



POLICY ISSUE **(Information)**

January 31, 1986

SECY-86-1A

For: The Commissioners

From: Victor Stello, Jr.
Acting Executive Director for Operations

Subject: STATUS OF STAFF ACTIONS REGARDING TVA

Purpose: To provide the Commission with a status report on staff activities in response to issues associated with TVA. This is the second status report on this topic.

Background: On December 13, 1985, Chairman Palladino directed the staff to prepare periodic written reports summarizing the major NRC plans, schedules, and organizational assignments related to all TVA plants. The first of these reports was provided to the Commission as SECY-86-1 dated January 2, 1986. This report is the second monthly report.

Discussion: The staff has identified a number of major TVA issues requiring resolution prior to the restart of any of the TVA reactors. The staff briefed the Commission on these issues on January 7, 1986 and stated that Sequoyah Unit 2 was expected to be the first reactor ready to resume operation. TVA briefed the Commission on a number of TVA activities on January 9, 1986 and noted the appointment of Steven White as the new Manager of Nuclear Power. Because of this significant management change, TVA requested a 30 day period for Mr. White to reevaluate the ongoing TVA efforts to address the safety concerns needed for the restart or licensing of TVA facilities. TVA is not expected to provide details of Mr. White's evaluation before February 18, 1986.

The staff has developed a listing of issues identified for restart of the Sequoyah Units together with a lead office assignment for each issue (Enclosure 1). Also included

Contact: H. Thompson, NRR
492-9595

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PDR SECY
86-001A PDR

in Enclosure 1 is a preliminary schedule chart which displays the staff approach for resolution of these issues. This schedule is based almost exclusively on staff estimates of the time when TVA submittals will be received or when the Sequoyah facility will be ready for inspection or audit. While the schedule has been informally discussed with the TVA staff, TVA has not taken a position regarding Sequoyah readiness for re-start. If TVA schedules support an earlier restart of the Sequoyah reactors, the staff schedules and approach can be reevaluated in order to achieve an earlier decision date.

As indicated on the attached schedule charts the staff has been reviewing a number of ongoing TVA activities. In addition to numerous visits as part of the inspection program the staff has completed site visits to review equipment qualification status, resolution of the issues brought forward through the employee concerns program, review of the methods used by TVA to verify electrical system design and portions of the welding review program. Enclosure 2 is a summary of completed major items for Sequoyah. In all cases, preliminary results of these site reviews are provided to TVA when the review or inspection team leaves the site. Additionally, significant concerns that arise during staff review of TVA activities are provided in writing to TVA in order that resolution of these issues can be promptly initiated by TVA.

Although the staff has not received TVA's response to the 50.54(f) letter of September 17, 1985 or TVA's schedule for licensing readiness of Watts Bar, a listing which identifies known items for the Watts Bar facility and lead office assignments is provided as Enclosure 3. Enclosure 3 also contains a preliminary schedule chart developed by the staff.

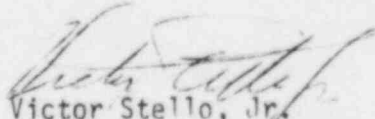
Although the NRC has not received TVA's response to the staff's 50.54(f) letter of September 17, 1985 or TVA's schedule for the restart of any Browns Ferry Unit, a listing of known items necessary for restart of the Browns Ferry facility has been developed. This listing which

identifies the items and lead office assignments is provided as Enclosure 4. Preliminary schedules for the review of these items are being developed by the staff and will be discussed with TVA at the Browns Ferry site during the week of February 10, 1986

TVA has identified ongoing activities at each of its sites in order to ensure that staff activities are properly coordinated. This activity summary is included as Enclosure 5.

The staff is currently conducting normal construction inspection activities at the Bellefonte site and intends to augment these activities as necessary based on identification of issues that may be applicable to Bellefonte. More detailed information on Bellefonte will be included in subsequent status reports.

The staff is currently finalizing systems for tracking resources expended on the TVA effort. Resource estimates are only partially developed, as shown in Enclosures 1 and 3. The report of resources expended together with a more complete summary of projected future resources to be allocated to TVA issues will be included in the next status report.


Victor Stello, Jr.
Acting Executive Director
for Operations

Enclosures:

1. Sequoyah Issues List and Preliminary Schedule
2. Summary of Completed Sequoyah Items
3. Watts Bar Issues List and Preliminary Schedule
4. Browns Ferry Issues List
5. TVA Ongoing Activities

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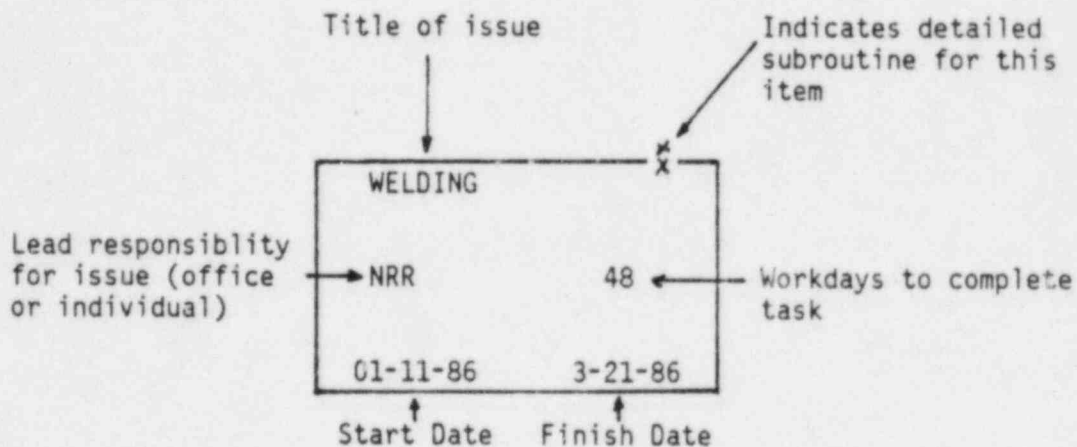
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ISSUES SUMMARY FOR SEQUOYAH

