

NRC POLICY AND PLANNING GUIDANCE

PROGRAM PERFORMANCE

FINAL FY 1982 RESULTS

(Without Resources)

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1. SAFE OPERATION OF LICENSED PLANTS

Systematic Evaluation Program (SEP)

IREP/NREP

SYSTEMATIC EVALUATION PROGRAM

PLANT	TOPIC REV.		FY 82				FY 83				FY 84
	#	% Comp	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Palisades	90	100%		△	■	○					
Ginna	92	100%		△	■	○					
Oyster Creek	83	100%			△	■					
Millstone 1	86	100%			▲						
Big Rock Point	85	95%				△			□	○	
Yankee Rowe	89	99%				△			□	○	
Dresden 2	88	100%			▲				□	○	
Haddam Neck	90	100%				△			□	○	
LaCrosse	83	95%				△			□	○	
San Onofre	89	94%							△		
Quarter (Actual)			94	87	139	96					
Program to Date (Act)			532	617	757	852					
Program to Date (Plan)			566	680	816	857	875				
% of Planned			94%	91%	93%	99%					

Topic Tech. Rev. Safety Assess. for ACRS Safety Assess. to EDO/Comm. 1

Scheduled: △ □ ○

Completed: ▲ ■ ●

SYSTEMATIC EVALUATION PROGRAM (SEP)

POLICY AND PLANNING GUIDANCE (Page 3, Item 7)

"The Commission supports the systematic evaluation program for operating reactors."

"The program should continue at its present pace."

"The goals and objectives of the program should be met expeditiously."

PROGRAM OBJECTIVE

SEP is a deterministic review of specific safety issues for operating plants. Its purpose is to assess the adequacy of design and operation of reactors, compare them with current safety criteria and provide the basis for integrated and balanced equipment backfit decisions. PHASE II of the program currently underway involves the evaluation of the 10 older operating plants (originally 11, but Dresden 1 has been deferred because the reactor will be shut down until at least 1986). The specific objectives are to:

Complete topic reviews for the 10 plants.

Conduct integrated plant safety assessment for each plant.

Provide the technical basis for the conversion of Provisional Operating Licenses for 7 plants which are: Palisades, Ginna, Oyster Creek, Millstone 1, Dresden 2, Lacrosse, and San Onofre.

BACKGROUND

SEP was initiated in late FY 1977. Phase I, involving the establishment of guidelines, techniques, and review areas for conducting the evaluation, has been completed. Phase II, currently underway, will be completed in FY 83. Phase III is scheduled to begin in FY 83 and to be completed in FY 89-90. This Phase will provide documentation on how each of the next 60 operating reactors compares to the current safety criteria. NRR proposes that the SEP Phase III Program be integrated with NREP to form the Systematic Safety Evaluation of Operating Reactors Program to ensure an integrated approach to deterministic and probabilistic safety assessment of reactors.

STATUS

Of the 1370 SEP Phase II topics initially identified for all 10 plants, 495 were deleted as not applicable or duplicated by USIs, the TMI Action Plan, or by other topics. Of the remaining 875 topics to be reviewed, 852 were completed through FY 82. The final integrated safety assessments for Palisades and Ginna have been submitted to the Commission for review, and the Oyster Creek draft integrated assessment was issued for ACRS review. The remaining plant reviews are to be completed by June 1983.

A Commission Paper on SEP II experience is planned for December 1982. A program plan to integrate SEP Phase III and NREP is planned to be submitted to the Commission in early Calendar Year 1983, after more experience is gained from the SEP Phase II program.

MILESTONE DESCRIPTION	FY 82				FY 83				FY 84
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
<u>IREP</u>									
Phase I (Crystal River Study)									
- Issue Final Report	▲								
Phase II (Analysis of 4 additional plants)*									
- Complete draft studies/reports		▲							
- Issue final reports			△				△		
IREP Procedures Guide									
- Complete revisions				△	△				
<u>NREP</u>									
IEEE Peer Review Conference held	▲								
AWS Peer Review Conference held			△	▲					
Complete final procedures				△	▲				
<u>NREP IMPLEMENTATION</u>									
NRR selection of NREP procedures				▲					
Begin implementing of SEP Phase III/NREP				△			△		

* Calvert Cliffs 1
 Arkansas 1
 Browns Ferry 1
 Millstone 1

SCHEDULED ▲

SCHEDULED(REVISIED) - - - - △

COMPLETED ▲

IREP/NREP

POLICY AND PLANNING GUIDANCE (Page 10, Item A; Page 10, Item 1)

"Probabilistic risk assessment is an important tool for weighing risks against one another and for defining achieved safety levels. Quantitative risk assessment techniques will be used to estimate the relative importance of potential nuclear power plant accident sequences."

"Special attention should be given to using probabilistic assessment techniques where the data warrants such use and in areas especially amenable to risk assessment..."

PROGRAM OBJECTIVE

IREP is a developmental and pilot effort "to employ risk-assessment methods to identify particularly high risk accident sequences at individual plants and determine regulatory initiatives to reduce these high-risk sequences." IREP is scheduled to be completed in FY 1983 with the issuance of the last final report on the four Phase II plants. Publication of a final IREP procedures guide will be in the first quarter FY 1983.

NREP will be used to assess the design and operational deficiencies of all commercial operating power reactors employing the probabilistic risk assessment techniques developed under IREP. The NREP program plan is scheduled to be implemented during FY 1983. The staff will seek Commission approval to integrate NREP with SEP Phase III plants, and require licensees to do PRA under NREP.

BACKGROUND

The Interim Reliability Program was developed under Item II.C.1 of the TMI Action Plan. Phase I, a prototype study of Crystal River 3, began in late 1979, and was completed in December 1981. IREP Phase II is a follow-on study of four additional plants: Calvert Cliffs 1, Arkansas 1, Browns Ferry 1, and Millstone 1. Arkansas 1 was completed June 1982 and Browns Ferry 1 was completed July 1982. Millstone 1 will be completed December 1982 and Calvert Cliffs 1 in February 1983.

The draft IREP procedures guide along with probabilistic risk assessment (PRA) procedures developed with IEEE and ANS, has been used as part of the basis for the NREP procedures guide, which is complete.

IREP is primarily a RES program using exclusively NRC and Contractor Resources. NREP will be managed by NRR.

IREP/NREP

STATUS

Final documentation on the IREP program has slipped as a result of competition for critical contractor personnel for Indian Point review and severe accident research work. The NREP procedures guide is complete.

A program plan to integrate SEP Phase III and NREP is planned to be submitted to the Commission in early Calendar Year 1983, after more experience is gained from the SEP Phase II program.

