otherwise, will take into account the impact of such action on GPUN's ability to complete effectively the projects in Categories A, B, and C; and in consultation with GPUN, will try to minimize such impact. Although any formal regulatory action (i.e., regulatory rule, order, or license condition) taken by the NRC will be effective in accordance with its terms without inclusion in Category A, the NRC and GPUN recognize the desirability of incorporating such action into Category A, particularly in order to incorporate at the same time any other appropriate changes in the Long Range Planning Program. Accordingly, once such formal regulatory action is taken (or earlier, if practicable), the NRC will provide GPUN a reasonable opportunity to propose overall changes in the Long Range Planning Program which would most effectively accommodate such requirements. Any resulting changes in projects in Category A will be (1) reviewed by the NRC, taking in account the overall objective of the Long Range Planning Program to use available resources effectively, and (2) if acceptable, approved by the NRC, and will thereupon be reflected in a revised Category A listing submitted by GPUN. GPUN will inform the NRC of any resulting changes in Categories B and C in accordance with Section V above.

C. NEW NRC ISSUES (CATEGORY B)

The NRC may, from time to time, identify new regulatory issues which may result in (a) plant modifications, (b) procedure revision or development, or (c) changes in facility staffing requirements. With respect to issues which the NRC requests (1) scheduling information or (2) responses by a certain date, these issues may be included in Category B in accordance with the project priority resulting from GPUN assessment. Projects and/or schedule date commitments resulting from GPUN evaluation will form the basis for discussions between the NRC and GPUN.

As for the case of NRC-originated changes to Category A issues, the NRC will provide GPUN a reasonable opportunity to propose overall changes in the total integrated plan program which would most effectively accommodate such issues. Any resulting changes in the integrated plan program will thereupon be reflected in a revised Category B or C list submitted by GPUN.

D. INSPECTIONS AND AUDITS

The Plan and the Long Range Planning Program implementation processes and procedures do not fall within the scope of GPUN's Quality Assurance Program or the requirements of 10CFR50 Appendix B. The existence of the Plan does not change the extent or nature of NRC inspection or audit activities which would be applied in the absence of the Plan. Specifically, the management processes by which resource limits are established and allocated are not subject to detailed audit or inspection. GPUN will provide information as discussed in Section V for review and/or approval by NRC of the basis for the Category A and B project schedules. Implementation of those projects are subject to inspection and audit as required by GPUN QA Program and NRC Regulations.

VII MODIFICATION TO THE PLAN

The licensee and the NRC recognize that the Plan itself may require future modifications. Accordingly, all Plan revisions will be submitted for prior NRC approval. The revisions will be made effective on a mutually agreed date upon or subsequent to amendment issuance by the NRC.

T M I - 1 P R O J E C T L I S T I N G

ATTACHMENT 2

CATEGORY "A" PROJECTS

SORT BY CATEGORY/CYCLE/BA NUMBER

STATUS AS OF 30MAR88

OBS	BA NUMBER	DESCRIPTION PROJECT DESCRIPTION	CYCLE/ YEAR	CLASSIFICATION
1	128061P2	REG GUIDE 1.97 MODS-SEISMIC CR MODIFY PANELS TO MEET SEISMIC REQUIREMENTS AS NECESSARY. LAI 86-9196.	7R	NRR
2	412244P5	REMOTE SHUTDOWN SYS ENHANCEMENT CB REWIRE RSD PANELS TO ISOLATE ESAS CONTACT FROM ICV 3&4.	7R	NRR
3	412384P4	APPENDIX R OPEN ITEMS CB RC: TRIP CIRCUITS MOD(REROUTE 2 CKTS); LAI 87-9176.	7R	NRR
4	412484	FLOW MEASURING INSTRUMENTATION-IST PRGRM CB ISPH INSTALL TAPS AND ANNUBARS WITH LOCAL INDIC. TO PROVIDE FLOW FOR CHILL PUMP & SW PUMP. LAI 83-0121.	7R	NRR
5	412491P3	REG GUIDE 1.97 MODS RB CB AB FH RB WORK, TERMINATIONS; ABOUT 30% OF TOTAL JOB. LAI 86-9193 & LAI 87-9155.	7R	NRR
6	412531P1	PUMP RECIRC FLOWMETERS FOR IST DGB INSTALL FLOWMETER ON DISCHARGE LINES OF PUMPS DF-P1A/B AND DF-P1C/D. LAI 87-9079.	7R	NRR
7	412531P2	PUMP RECIRC FLOWMETERS FOR IST AB INSTALL FLOWMETER ON RECIRC LINE FOR WDL-P13A/B; INSTALL RECIRC LOOP FOR CAP1A/B. LAI 87-9045.	8R	NRR