<u>ISSUE</u>	<u>LEAD RESP.</u>
<u>SEQUOYAH</u>	
1. Employee Concerns Program	NRR
2. Allegations	NRR
3. Welding	NRR
4. Design Control	IE
5. Electrical Design Calculations	NRR
6. Equipment Qualification	IE
7. Operational Readiness	RII
8. Cable Tray Supports	RII
9. Technical Specification Revisions	NRR
10. Wrongdoing, Intimidation and Harassment	OI
11. NSRS Reports	NRR
12. Corporate Activities	NRR
13. QA Program Implementation	RII

SEQUOYAH "PERT" CHART NOTES

1. The following pages provide a preliminary "PERT" chart for major regulatory activities at Sequoyah. The first page is an integrated schedule showing major issues and milestones. Subsequent pages provide subroutines, showing detailed steps for each major issued identified on the integrated schedule.
2. The key to individual items is shown below:



3. Dark lines connecting individual items indicate the critical path.

SEQUOYAH - INTEGRATED SCHEDULE

008
OPS READ REVIEW
NR 48
01-11-86 03-21-86

014
OP READ MONITOR
NR 14
01-22-86 04-10-86

010
REV TECH SPECS
NR 19
01-11-86 02-07-86

006
ELECTRICAL CABLE
NR 53
01-11-86 03-20-86

021
ALLEGATIONS
NR 42
01-11-86 04-10-86

012
EMPLOYEE CONCERN
NR 64
01-11-86 04-14-86

004
WELDING
NR 54
01-11-86 03-31-86

005
DESIGN CONTROL
NR 53
01-11-86 03-28-86

007
EQ REVIEW
NR 43
01-11-86 03-14-86

009
CABLE TRAY SUPPLY
NR 43
01-11-86 03-14-86

011
CORPORATE ACT
NR 43
01-11-86 03-14-86

022
01 RESOLVE I&H
NR 42
01-11-86 04-10-86

017
NR AUTHORIZE
NR 1
04-24-86 04-24-86

013
COMMISSION PAPER
NR 5
04-15-86 04-21-86

015
FINAL LIC MATTER
NR 2
04-22-86 04-23-86

018
COMMISSION RTG
NR 1
04-24-86 04-24-86

019
UNIT 2 RESTART
TVA 0
04-25-86 04-25-86

020
UNIT 1 PREPS
TVA 10
04-25-86 05-08-86

020
UNIT 1 RESTART
TVA 0
05-08-86 05-08-86

024
QA PROGRAM
NR 33
01-11-86 02-28-86

023
NRS REPORTS
NR 62
01-11-86 04-10-86

001
PLANNING
MESSMAN 1
01-10-86 01-10-86

13

SEQUOYAH

Subject Area: TVA Employee Concerns

As a result of a lack of confidence by TVA employees in their supervisor/manager willingness to address perceived safety issues, numerous (greater than 4,000) employee concerns have been identified which encompass potentially safety related, non-safety related and intimidation/harassment/wrongdoing issues. TVA has been requested via the 50.54(f) letter of 9/17/85 to address the root cause(s) of this problem, their actions to resolve the problem, their actions to monitor the effectiveness of these actions and their actions to deal with all of the individual concerns.

Lead Responsibility: NRR - B. K. Singh

Major Tasks:

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
1. Review and Categorize K-forms involving safety related issues and enter in data base. (1/31/86)	FRC*	1/1/0
2. Sort data base to provide groups of employee concerns by major issue heading. Provide initial listing (and supporting information) to office having lead for particular issue. (2/7/86) - Note: supplemental listings and information may be expected.	NRR (Singh)	3/0/0
3. Issue a Temporary Instruction (TI) to inspect the implementation of the licensee's actions and plans to address employee concerns as discussed in Task, 4 and 8, below	IE (Hooks)	0/1/1
4. Conduct inspections at TVA corporate, Watts Bar and Sequoyah to evaluate the adequacy of the implementation of TVA's actions and plans to address and resolve employee concerns that are specific and generic to Sequoyah. Several inspections will be conducted to ensure that (1) concerns are properly classified (2) concerns will be resolved at the proper time relative to unit startup (3) concerns are thoroughly evaluated/investigated, and	RII (Weise)	/ /

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
<p>(4) corrective action are adequate, including implementation. (Inspections should factor in relevant allegations, NSRS concerns and other concerns. NRR to provide supporting information) Prepare and issue draft SER and inspection report(s). (2/14/85) Note: specific technical concerns such as welding, electrical calculations, design control, etc, will be addressed under separate tasks.</p>		
a. Welding	NRR (Liaw)	2/4/12
b. Configuration Control	RII (Weise)	0/0/4
c. Operational Readiness	RII (Weise)	0/0/6
d. Supports/Anchors	RII (Blake)	0/0/12
e. Miscellaneous	RII (Verrelli)	0/0/1
f. Environmental Qualification	IE (Hubbard)	0/1/0
g. Electrical Cables	RII (Conlon)	7/14/16
h. Cable Tray and Conduit Hangers	RII (Liu)	0/0/4
5. Evaluate 12/27/85 Sequoyah submittal from TVA and transmit staff questions. (2/7/86)	NRR (Singh)	1/0/0
6. TVA response to staff questions received by 3/1/86 (assumed date)	TVA	
7. Evaluate TVA response (3/14/86)	NRR	1/1/1
8. Conduct inspections at TVA corporate, Watts Bar, Browns Ferry, and Sequoyah to verify on a sampling basis that TVA has implemented those actions and plans to address the root cause(s) of the employee concerns problem, including the methods for evaluating	RII (Weise)	4/8/9