2. NEAR-TERM LICENSING PROBLEMS

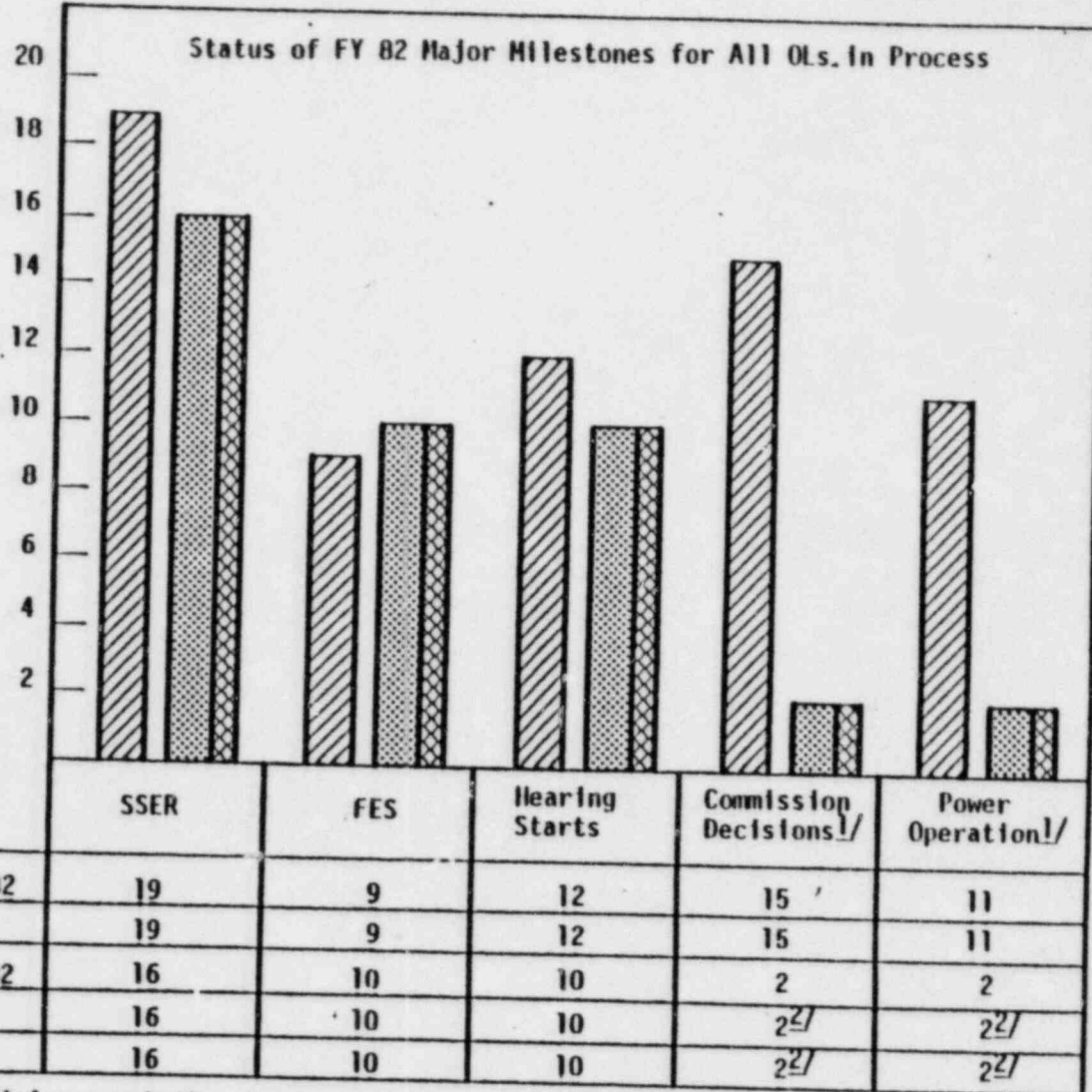
Operating License Reviews

CRBR CP Review

OPERATING LICENSE REVIEWS

As of 9/30/82

Number of Milestones



^{1/}Commission Decision: Commission decision on whether to grant an OL with or without conditions. Power Operation: When a licensee has the authority (including conditional) and ability to achieve 100% rated power output. Occurs only after a licensee has completed construction, and the Commission has granted a license. Power operation begins on the date of construction completion or the date of Commission decision, whichever is later.

^{2/}Excludes operating licenses restricted to 5% power (Grand Gulf 1, Summer 1, and Susquehanna 1).

OLs TO BE ISSUED IN FY 82

As of 9/30/82

Plant	Pwr Oper Date ^{2/}	Milestone	FY 82				FY 83				FY 84
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
LASALLE 1	8/82	Com Decision Construct. Comp.	△ ○		●	▲					Com Decision: Bevill 10/81: △ Applicant Const. Compl. ○ Bevill 9/82: ---△ ---○ Completed: ▲ ● Regulatory delay: ///////////////
GRAND GULF 1	10/82	Com Decision Construct. Comp.	△ ○		●		△				
SAN ONOFRE 2	9/82	Com Decision Construct. Comp.	○	△ ●		▲					
SUMMER 1	10/82	Com Decision Construct. Comp.		○	△	●	△				
DIABLO CANYON 1		Com Decision Construct. Comp.	(No current estimate) ^{1/}								
SUSQUEHANNA 1	9/82	Com Decision Construct. Comp.			○	△ ●	△				
MCGUIRE 2	4/83	Com Decision Construct. Comp.				○	△	△	○		
DIABLO CANYON 2		Com Decision Construct. Comp.	(No current estimate)								
ZIMMER 1	12/82	Com Decision Construct. Comp.				○	△	△	○		
WATTS BAR 1	8/83	Com Decision Construct. Comp.		△		○		△	○		
SHOREHAM 1 ^{3/}	10/83	Com Decision Construct. Comp.				○	△	△	△		

^{1/} Original construction completion date was 3/81. Revised date to be based on design verification program which is currently underway.
^{2/} Later of construction or Commission decision dates.
^{3/} Based on the Quarterly Report to Congress on Emergency Preparedness, submitted to the Commission on October 18, 1982, a license restricted to operation up to 5% of full power could be issued May 1983.

OPERATING LICENSE REVIEWS

POLICY AND PLANNING GUIDANCE (Page 4, Item 2; Page 6, Item 4)

"Consistent with maintaining safety of operating plants, staff reviews and public hearings should be completed on a schedule that assures the licensing process will not unnecessarily be a critical path item that would delay reactor startup."

"To the extent consistent with safety implications, schedules for requirements will be set so as to avoid downtime on operating plants or delay in startup of new plants."