T M I - 1 P R O J E C T L I S T I N G

CATEGORY "A" PROJECTS

SORT BY CATEGORY/CYCLE/BA NUMBER

STATUS AS OF 30MAR88

OBS	BA NUMBER	DESCRIPTION PROJECT DESCRIPTION	CYCLE/ YEAR	CLASSIFICATION
8	412462	ANTICIPATE TRANSIENT W/O SCRAM(ATWS)RULE CR RELR CB TB ADD ELECTRONICS LOGIC TO TRIP REG GRP. LAI 85-9227.	9R	NPR

T M I - 1 P R O J E C T L I S T I N G

C A T E G O R Y " B " P R O J E C T S

SORT BY CATEGORY/CYCLE/BA NUMBER

STATUS AS OF 30MAR88

OBS	EA NUMBER	DESCRIPTION PROJECT DESCRIPTION	CYCLE/ YEAR	CLASSIFICATION
9	123227	IN SERVICE RX BLDG TENDON SURVEILLANCE 10 TENDONS.	7	NRR
10	123224	OTSG TUBE PLUGGING RB PLUG OTSG TUBES AS NECESSARY.	7R	NRR
11	123226	7R REACTOR REFUELING RB REPLACE 76 FUEL ASSEMBLIES.	7R	NRR
12	123235	RC PUMP SNUBBER VALVE BLOCK REPLACE RB REPLACE THE CONTROL VALVE BLOCKS ON THE 4 RCP SNUBBERS; TEST SNUBBERS (NRR).	7R	NRR
13	125007	TMI INSERVICE INSPECTION (OUTAGE 7R) ALL ASME SECT XI INSPECTIONS.	7R	NRR
14	125008	EDDY CURRENT INSPECTION RB ECT OF ISI TUBES ; 30 INSPECTION.	7R	NRR
15	123A08	8R REACTOR REFUELING RB 76 NEW FUEL ASSEMBLIES.	8R	NRR

TMI - 1 PROJECT LISTING

CATEGORY "B" PROJECTS

SORT BY CATEGORY/CYCLE/BA NUMBER

STATUS AS OF 30MAR88

OBS	BA NUMBER	DESCRIPTION PROJECT DESCRIPTION	CYCLE/ YEAR	CLASSIFICATION
16	123C08	OTSG TUBE PLUGGING RB PLUG OTSG TUBES AS NECESSARY.	8R	NRR
17		ILRT RB INTEGRATED LEAK RATE TEST OF CONTAINMENT - 1990.	8R	NRR
18	126A08	OTSG EDDY CURRENT TESTING RB ECT OF ISI TUBES; 30 INSPECTION.	8R	NRR
19	126C08	TMI INSERVICE INSPECTION (OUTAGE 8R) ALL ASME SECT XI INSPECTIONS; AUGMENTED ISI.	8R	NRR
20	412538	HEAT SINK PROTECTION SYSTEM UPGRADE CR CB INSTALL DIFFERENT CR INDICATOR FOR MSRD; OTHER MOD IDENTIFIED BY OPS, MAINT AND PLANT ENG. LAI 87-9283.	8R	NRR
21	128097	SEISMIC QUAL NUCLEAR POWER PLANTS RESOLUTION OF USI A-46 THROUGH SEISMIC QUALIFICATION UTILITY GROUP PARTICIPATION.	87-90	NRR
22	412523	REPLICATE SIMULATOR CERTIFICATION UPGRD UPGRADE SIMULATOR CONSISTENT WITH CONTROL ROOM MODIFICATIONS.	87-90	NRR
23	128108	SEISMIC QUAL OF EQUIP IN OPER NUC PLANTS	87-91	NRR