<u>Item</u>	<u>Responsibility</u>	<u>Resources</u> (Man Weeks) <u>NRR/IE/RII</u>
their effectiveness. Several inspections will be conducted. Prepare and issue draft SER input by 3/28/86 and inspection reports.		
9. Verify reviews complete (3/31/86)	NRR (Singh)	1/0/0
10. TVA 50.54(f) response(s): evaluate to determine (1) the acceptability of TVA's actions and plans to address the root cause(s) of Employee Concerns problem and TVA's methods for evaluating the effectiveness of their actions, and (2) the acceptability of TVA's actions and plans to address and resolve the individual employee concerns prior to startup of an operating reactor (Sequoyah 2 is lead plant) or licensing of Watts Bar 1. Prepare SER (4/10/86)	NRR (Singh)	TBD /1 / TRD

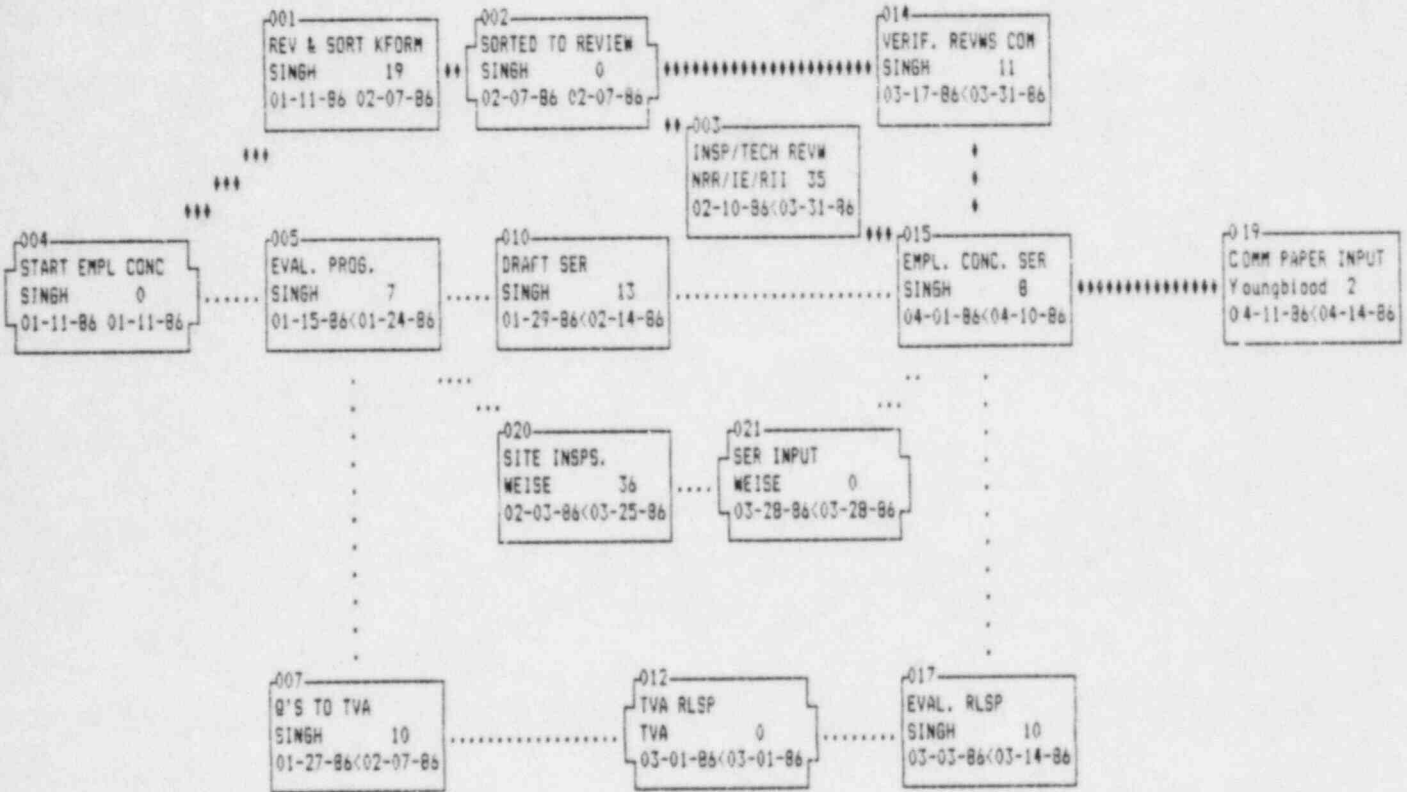
Specific list developed by NRR. Will also be based on sort of all concerns by Franklin and provided by B. K. Singh.

* \$150,000 has been allocated for contractor support on Sequoyah

EMPLOYEE CONCERNS

PERT Chart
01-31-86 09:26

Project: EMPLOYEE.PJ
Revision: 17



.... (Link) **** (Critical link) (Task) (Critical task)

SEQUOYAHSubject Area: Sequoyah Allegations

Allegations which have safety significance have been made directly to the NRC concerning the Sequoyah Nuclear Plant.