"The staff should make independent estimates of construction completion dates."

PROGRAM OBJECTIVE

To achieve these goals, NRC planned to complete, based on the October 1981 Beville Schedule, the review of 11 OLS in FY 82 and 17 in FY 83. As part of these reviews, the staff planned to complete work on 9 FESSs, 19 SSERs, and to initiate 12 hearings.

BACKGROUND

Following the TMI-2 accident, significant agency resources were concentrated on identifying lessons learned from the accident and on the development of the TMI-2 action plan. The associated requirements for the continued operation of licensed facilities and for the issuance of new operating licenses were then established in NUREG-0694 and NUREG-0737, and licensing was resumed. As a result, a need was created for resources dedicated to assure the orderly licensing of plants with fuel load dates in FY 82 and beyond, while performing the additional in-depth reviews to implement the recommendations of the various TMI investigations. Since the resumption of licensing, the staff has paid significant attention to performing OL reviews in order to minimize the impact of these reviews on fuel load dates.

STATUS

Since the October 1981 Beville Schedule, the number of OLS scheduled to be issued in FY 82 has changed from 11 to 5 because of the slippages of: McGuire 2 construction completion schedule from June 1982 to April 1983; Zimmer 1 from July 1982 to about September 1983; Watts Bar 1 from August 1982 to August 1983; and Shoreham from September 1982 to about March 1983. Diablo Canyon 1 and 2 are also excluded.

Of the 11 plants for which OLS were scheduled to be issued in FY 1982, six had Commission decision dates that were later than the licensees' construction completion dates. Due to changes in the fuel load date for those plants, no regulatory impact occurred. The licenses were issued either before or simultaneous with the applicants' need for authorization of operations.

MILESTONE DESCRIPTION

MILESTONE DESCRIPTION	FY 82				FY 83				FY 84
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Receive Acceptable Update to PSAR & ER	▲								
Complete Site Suitability Portion of LWA				▲					
Issue Draft SER				▲					
Begin Environmental Portion of LWA Hearing				▲					
Issue FES Supplement				▲					
Issue SER									
Begin Safety Portion of LWA Hearing									
Begin Safety Hearing									
Issue LWA-2									▲
Commission CP Decision									▲

SCHEDULED ▲

SCHEDULED(REVISED) - - - - ▲

COMPLETED ▲

CRBR (CP REVIEW)

POLICY AND PLANNING GUIDANCE (Page 4, Item 4)

"The NRC will conduct the licensing review consistent with its statutory regulatory responsibilities and without delay."

PROGRAM OBJECTIVE

The licensing review for the CRBR assumes receipt of updated ER and PSAR in early FY 1982.

- LWA decision 14-16 months after updated ER and PSAR.
- CP decision 27-32 months after updated ER and PSAR.

BACKGROUND

NRR schedule is based on the assumptions that the majority of the review previously conducted remains valid and only the open issues identified in 1977, the TMI-related requirements, and any new requirements would have to be resolved. The CRBR licensing schedule requires the timely, complete and acceptable submittals by the applicant (DOE) of all information and material requested by the NRC.

STATUS

The major portions of the ER and PSAR were received from DOE in the first quarter of FY 1982.

The Site Suitability Report update was issued on June 11, 1982.

The site suitability portion of the LWA hearing was completed on August 27, 1982.

The draft SER was circulated for staff review on September 29, 1982.

UNRESOLVED SAFETY ISSUES

Number	Description	Planned Event	Schedule											
			FY 82				FY 83				FY 84			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
A-1	Water Hammer	Draft TR* for comment Final TR					△		△					
A-3 } A-4 } A-5 }	Steam Generator Tube Integrity	Final TR									△ ^{1/}			
A-11	Reactor Vessel Material Toughness	Final TR			△		△							
A-12	Steam Generator and Reactor Coolant Pump Support	Final TR			△				△					
A-17	Systems Inter- action	Final TR												△
A-39	SRV Pool Dynamic Loads (tech. resolution for HKI completed)	Final TR				△	▲							
A-40	Seismic Design Criteria	Draft TR for comment Final TR			△							△		
								△						△

* TR - technical resolution

SCHEDULED △ SCHEDULED(REVISED) △ COMPLETED ▲

^{1/} Final Technical Resolution of USIs A3, A4, A5 will be incorporated in the report on the generic implications of the Ginna Steam Generator Task Force findings.

3. COORDINATING REGULATORY REQUIREMENTS

USIs and Non-TMI GSIs

Operating Reactor Licensing Actions

TMI Action Plan

UNRESOLVED SAFETY ISSUES

As of 9/30/82

Page 2 of 2

Number	Description	Planned Event	Schedule												
			FY 82				FY 83				FY 84				
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4					
A-43	Containment Emergency Sump Performance	Draft TR for comment Final TR				△	△								
A-44	Station Blackout	Draft TR for comment Final TR							△	△				△	△
A-45	Shutdown Decay Heat Require- ments	Task Action Plan Final TR	△			▲									
A-46	Seismic Quali- fication of Equipment in Operating Plants	Task Action Plan Draft TR Final TR	△			▲				△			△		
A-47	Safety Implica- tions of Control Systems	Task Action Plan Final TR (not scheduled)		△					△						
A-48	Hydrogen Control Measures and Effects of Hydro- gen Burns on Safety Equip.	Task Action Plan		△					△						
A-49	Pressurized Thermal Shock	Commission Paper recommending approval of this as a USI Task Action Plan within 3 months after Commission approval of USI Draft TR for comment Final TR	▲												
															△

10/30/85

SCHEDULED △

SCHEDULED (REVISED) ---△

COMPLETE ▲

UNRESOLVED SAFETY ISSUES (USIs) AND NON-TMI GENERIC SAFETY ISSUES (GSIs)

POLICY AND PLANNING GUIDANCE (Page 5, Item D; Page 6, Item 2)

"Unresolved Safety Issues should be promptly pursued..."

"Priorities for implementation should be established in light of all other requirements imposed on licensees."

"All generic issues will be integrated in an agency-wide program."

"Emphasis will be placed on implementing approved solutions to generic safety issues which have been resolved."

"As a first step in resolving existing generic issues, the staff will examine these issues and recommend to the Commission a priority list."

PROGRAM OBJECTIVE

Effort consists of developing technical resolutions to:

- 14 USIs (16 USI tasks)
- 11 Non-TMI GSIs and prioritizing all GSIs

BACKGROUND

- The Commission has identified a total of 25 USIs because of their high priority among the generic issues.
- The technical resolutions for 11 USIs have been completed prior to FY 82 (A-2, -6, -7, -8, -9, -10, -24, -26, -31, -36, -42).
- USI A-8 is being implemented during Operating License (OL) review for applicable plants.
- Implementation has been completed for 1 USI (A-6).