T M I - 1 P R O J E C T L I S T I N G

CATEGORY "B" PROJECTS

SORT BY CATEGORY/CYCLE/BA NUMBER

STATUS AS OF 30MAR88

OBS	BA NUMBER	DESCRIPTION PROJECT DESCRIPTION	CYCLE/ YEAR	CLASSIFICATION
		SCOPE THE SEISMIC QUAL OF EQUIP FOR TMI-1 AS WILL BE REQUIRED BY NRC GL 87-02 & LAI 87-9084.		
24	128056	VENDOR MANUAL REVIEW ESTABLISH AND IMPLEMENT VENDOR DOCUMENT CONTROL PROGRAM; LAI 85-9258.	87/88	NRR
25	126881	OUTAGE GENERAL EMPLOYEE TRAINING - TMI-1 INSTRUCT INDIVIDUALS WORKING IN NUCLEAR POWER PLANTS.	88	NRR
26	418057	CONSOLIDATION PLAN TASKS TO BE ACCOMPLISHED TO CONSOLIDATE TMI-1 AND 2 SECURITY; LAI 88-9019.	88/89	NRR
27	12689A	OUTAGE GENERAL EMPLOYEE TRAINING - TMI-1 INSTRUCT INDIVIDUALS WORKING IN NUCLEAR POWER PLANTS.	89	NRR
28	12689E	RX VESSEL INSERVICE INSP SUPP & PREP-8R PLAN AND PREPARE FOR RX VESSEL INSPECTION IN 8R.	89	NRR
29	123A09	9R REACTOR REFUELING RB 80 NEW FUEL ASSEMBLIES.	9R	NRR
30	123C09	OTSG TUBE PLUGGING RB PLUG OTSG TUBES AS NECESSARY.	9R	NRR

T M I - 1 P R O J E C T L I S T I N G

CATEGORY "B" PROJECTS

SORT BY CATEGORY/CYCLE/BA NUMBER

STATUS AS OF 30MAR88

OBS	BA NUMBER	DESCRIPTION PROJECT DESCRIPTION	CYCLE/ YEAR	CLASSIFICATION
31	126A09	OTSG EDDY CURRENT TESTING ^{RB} ECT OF ISI TUBES; 3% INSPECTION.	9R	NRR
32	126C09	TMI INSERVICE INSPECTION (OUTAGE 9R) ^{ALL} ASME SECT XI INSPECTIONS; AUGMENTED ISI.	9R	NRR

T M I - 1 P R O J E C T L I S T I N G

CATEGORY "C" PROJECTS \

SORT BY CATEGORY/CYCLE/BA NUMBER

STATUS AS OF 30MAR88

OBS	BA NUMBER	DESCRIPTION PROJECT DESCRIPTION	CYCLE/ YEAR	CLASSIFICATION
33	123222	TURBINE/GENERATOR INSPECT & OVERHAUL ^{TB} OVERHAUL GENERATOR EXCITER, B LP TURBINE, AFP TURBINE, VALVES.	7R	MRC
34	123223	RCP SEAL INSPECT/REPLACE ^{RB} INSPECT/REPLACE SEALS ON RCP'S.	7R	MRC
35	123231P1	OTSG AND RCS INSULATION REPLACEMENT ^{RB} INSULATION SCHEDULED TO BE REMOVED DURING 7R TO BE REPLACED WITH UPGRADED REFLECTIVE INSULATION.	7R	MRC
36	125006	STEAM EROSION (AUGMENTED) ^{ALL} AUGMENTED INSPECTIONS TO DETECT EROSION/DEGRADATION OF TMI SYSTEMS.	7R	NRR
37	128081P2	OTSG MECHANICAL CLEANING - SLUDGE SMPL ^{RB} REMOVE SLUDGE SAMPLE FROM OTSG TO SUPPORT CHEM CLEANING PROGRAM.	7R	MRC
38	128124P1	REDESIGN/REPLACE CONTAINMENT ISO VALVES ^{RB AB} REPLACE DHV-69, WALKDOWN AND MEASURE INTERNALS FOR OTHER VALVES (4).	7R	IOE
39	412014	UPGRADE RIVER WATER PUMP SYSTEM-LM ^{ISPH} REMOVE 14 SEAL WATER PUMPS, REPLACE WITH 2.	7R	MRC