Lead Responsibility: NRR - T. Alexion

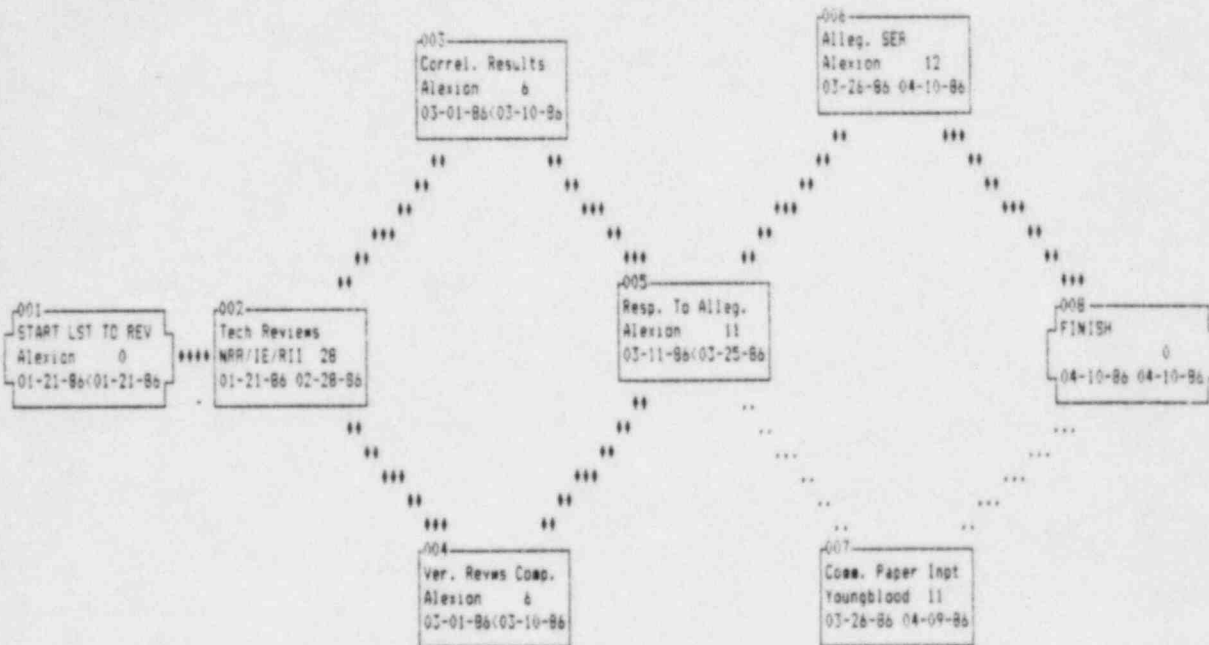
Major Tasks:

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
1. Assign allegations to reviewers (1/21/86)	NRR	1/0/0
2. Interview alлегers, as necessary (2/28/86)	RII/OI/IE/NRR (Alexion - coord.)	5/0/4
3. Perform technical review and prepare evaluation on allegation merit, and provide results to NRR (2/28/86)	RII/OI/IE/NRR (Alexion)	10/1/9
4. Verify reviews are complete. Correlate results of review of ERT concerns, NSRS concerns, and other concerns with reviews of these allegations and define corrective actions (3/10/86)	NRR (Alexion)	1/1/2
5. Prepare responses to alлегers (3/25/86)	NRR (Alexion)	2/0/1
6. Prepare final SER Input (4/10/86)	NRR (Alexion)	1/0/0

ALLEGATIONS

PERT Chart
01-28-86 09:18

Project: ALLEG.PJ
Revision: 8



.... (Link) **** (Critical link) (Task) (Critical task)

SEQUOYAH

Subject Area: Welding problems at Sequoyah

1. As a result of an investigation of employees' concerns conducted by a TVA contractor at Watts Bar, more than 400 issues were identified that are related to welding of safety related steel structures at TVA facilities. There were also some allegations by employees made directly to the NPC. The issues concerning welding at Watts Bar can be categorized as follows:
 - improper or falsified inspections;
 - inspectors and welders qualification;
 - welding filler materials (weld rod) control; and
 - regulatory commitments to certain industry codes governing structural steel welding.
2. Approximately 50 of the Watts Bar concerns were identified to be applicable to Sequoyah Units 1 and 2 and, therefore, need to be resolved for the restart of Sequoyah units.

Lead Responsibility: NRR - B. D. Liaw

The NRC Task Group on Welding at TVA (under NRR lead) will have the overall lead responsibility. The Task Group consists of the following:

B. D. Liaw - NRR representative and the Overall manager;

R. L. Spessard - I & E representative

A. P. Herdt - Region II representative

D. E. Smith is responsible for internal NRR review for Sequoyah.

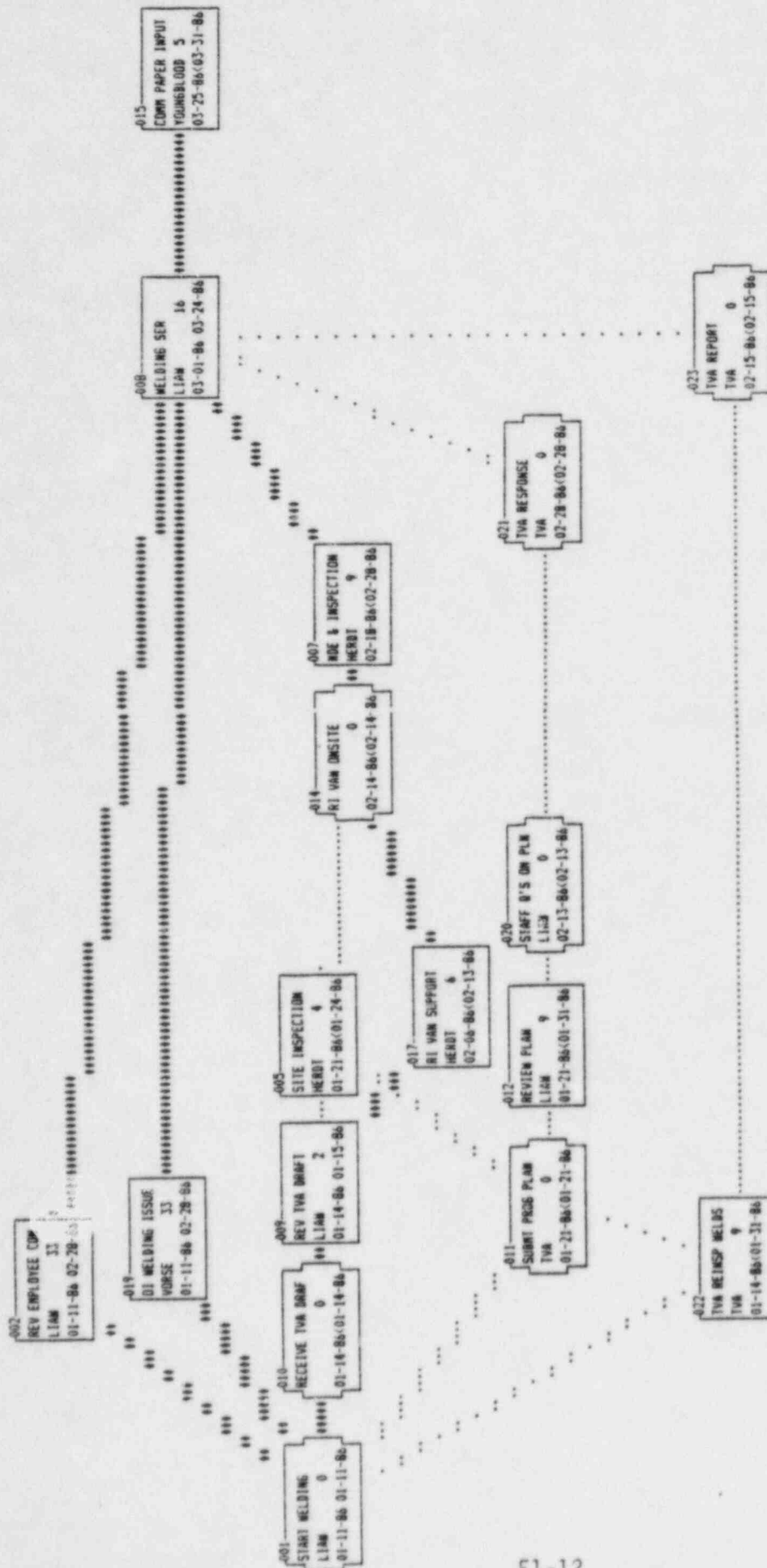
Major Tasks:

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
1. Meeting with TVA 1/7/86	NRR/IE/RII	1 (total)
2. Conference call with TVA on staff's suggestion of some sample physical reinspections of welds. 1/9/86	NRR/IE/RII	

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
3. Staff to provide comments to TVA of draft inspection plan within 2 days of receipt - receipt scheduled 1/14/86.	NRR/IE/RII	1/0/0
4. Special inspection team to do a inspection at Sequoyah (1/21-2/28/86). Inspection of Aptech's work for TVA, Bechtel special team's work for TVA	RII (Lead)	2/2/6
5. Formal review of TVA inspection plan for Sequoyah, submitted 1/17/86, and staff questions on plan to TVA (2/13/86)	NRR (Liaw)	2/2/2
6. TVA implements reinspection (1/20-31/86); staff will monitor and provide comments to TVA	RII (Herdt)	1/1/6
7. TVA to issue inspection report 2 weeks after reinspections completed (2/15/86).	TVA	
8. Identify NDE Van Support needs to TVA. Identify welds, weld access needs (scaffolding, ladders, etc) to TVA (2/13/86)	RII (Herdt)	0/1/1
9. Review a sample of employee concerns related to welding at Sequoyah to insure that they have been properly accounted for in TVA's program, including disposition. (2/28/86)	NRR	/ / *
10. Evaluate I & H issues related to welding at Sequoyah (2/28/86)	OI	
11. NRC Independent Verification Region I NDE Van for one week and inspection (2/18-28/86).	NRR/IE/RII/RI	3/3/3 (also 8 man weeks from RI inspectors)
12. TVA submits final report on welding at Sequoyah estimated (3/7/86).	TVA	
13. NRC staff review and Final SER input complete (3/24/86).	NRR	6/2/2

* Manweeks shown under employee concerns.

WELDING



SEQUOYAH

Subject Area: Design Control

Questions have been raised regarding the adequacy of the existing design control process as well as the adequacy of the previously implemented design process.