UNRESOLVED SAFETY ISSUES AND NON-TMI GENERIC SAFETY ISSUES

The schedule for issuance of licensing actions for the technically resolved USIs being implemented is shown below. These actions are included in the total inventory of actions to be completed.

<u>USI#</u>	<u>PLAN FY 82</u>	<u>ACTUAL FY 82</u>	<u>FY 83</u>	<u>FY 84</u>	<u>Comments</u>
A-2	13	-	25	-	
A-7	-	-	22	-	
A-9	-	-	-	-	Not scheduled, pending final resolution of proposed Anticipated Transient Without Scram (ATWS) rule
A-10	12	15	11	-	
A-24	-	-	71	-	
A-26	14	2	-	-	24 licensing actions completed in prior year
A-31	-	-	-	-	Resolution resulted in a revised section 5.4.7 of the SRP. Backfit decisions on operating reactors pending CRGR review.
A-36	50	-	62	32	
A-42	-	-	24	-	
Total	89	17	215	32	

Generic Safety Issues:

The NRR staff has identified a total of 51 Non-TMI GSIs as follows:

- 12 - fully resolved, with implementation completed or deemed not required.
- 4 - terminated, superseded or no longer included as a multi-plant action.
- 17 - inactive, primarily because of non-availability of staff.
- 7 - technical resolutions complete, implementation of 1 GSI not started, implementation of 6 GSIs in progress.
- 11 - technical resolutions in an active status (A-15,A-16,A-19,A-29,A-32,A-37,B-10,B-26,B-47,B-54,B-64).
- 51 Total

UNRESOLVED SAFETY ISSUES (USIs) AND NON-TMI GENERIC SAFETY ISSUES (GSIs)

STATUS

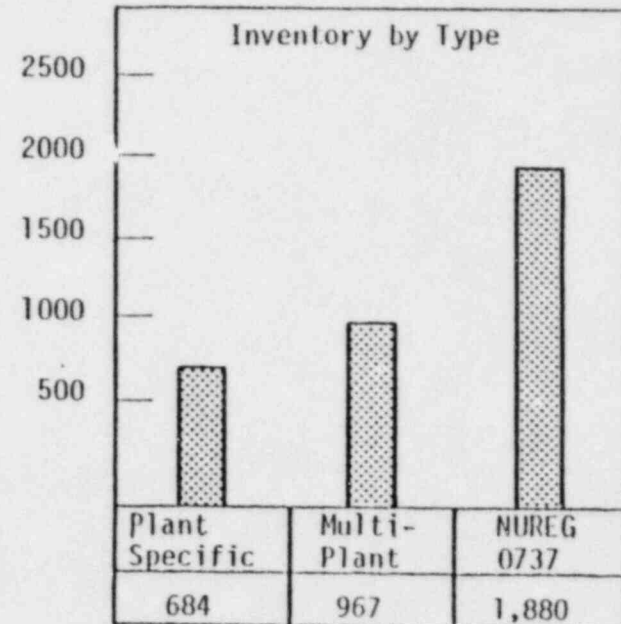
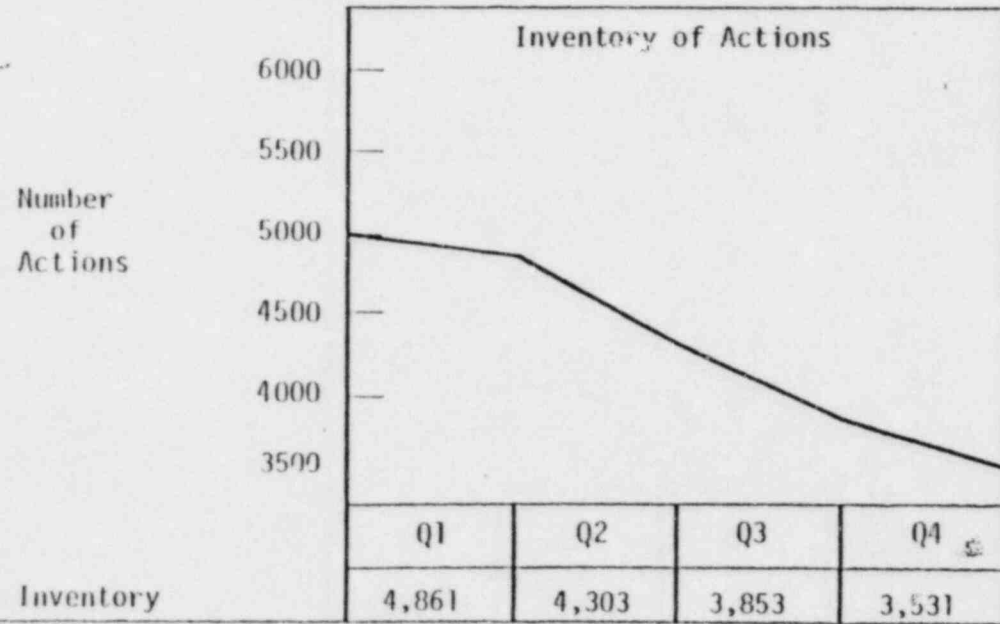
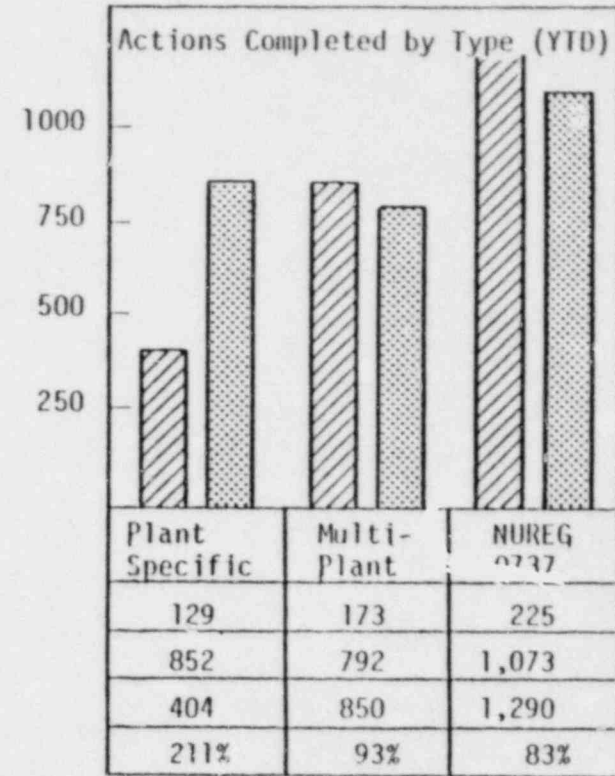
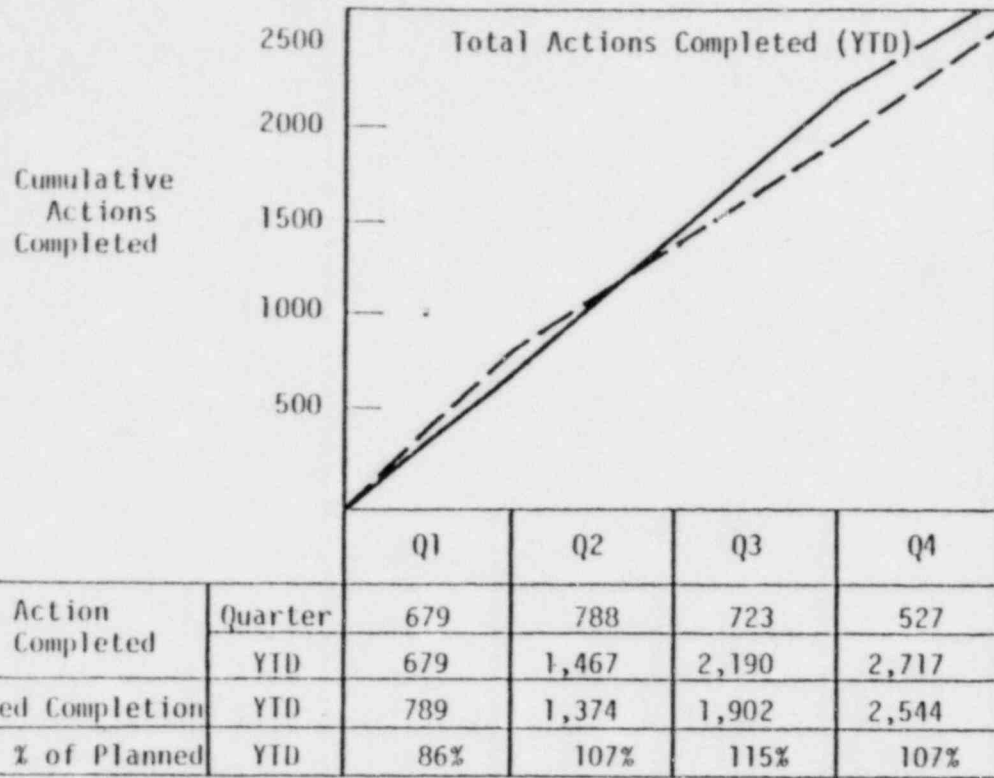
At the beginning of FY 1982, the schedule for technical resolutions of USIs did not reflect the recent decision to increase risk analysis, include cost benefit information and conduct the CRGR review to ensure that proposed new requirements provide the maximum contribution to safety. The schedules and milestones have been revised to accommodate this review process. Primarily because of these unforeseen additional reviews, only one (A-39) of the five USIs scheduled for FY 1982 has been technically resolved during FY 1982. A-11 also has been technically resolved and the technical resolution is to be published during October 1982.