T M I - 1 P R O J E C T L I S T I N G

CATEGORY "C" PROJECTS

SORT BY CATEGORY/CYCLE/BA NUMBER

STATUS AS OF 30MAR88

OBS	BA NUMBER	DESCRIPTION PROJECT DESCRIPTION	CYCLE/ YEAR	CLASSIFICATION
40	412081P3	OTSG BLOWDOWN RB TB INSTALL PIPING & VALVES & CONTROLS FOR HOT OTSG B/D.	7R	MRC
41	412232	FUEL HANDLING SYS UPGRADE RB FHB REPLACE HYDRAULIC MAST CONTROL CONSOLE DILLON SYSTEM, UPGRADE FROM B4 TO B5.	7R	MRC
42	412255	STRIP CHART RECORDER UPGRADE CR TB REPLACE 21 STRIP CHART RECORDERS (19 IN CR).	7R	MRC
43	412444	MAIN GENERATOR PROTECTION IMPROVEMENTS CR TB RELR ADD CORE H2 SAMPLE; NEW RELAY PANEL; ADD 2 REVERSE POWER RELAYS.	7R	REL
44	412495	RX EX-VESSEL FLUENCE MEASUREMENT RB PLACE DOSIMETRY IN EXISTING SOURCE CAL TUBE.	7R	NRR
45	412534P2	ICS/NNI - ENHANCE RELIABILITY CB RELR RESPONSE TO SPIP REC: REROUTE "HAND" POWER CIRCUIT.	7R	REL
46	418678	NATURAL DRAFT COOLING TOWER PIPE REFURB. NDCT REPLACE WOODEN PIPING, PIPE SUPPORTS AND SPLASH BOXES. REFURBISH VALVES, HOT BASIN, ETC.	7R	MRC
47	126B08	STEAM EROSION (AUGMENTED)	8R	NRR

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		ALL AUGMENTED INSPECTIONS TO DETECT EROSION/DEGRADATION OF TMI SYSTEMS.		
48	128125	TMI-1 MAIN ANNUNCIATOR REFORMATING CR RELR RELOCATE AND RETURN 200 MAIN CR ANNUNCIATOR ALARMS AND WINDOWS. (PART OF SPIP)	8R	NRR
49 *	128128	OTSG CHEMICAL CLEANING SYSTEM RB IMPLEMENT CLEANING OF BOTH OTSG'S BASED ON KWU PROCESS.	8R	MRC
50	412522	REPLACE BAILEY TRANSMITTERS REPLACE BAILEY BY TRANS WITH ROSEMOUNT OR FOXBORO.	8R	MRC
51	128098	BWOG PERFORM IMPROVE UPGRADES REL R CR UPGRADES RESULTING FROM SECO/DAVIS BESSE EVENTS. SCOPE NOT DEFINED.	87-89	NRR
52	128114	EPRI STEAM GENERATOR RELIABILITY PROJ CO-FUNDING FOR EPRI SGRP TASK 404.	87-89	MRC
53	412536	B&WOG ADVANCED CONTROL SYSTEM TASK FORCE SUPPORT OF TASK FORCE TO DEVELOP AN OPTIMAL CONFIGURATION FOR THE ADVANCED CONTROL SYSTEM.	87-89	ISM
54	419649	CONSTRUCT ADMIN NORTH BUILDING CONSTRUCT A 200X150 TWO STORY	87-89	FAC