Lead Responsibility: R. Architzel, Technical Lead, IE

Major Tasks:

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
1. Itemized verification by direct inspection of all Design Control related commitments contained in the Sequoyah Nuclear Performance Plan. Part 5 of the Plan is dedicated to Design Control. (12/16-20/85)	RII	Complete
2. Assessment of the implementation and adequacy of the Sequoyah Nuclear Plant Design Control Program as upgraded after June 1985. (12/16-20/85 and 1/21-24/86)	RII	Complete
3. Determine Gilbert/Commonwealth's scope of review associated with their review of Sequoyah's historical design control process at Region II and Sequoyah jobsite. Identify Region II's and NRR's related activities associated with design control assurance for Sequoyah.	IE/RII	0/1/1
4. TVA submittal concerning design controls (est. response by 2/14/86)*	TVA	
5. Evaluate TVA's submittals (2/28/86)	IE/RII	TBD
6. Develop inspection plans to assess (1) Gilbert/Commonwealth's design control review, (2) TVA's actions resulting from Gilbert/Commonwealth's efforts; and (3) TVA's three-system review of partially completed/incompleted ECNs.	IE/RII	0/6/1

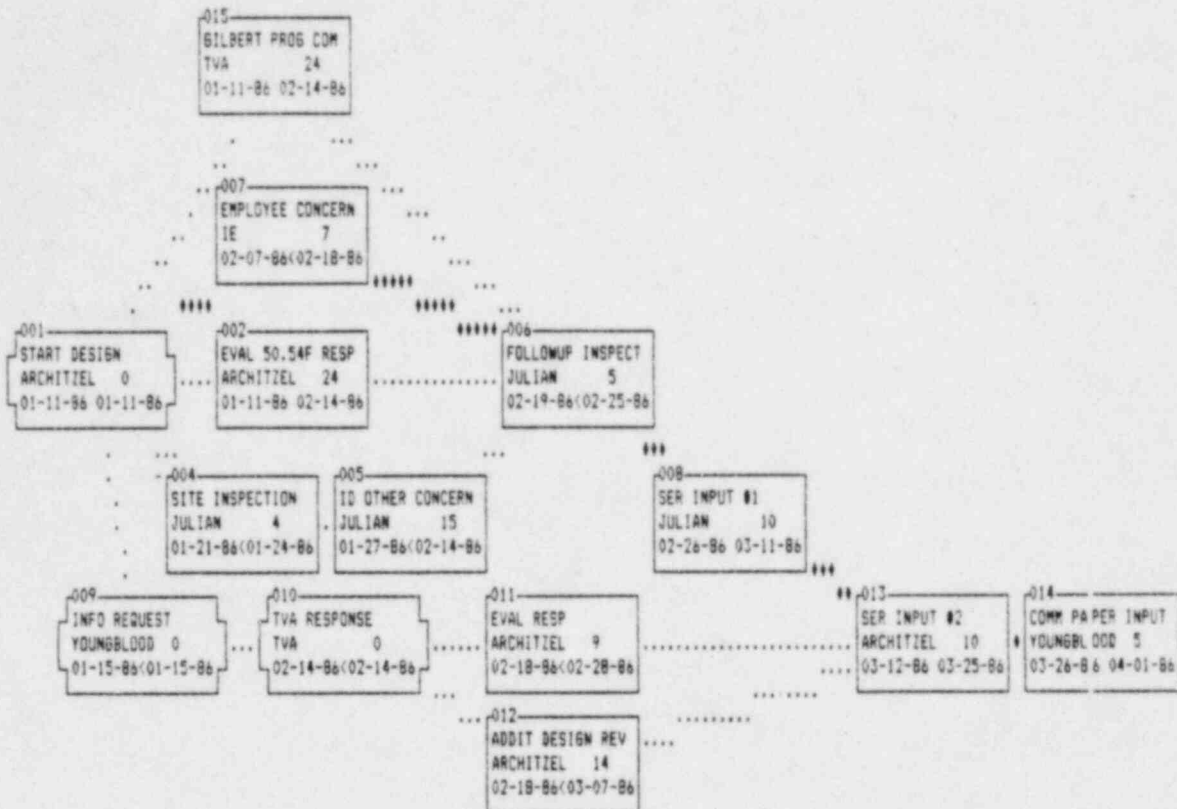
<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
7. Conduct onsite inspections to review adequacy of Gilbert/Commonwealth's efforts, review ECN's for 1975-85 on Feedwater and Auxiliary Feedwater systems, TVA's actions in response to Gilbert/Commonwealth's findings, and TVA partial ECN review.	IE/RII	0/24/6
8. Assess adequacy of Gilbert/Commonwealth and TVA partial ENC review for coverage of relevant allegations, employee concerns, open NSRS reports, OIA referrals, TVA QA Audit results, and INPO results.	IE/RII	TBD
9. Issue inspection reports and SER. (3/25/86)	IE/RII	1/12/5

* Note: Completion of this effort dependent on TVA submittal (requested in NRC letter of 1/15/86. Estimate TVA response by 2/14/86.

DESIGN CONTROL

PERT Chart
01-28-86 16:45

Project: DESIGNCO.PJ
Revision: 14



.... (Link) **** (Critical link) (Task) (Critical task)

SEQUOYAH

Subject Area: Sequoyah Electrical Design Calculations Documentation Issue

1. The licensee has not maintained adequate documentation of many electrical calculations which were performed to support plant design changes. Involves most AC and DC power systems.
2. Question as to the adequacy of station onsite electrical distribution system design and the safety implication as a result of unconfirmed design changes.
3. Can the present onsite distribution system configuration meet all the requirements for safe startup/operation and accident mitigation.
4. INPO identified the problem