Task Action Plans for A-45 and A-46 were issued in the third quarter. Task Action Plans for two USIs (A-47 and A-48) will be issued during the first quarter of FY 1983.

Consistent with Commission FY 1982-1983 budget decisions, all GSIs are being prioritized on the basis of significance to safety, risk reduction and cost. A preliminary ranking on NRR generic issues (includes NRR TMI related issues) was completed in March 1982. The final prioritization of NRR issues was submitted to the Director of NRR for review in September 1982.

OPERATING REACTOR LICENSING ACTIONS

As of 9/30/82



Actual

Plan

OPERATING REACTOR LICENSING ACTIONS

POLICY AND PLANNING GUIDANCE (Page 6, Item 1)

"The EDO, assisted by the DEDROGR, will exert strong management control over operating reactor licensing actions in order to reduce the existing backlog."

"Priorities and procedures must be developed for eliminating the backlog expeditiously (i.e., by FY 84)."

"A significant portion of the reactor license amendment reviews should be transferred to the regional offices to assist in cleaning up the large backlog."

PROGRAM OBJECTIVE

Complete 2,544 licensing actions in FY 82 to include 404 plant specific actions, 850 multi-plant actions including actions related to resolved USIs, and 1,290 NUREG-0737 actions.

BACKGROUND

Through its licensing actions, the NRC has implicitly determined on a plant-specific basis, or on a multi-plant basis, the level of protection of public health and safety that it deems adequate and is to be maintained in operating nuclear power plants. These licensing actions involve the technical review and required processing of amendments, orders, petitions, hearings, fuel reloads, and multi-plant issues. Although NRR has continued to improve the current methodology and approach for reviewing and prioritizing licensing actions, licensing action workloads have increased over the past several years. Increases have resulted from additional facilities being licensed and from an increase in the number of actions per plant as a result of implementing many of the TMI-related requirements, implementing resolved USIs, and actions identified during plant startup.

The staff is paying significant attention to the processing and completing of licensing action workloads consistent with budgeted resources. Specific operating plans were developed by NRR to complete 2,544 licensing actions in FY 82.

STATUS

As of the end of FY 82, the NRR staff had completed 2,717 actions compared to the 2,544 planned to be completed in the year (107% of target). Plant-specific completions were ahead of plan and NUREG-0737 and non-TMI multi-plant action completions were slightly behind the FY 82 target.

OPERATING REACTOR LICENSING ACTIONS

STATUS (Continued)

The number of actions in the inventory was reduced from 5,318 actions at the beginning of FY 82 to 3,531 at the end of FY 82. This reduction is a result of the 2,717 completed actions, partially offset by new actions received during FY 82.

NRR transferred technical review for 364 actions to the Regions during FY 1982.

TMI ACTION PLAN

SUMMARY OF ACTION ITEMS BY NUREG-0600 CHAPTER:

Chapter I:	83	Operational Safety
Chapter II:	182	Siting and Design
Chapter III:	62	Emergency Preparedness and Radiation Effects
Chapter IV:	20	Practices and Procedures
Total:	347	Priority "1" items: 198

SUMMARY OF ITEMS BY APTS SECTION:

Section 1: Developmental Items

*Red Items:	(18)	Priority "1" Items	(9)
*Yellow Items:	(25)	Priority "1" Items	(11)
*Green Items:	(58)	Priority "1" Items	(7)
Total:	101**	Total:	27

Section 2: Implementation Items
(Requirement)

*Red Items:	(4)	Priority "1" Items	(3)
*Yellow Items:	(14)	Priority "1" Items	(14)
*Green Items:	(50)	Priority "1" Items	(38)
Total:	68	Total:	55

Section 3: Completed/Subsumed Items

Total Items:	178	Total Priority "1" Items:	118
Grand Total:	347	Total Priority "1" Items:	198

* Red - Trouble with item; serious slip (>1 year); severe resource shortage; tracking problems.
 Yellow - Any slip less than 1 year; potential Red item.
 ** Green - Execution is on schedule.
 72 active; 29 inactive.