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		OFFICE BUILDING.		
55	128072	PLANT LIFE ASSURANCE/EXTENSION SUPPORT OF STUDIES BY EPRI & BWO FOR FEASIBILITY OF EXTENDING OPERATING LIFE.	87-90	REL
56	412AAQ	PLANT CHECK VALVE UPGRADE STUDY OF CHECK VALVE APPLICATIONS - BASED ON SAN ONOFRE.	87-90	ISM
57	412271	PLANT PERFORMANCE MON INSTK TB RB EVALUATION TO DETERMINE WHAT INSTRUMENTATION IS NEEDED. (POSSIBLE MOD)	87-90	HRP
58	412512P1	SAFETY/PERFORMNC IMPROVEMENT PROG (BWO) TB MODS TO IMPLEMENT SPIP RECOMMENDATIONS.	87-90	NRR
59	128019	TMI-1 DECOMMISSIONING COST EST. UPGRADE DEVELOP COST ESTIMATE CONSISTENT WITH CHANGES TO 10CFR50.	88	ORR
60	418058	SECURITY ACCESS CONTROL COMPUTER ENHANCE ALL REPLACE CARD READERS; UPGRADE MAIN COMPUTER; NEW PRINTER.	88	NRR
61	419448	PURCHASE IN-PLACE (CANBERRA) WBC SYSTEMS WHOLE BODY COUNTING SYSTEMS.	88	NRR

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62	419453	EQUIPMENT FOR RCRA & WASTE MINIMIZATION EQUIPMENT FOR HANDLING OF HAZARDOUS MATERIALS AND WASTES.	88	ERR
63	419477	EMERG COMMUNICATIONS SYSTEM UPGRADE REPLACE 31 DEDICATED TELEPHONE CIRCUITS WITH MICROWAVE TRANSMISSION SYSTEM.	88	NRR
64	419883	REPLICA SIMULATOR REMOTE SHUTDOWN PANELS REPLICATE AND INSTALL TMI-1 REMOTE SHUTDOWN PANELS AT SIMULATOR; MODIFY SOFTWARE.	88	ISM
65	128122	B&W OWNER'S GROUP PROGRAM GPUN PARTICIPATION IN THE BWOG.	88-90	NRR
66	128132	AS FOUND DOCUMENT & DRAWING UPDATE MAINTAIN AS-FOUND DOCUMENTATION (PER 10CFR50 APP B).	88-90	NRR
67	128099	TMI-1 INDIVIDUAL PLANT EVALUATION INDUSTRY DEGRADED CORE ACTIVITIES & PLANT SPECIFIC NRC SUBMITTAL.	88/89	NRR
68	412521	VOLUME REDUCTION EQUIPMENT FACILITY PROVIDE SOLID WASTE DISPOSAL FACILITY.	88/89	RAD

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69	419454	AUTOMATIC PRECIPITATION SAMPLERS AUTOMATIC SAMPLERS FOR ENVIRONMENTAL MONITORING PROGRAM.	88/89	ERR
70	419456	AUTOMATIC WATER COMPOSITORS CONTINUOUSLY OPERATING WATER SAMPLER FOR RIVER WATER SAMPLES.	88/89	ERR
71	128100	STATION BLACKOUT ANALYSIS TO RESPOND TO NRC REQUIREMENTS ON STATION BLACKOUT.	89	NRR
72	128101	DECAY HEAT REMOVAL RELIABILITY ANALYSIS TO RESPOND TO NRC REQUIREMENTS WHEN DEVELOPED.	89	NRR
73	128113	LOW ACTIVITY WASTE STREAM PETITION (EPRI SUPPORT OF BELOW REGULATORY CONCERN TECHNICAL SUPPORT PROGRAM.	89	NRR
74	412AAG	BELOW REGULATORY CONCERN POWDEX DISPOSAL OBTAIN PERMISSION FOR ONSITE DISPOSAL OF SPENT POWDEX.	89	NRR
75	419XX2	CONSTRUCT TURBINE BUILDING TOOL SHOP CONSTRUCT MAINT CONTRACTOR TOOL SHOP ON 305' LEVEL OF TB TO REPLACE PLYWOOD SHED.	89	ORR
76	419XX9	CONSTRUCT VISITOR CENTER	89	FAC