Lead Responsibility: NRR/EICSB - J. Knight

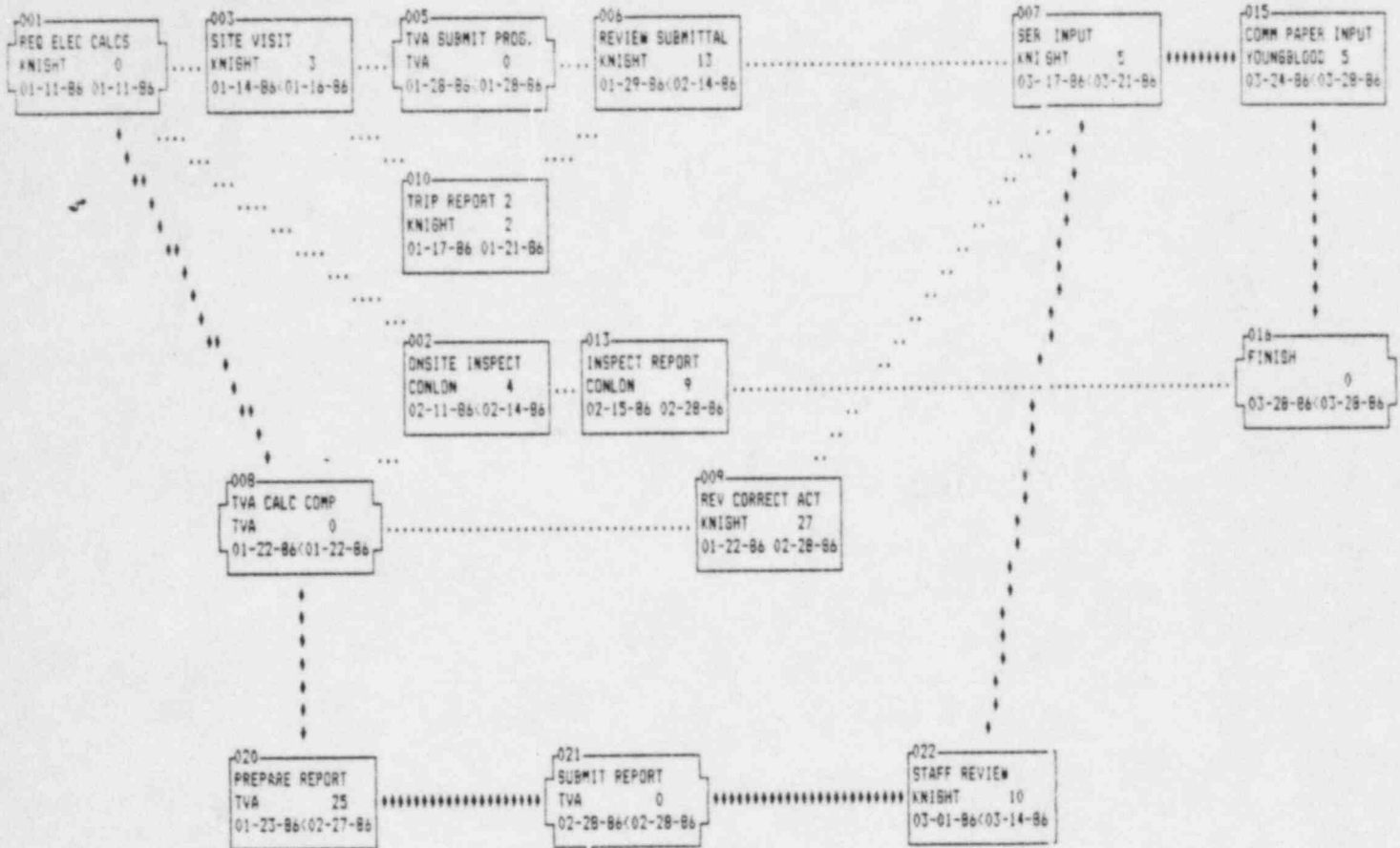
Major Tasks:

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
1. Conduct Site Visit (1/16/86)	NRR (Knight)	complete
2. Review adequacy of licensee's program submittal of 1/28/86 (2/14/86)	NRR (Knight)	1/0/0
3. Inspect results of licensee's studies including resolution of employee concerns and implementation of changes or modifications. (2/14/86)	RII (Conlon, Knight)	3/3/3
4. Review follow-up actions regarding identified deficiencies (design changes). (2/28/86)	NRR (Knight)	2/0/1
5. Review TVA submittal (to be provided 2/28/86) regarding electrical design change program and prepare SER input. (3/14/86)	NRR (Knight)	3/0/0
6. Complete SER regarding adequacy of licensee's reanalysis program (address allegations and employee concerns as appropriate). (3/21/86)	NRR (Knight)	2/0/0

ELECTRICAL DESIGN CALCULATIONS

PERT Chart
01-28-86 15:20

Project: ELECTRIC.PJ
Revision: 16



.... (Link) **** (Critical link) [] (Task) [] (Critical task)

SEQUOYAH

Subject Area: Equipment Qualification

TVA's implementation of the Equipment Qualification Rule, 10 CFR 50.49, at Sequoyah 1 and 2 does not comply with the regulations.

Lead Responsibility: IE - Zech

Major Tasks:

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
1. Conduct an <u>audit</u> of the documentation packages of selected pieces of equipment. (complete 11/18/85)	NRR/IE/RII	Complete
2. Conduct <u>inspection</u> of TVA's program to implement 10 CFR 50.49 (complete 1/13/86)	IE/NRR/RII Contractor	4/16/4 \$25,000
Subtasks:		
a. Followup on audit findings		
b. Review all packages (91) for completeness		
c. Review program to maintain qualification status		
d. Physical verification of as-installed condition		
e. Review corrective actions for Westec findings		
f. Review internal procedures for implementing 10 CFR 50.49		
g. Review resolution of employee concerns on EQ		
3. Write SER input to support startup. Writeup will identify issues that remain as potential enforcement items/unresolved items/open items (2/6/86)	NRR (Shemanski)	2/0/0
4. Site inspection at Sequoyah (2/10-2/14) to review additional packages	IE/NRR/RII (Hubbard) Contractor	2/4/2 \$12,000
5. Reinspect corrective actions and perform final review of related documentation packages (2/24-28/86)	IE/NRR/RII (Hubbard) Contractor	1/4/2 \$8,000