TMI ACTION PLAN

Twenty-two Items in Status Code Red

(See TMI Action Plan Tracking System, 9/30/82, for detail on status)

I.A.1.3*	Operational Safety - Shift Manning
I.A.2.3	Administration of Training Programs
I.A.2.5*	Training and Qualification of Operating Personnel - Plant Drills
I.A.2.6(6)*	Long-Term Upgrading of Training and Qualifications
I.A.2.7*	Accreditation of Training Institutions
I.B.1.1(2)*	Management for Operations - Long-Term Improvements (develop criteria)
I.B.1.1(3)*	Management for Operations - Long-Term Improvements (issue guidelines)
I.B.1.1(4)*	Management for Operations - Long-Term Improvements (review licensee responses)
I.C.9*	Long-Term Plan for Upgrading of Procedures
I.D.1(5)*	Control Room Design Reviews - Control Room Design Review Report Audits
I.D.5(4)	Control Room Design - Improved Instrumentation Research (Liquid Level Detector)
I.D.5(5)	Control Room Design - Improved Instrumentation Research (Diagnostic Systems)
II.A.2	Site Evaluation of Existing Facilities
II.B.6*	Risk Reduction for Operating Reactors at Sites with High Population (Zion 1&2/IP 2&3)
II.B.8	Safety Review Consideration - Rulemaking Proceeding on Degraded Core Accidents
II.C.1*	Interim Reliability Evaluation Program (IREP)
II.C.2	Continuation of IREP (NREP)
II.C.3*	Risk Assessment - Systems Interaction
II.E.3(4)	Decay Heat Removal - Alternate Concepts Research
II.E.5(1)	Design Evaluation of B&W Reactors
III.D.1.1(2)	Primary Coolant Sources Outside the Containment Structure (Data on fluid leakage)
III.D.1.1(3)	Primary Coolant Sources Outside the Containment Structure (NRR system acceptance criteria)

* Priority 1.

TMI ACTION PLAN

PROGRAM OBJECTIVE

The Three Mile Island Action Plan was developed to provide a comprehensive and integrated plan for actions judged necessary by the NRC to correct or improve the regulation and operation of nuclear facilities based on the experience from the accident at TMI-2 and the official studies and investigations of the accident.

BACKGROUND

In May 1980, the NRC published the Commission-approved Action Plan (NUREG-0660) consisting of approximately 375 discrete actions (later reduced to 347 by combining). NUREG-0660 sorts the items into five categories: Operational Safety; Siting and Design; Emergency Preparedness and Radiation Effects; Regulatory Practices and Procedures; and NRC Policy, Organization, and Management. The five categories are found as Chapters I through V in NUREG-0660. Status of accomplishments are tracked by the Action Plan Tracking System (APTS).

NRR, with Commission approval, has re-sorted the items into three status-related items:

- Developmental, which includes items in NUREG-0660 (exclusive of NUREG-0737);
- Implementation ("Requirement"), which includes items in NUREG-0737; implementation approved; and
- Complete/Subsumed, which includes items on which no further action is required in the context of the Action Plan, and items that have been subsumed by other Action Plan items.

STATUS

There are 22 "red" items reported in the APTS, 8 of which are Priority "1." Of all the items, 13% are "red"; of the Priority "1" items, 10% are "red."

Just over 50% of all items (178) and 59% of the Priority "1" items (117) have been completed or subsumed.

See pages 20 and 21 for more detail.

4. IMPROVING THE LICENSING PROCESS

(NO AREAS ADDRESSED)

5. SUPPORTING NEW INITIATIVES

HLW Repositories Technical Criteria

HIGH LEVEL WASTE REPOSITORIES TECHNICAL CRITERIA

As of 9/30/82

MILESTONE DESCRIPTION	FY 82				FY 83				FY 84
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Complete Staff Assignments for Response to Public Comments	▲								
Public Comments on Major Items Summarized and Staff Positions Drafted		▲							
Complete First Draft of Text for Final Rule and Entire Response to Public Comments			▲						
Final Rule to EDO				▲					
Final Rule to COMM						△			

SCHEDULED △

SCHEDULED(REVISIED) - - - - △

COMPLETED ▲

HIGH LEVEL WASTE REPOSITORIES TECHNICAL CRITERIA

POLICY AND PLANNING GUIDANCE (Page 8, Item 2)

"NRC should publish a final rule before January 1983 covering the technical criteria for high level waste repositories."

PROGRAM OBJECTIVE

Complete preparation of the final technical rule and begin public hearing if required.

BACKGROUND

NRC will license DOE to store and/or dispose of high level waste in a repository to insure that there is no unreasonable risk to public health and safety. To accomplish this, the NRC will develop technical and scientific information required and publish generic regulations and regulatory guidance (technical positions and regulatory guides).

STATUS

All actions remain on schedule. In keeping with accelerated staff effort, SECY 82-288 was forwarded to the Commission July 7, 1982. It was an information report containing draft final technical criteria, partial draft statement of considerations addressing the major issues raised in public comment on the proposed technical criteria, and a draft rationale for the final performance objectives and numerical criteria.

A package based on the use of a draft EPA standard has been developed. A staff paper on how to proceed in the absence of an EPA standard is being prepared.