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		EXPAND AND RENOVATE VISITOR/ OBSERVATION CENTER - TO PROVIDE OFFICES FOR THE COMMUNICATION DIVISION GROUP.		
77	41989G	MELITA 3000 EMERG TELENOTIFICATION SYS THIS SYSTEM WILL AUTOMATICALLY PERFORM SURVEILLANCES.	89	NRR
78	41989H	REMOTE SIREN MONITORING SYS (RSMS) PURCHASE RSMS INCLUDING SIREN SENSORS AND CENTRAL (REMOTE) STATION.	89	ISM
79	419639	RENOVATE GREEN ADMIN BUILDING 222 RENOVATE AND ENLARGE GREEN ADMIN BLDG.	89/90	FAC
80	419665	CONSTRUCT TRAINING LABS PROVIDE FOR TRAINING LABS IN EXISTING STRUCTURES.	89/90	FAC
81	412076	POISON FUEL RACKS - POOL A FHB EXPAND CAPACITY. (CYCLE 9)	9	NRR
82	126809	STEAM PIPING (AUGMENTED) A AUGMENTED INSPECTIONS TO DETECT EROSION/DEGRADATION OF TMI SYSTEMS.	9R	NRR
83	412ABE	SQUG MODS ALL MODIFY ANCHORAGES/SUPPORTS, REPLACE PROTECTIVE RELAYS TO COMPLY WITH SEISMIC QUALIFICATIONS.	9R	NRR

ABC Classifications

- a) Meet NRC Requirements (NRR) - Activities that a) must be carried out to fulfill specific NRC requirements or b) have been committed to the NRC by the Company or c) are such that if not accomplished could result in an NRC non-compliance even though the specific activity is not required by the NRC.
- b) Meet Environmental Requirements (ERR) - Activities that a) are specifically required by environmental regulatory agencies (State and Federal) or b) have been committed to environmental agencies by the Company or c) are such that if not accomplished could result in a regulatory non-compliance even though the specific activity is not required by an environmental regulatory agency.
- c) Meet Other Requirements (ORR) - Activities not covered by the NRC or environmental requirements but that are required by local, state, or federal ordinances, codes, court order or lawsuit settlement, or other guidance to which the Company is committed or if not accomplished could result in a violation of that ordinance, code or guidance, court order, etc.
- d) Increase Safety Margins (ISM) - Activities that, if implemented, will improve nuclear plant or personnel safety but are neither required for regulatory compliance nor required by safety regulations, codes or guidance.
- e) Decrease Environmental Effects (E) - Activities that, if implemented, will result in an improved environmental quality but are neither required for regulatory compliance nor required by environmental regulations, codes or guidance.
- f) Improve Radiological Conditions (RAD) - Activities that, if implemented, will result in improved radiological conditions, lower man-rem exposure rates, or radwaste control/reduction but are neither required for regulatory compliance nor required by radiological regulations, codes or guidance.
- g) Maintain Reliability/Capability (MRC) - Activities that, if implemented, will maintain power production at existing levels by preventing deterioration of plant systems or equipment. Includes activities in response to national codes & standards, insurance policies, equipment vendor specifications or nuclear industry high unavailability equipment data without which the plant could not operate prudently.
- h) Improve Reliability/Capability (REL) - Activities that, if implemented, will increase power generation by improving availability or capacity factor to maximize energy output.
- i) Improve Operational Effectiveness (IOE) - Activities that, if implemented, will improve staff efficiency or provide a direct economic payback in terms of reduced operating/maintenance costs.

- j) Improve Personnel Facilities (FAC) - Activities that, if implemented, will improve working conditions and the usefulness of personnel facilities.
- k) Provide Contingency/Blanket (CUI) - Activities that, if implemented, will provide management flexibility to respond in a timely manner to emergent work requirements or the ongoing requirements to procure, replace or repair minor items essential to support routine operations.
- l) Improves Heat Rate Performance - (HRP) - Activities, that, if implemented, will increase power production by enhancing the heat rate efficiency.