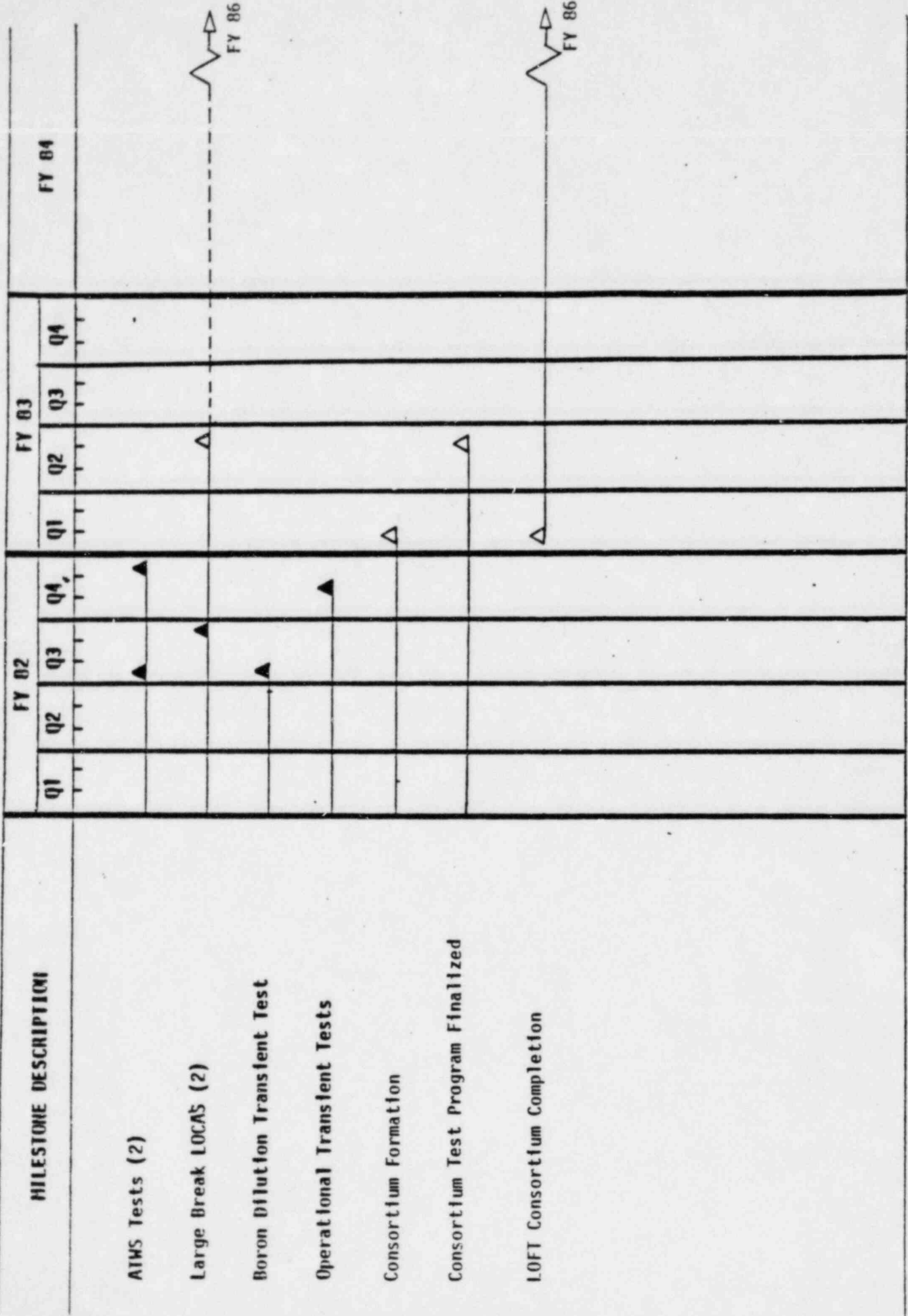
6. IMPROVING RELATED REGULATORY TOOLS

LOFT

Qualification of Safety Related Equipment

Siting Rulemaking

LOFT WITH CONSORTIUM



SCHEDULED ▲

SCHEDULED(REVISED) ---▲

COMPLETED ▲

LOFT

POLICY AND PLANNING GUIDANCE (Page 11, Item A; Page 12, Item 2)

"The research program will continue to emphasize support of the safety of operating reactors and other operating facilities."

"The first priority for NRC research efforts will be light water reactor safety."

PROGRAM OBJECTIVE

The objective of LOFT program is to establish conditions in a nuclear reactor which are characteristic of accidents postulated for a large pressurized water reactor (PWR) so that methods can be developed and tested for analytical description, for accident recognition, and for manual and automatic plant stabilization and recovery.

The specific goals of this program are:

- Acquiring data for the assessment and improvement of computer codes intended to predict the behavior of PWRs under a variety of accident conditions.
- Understanding the behavior of PWRs under accident conditions and the operator actions needed to stabilize and recover the plant.
- Interpreting and improving plant instrumentation needed to identify accident conditions and assist the operator in recovering the plant.

BACKGROUND

The NRC program utilizes the unique features of the LOFT facility for carrying out tests of the response of the primary system of a PWR to: loss-of-coolant accidents, anticipated transients without scram, and other off-normal and accident conditions. These tests provide the capability for assuring that the codes used in full-scale plant analysis combine the effects predicted by various models in an accurate fashion, and that no important effects are overlooked.

After study of the LOFT Special Review Group Report, RES derived a test program intended to meet the basic data requirements exemplified by the Group Report. This test program as approved by the Commission, and referenced by the FY 1982 Appropriation Bill, will be carried out completely with the exception that NRC is deleting two

LOFT

BACKGROUND (Continued)

contingency tests which were planned to be conducted only if the need was found for additional data. Previous tests have furnished all necessary data and therefore are proceeding without the contingency tests.

STATUS

The LOFT International Consortium was approved by NRC, DOE and the member countries on October 15, 1982. The participants will meet in the near future to approve a test matrix and the program management by DOE.

QUALIFICATION OF SAFETY RELATED EQUIPMENT

As of 9/30/82

MILESTONE DESCRIPTION	FY 82				FY 83				FY 84
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Environmental Qualification of Electrical Equipment									
- Proposed Rule		▲							
- Interim rule suspending deadline for qualification of electrical equipment				▲*					
- Final Rule to Commission				▲*					
- Issue SER Supplements 1 and 2				▲			2/		
Seismic and Dynamic Qualification of Safety Related Equipment									
- Advanced Notice of Rulemaking				Δ 1/					
- Cost/Benefit Analysis						Δ			
- Proposed Rule									Δ* 1/
- Final Rule									1/ Δ*
- Independent Verification Testing Program to Review Approximately 10 Industry Tests and Perform Approximately 3 Independent Verification Tests Per Year									
Rulemaking on Laboratory Accreditation									
- NRC/IEEE Agreement on Lab Accreditation		▲							
- Proposed rule to Commission			▲						

*Commission decision
 1/Delayed pending approval of comprehensive program plan.
 2/See STATUS (page 29) for discussion

SCHEDULED Δ

SCHEDULED(REVISIED) - - - - Δ

COMPLETED ▲

QUALIFICATION OF SAFETY-RELATED EQUIPMENT

POLICY AND PLANNING GUIDANCE (Page 11)

"The NRC and the industry must strengthen their Quality Assurance programs with specific attention to their implementation. The NRC must encourage the industry to be more aggressive in assuring the adequacy of design, construction, and operation."

PROGRAM OBJECTIVE

This program will provide a systematic approach to ensure that all safety-related equipment in both operating and new facilities is properly qualified to perform its safety functions if subjected to postulated accident conditions or a seismic event. The major emphasis in FY 82 will be in qualification of electrical equipment.

Major FY 82 Planned Accomplishments

- Publish an advance notice notice of proposed rulemaking on seismic and dynamic qualification of safety-related equipment and environmental qualification of mechanical equipment. (Delayed pending approval of comprehensive plan)
- Publish an effective rule on environmental qualification of electrical equipment.
- Review and witness industry qualification tests and conduct independent NRC tests.
- Continue rulemaking addressing accreditation of laboratories conducting tests.

BACKGROUND

In 1977, the Union of Concerned Scientists petitioned the Commission to upgrade the environmental qualification of safety-related equipment in operating facilities to current standards. This petition ultimately led to the Commission's Memorandum of Order of May 23, 1980 (CLI-80-21), which provides guidance and directives to resolve this matter in an expeditious manner.

The major emphasis to date has been on environmental qualification of electrical equipment.

The staff has prepared a comprehensive program plan which further includes seismic and dynamic qualification of equipment, qualification of mechanical equipment, accreditation of testing laboratories, and an NRC program for independent verification testing.

QUALIFICATION OF SAFETY-RELATED EQUIPMENT

STATUS

Proposed rule on environmental qualification of electrical equipment was published in the Federal Register on January 20, 1982. Public comments have been resolved and the final rule was sent to the Commission for their consideration in July 1982.

The interim rule suspending the deadline for qualification of electrical equipment was issued on June 30, 1982.

Independent verification testing program - This program was reoriented in FY 1982. As a result, no industry tests were reviewed and no independent verification tests made. Instead, IE visited or inspected approximately 20 independent testing organizations in FY 1982.

SER Supplements for Qualification of Electrical Equipment: Industry was late in getting information to contractor and contractor was late in realizing it.

Agreement has been reached between NRC and IEEE concerning laboratory accreditation. IEEE is working on the details of the accreditation process. Proposed rule on accreditation of qualification testing organizations is at the Commissioners' level for their consideration.

The Comprehensive Program Plan was submitted to the EDO on October 15, 1982

SITING RULEMAKING

As of 9/30/82

MILESTONE DESCRIPTION	FY 82				FY 83				FY 84
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Peer Review Workshop			△						
Typical Plant NUREG 0772 Source Term Anal.						△			
Summary of Typical Plant NUREG 0772 Source Term						△			
Source Term Re-evaluation Complete							△		
Schedule for Proposed Siting Rule to EDO						△			

SCHEDULED △

SCHEDULED(REVISED) - - - - △

COMPLETED ▲

SITING RULEMAKING

POLICY AND PLANNING GUIDANCE (Page 10, Items 1 and 2)

"The radioactive source term should be reassessed by early 1983."

"Based on the safety goal and the formulation of a new radioactive source term, a proposed siting rule should be published by late 1983."

PROGRAM OBJECTIVE

Establish technical basis for a revised radiological source term to be used in the proposed siting rule.

Establish clear, predictable siting criteria (focus on demography) which are consistent with the safety goal and best information on reactor accident consequences.

BACKGROUND

NRC FY 1980 Authorization Act directed development of demographic criteria for new plants.

July 1980, Advance Notice of Rulemaking published based on NUREG-0625.

August 1980, letter to Chairman Ahearne from D. Campbell, A. Malinauskas, W. Stratton addressing need for research on source term.

June 1981, NUREG-0771 and -0772 published establishing Regulatory Impact and Technical Bases for Source Term Assumptions.

— December 1981, directed by Commission to wait for source term reevaluation, due March 1983.

April 1982, firm plans established for fission product release tests at PBF (NUREG-0900).

STATUS

NUREG-0771, "Regulatory Impacts": update in final stages of review.

First PBF test scheduled for October 1982.

First estimate for revised source term undergoing development by contractor.

Technical support work for demographic considerations and accident sequence evaluations complete.

The schedule for the Peer Review Workshop has slipped because of delays in the publication of four NUREGs (one by staff and three by contractor). The NUREGs will be the technical basis for rulemaking to be reviewed in the workshop. Some of the delay is due to the need for careful editing to assure that no misconceptions or misinterpretations will result.

7. SAFEGUARDS

Insider Rule

INSIDER RULE

As of 9/30/82

MILESTONE DESCRIPTION	FY 82				FY 83				FY 84
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Final Package to Director NMSS									
Vital Area Access Control		▲							
Pat Down Search Rule		▲							
Personnel Screening Rule		▲							
Submit Rule to EDO									
Vital Area Access Control		▲							
Pat Down Search Rule		▲							
Personnel Screening Rule		▲							
Submit Rule to COMM									
Vital Area Access Control			△	-----	△				
Pat Down Search Rule			△	-----	△				
Personnel Screening Rule			△	-----	△				

SCHEDULED △

SCHEDULED(REVISIED) -----

COMPLETED ▲

INSIDER RULE

POLICY AND PLANNING GUIDANCE (Page 13, Item 2)

"The completion of the remaining elements...--control of the 'insider' and the material control and accounting reform amendments--should be expedited."

"The 'insider' rule will be submitted to the Commission in June 1982."

PROGRAM OBJECTIVE

Increase assurance of employee reliability and at the same time minimize the burden on licensees. The balanced approach will enhance plant safety and improve freedom of movement within nuclear power stations.

BACKGROUND

In 1977 the Commission approved Part 11, but only with regard to fuel facilities and transportation thereby excluding power reactors because the basis of Part 11 is national defense rather than public health and safety. Staff was directed to develop rule for power reactors.

Along with the need for access authorization there were specific concerns in other areas involving employees that required resolution; i.e., pat down search, access controls and vital area designation.

Due to the strong interrelationship, all efforts have been consolidated under the title of the "insider rule."

STATUS

In late May, the EDO agreed to delay submitting the rule to the Commission until 7/30/82 to allow time to re-examine the psychological testing requirement in the personnel screening section of the rule. In late July, it was decided that the rule should be reviewed by the CRGR, with a submission date of 9/30/82. That date was not met because of the need to resolve the safety-safeguards issue raised in the Chairman's 8/16/82 memo to the EDO. A Review Committee established to resolve this issue met for the first time in October 1982. The Committee expects to issue its recommendations by 2/28/83. This date could conceivably be extended to 6/30/83 in the event it is considered appropriate to publish the rule in proposal form, thereby providing the opportunity to consider public input on specific issues related to safety-safeguards matters.