Subtasks:

- a. Review proposed resolution of technical issues and schedules for completion
 - b. Review documentation and assess impact on previously completed packages
- | | | |
|--|-----------------|-------|
| 6. Evaluate TVA 10 CFR 50.49 certification submittal (2/20/86) | NRR (Shemanski) | 2/1/1 |
|--|-----------------|-------|

Major Tasks: Continued

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
7. Review final resolution of TVA's proposed corrective actions on technical issues, e.g., super-heat steam impact on valve vault equipment. Dates for TVA to resolve these issues are unknown.	IE/NRR/RII	TBD
8. Write final inspection report. Identify systems and components either modified or replaced by TVA as corrective action to meet 50.49. (4/15/86)	IE/NRR/RII	2/4/2

Subtasks: On a selected basis:

- a. Determine whether original systems design basis is maintained.
- b. Review licensee's program to verify that system and equipment operability requirements are met (e.g., MOVATs testing of Limitorque actuators that were rewired).

Note: The staff assumes TVA will resolve high energy line break and rockbestos issues in time to support completion of EO matters in early March.



SEQUOYAH

Subject Area: Operational Readiness

To assess TVA's management and implementation of programs, corrective actions, and commitments described in the Sequoyah Nuclear Performance Plan to assure the plant is ready to resume operations. In particular, the areas of regulatory improvement, management involvement, operating experience, and plant readiness for startup will be assessed and acceptability verified.

Lead Responsibility: Region II - Verrelli

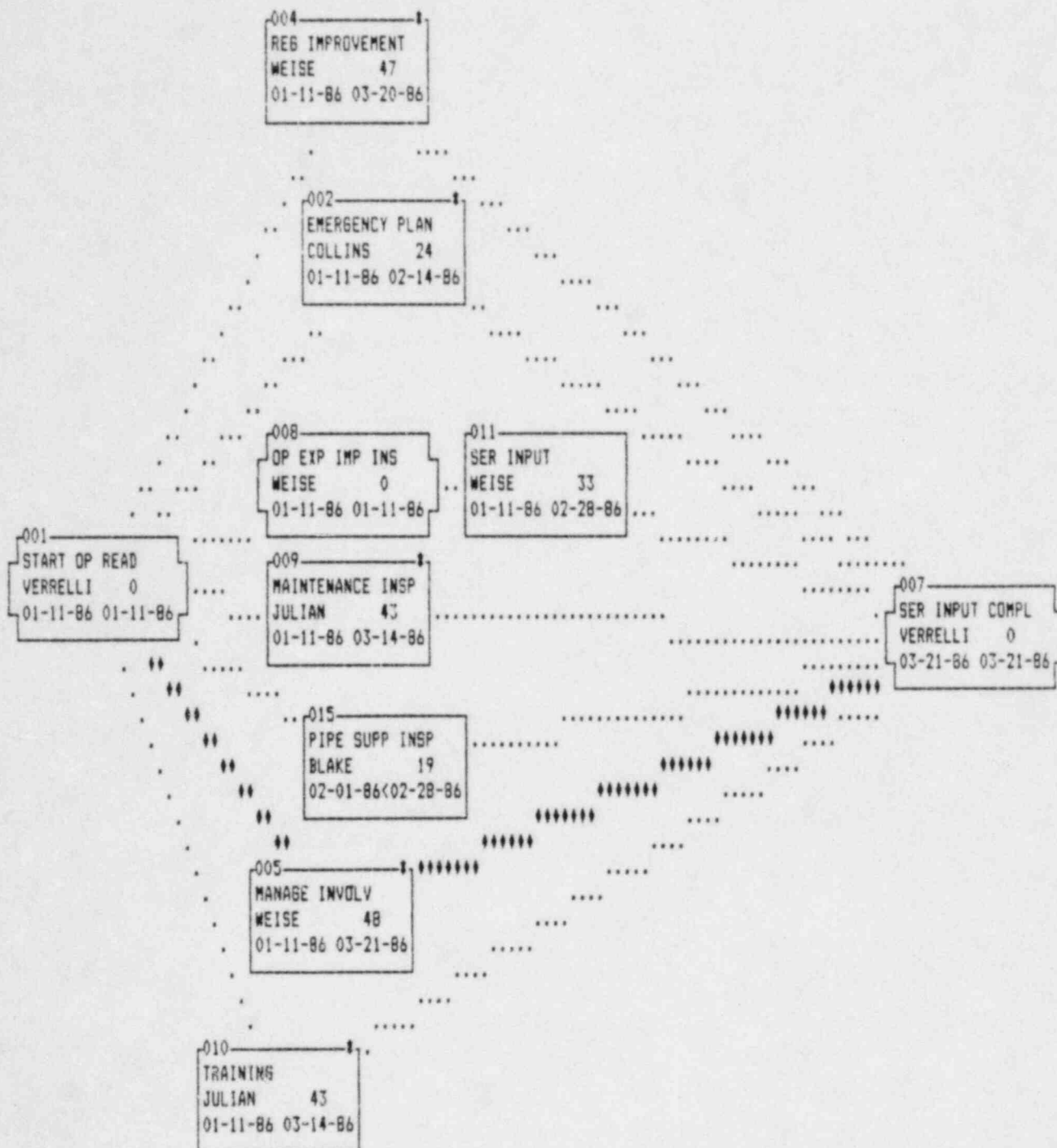
- Major Tasks:
1. Verification by direct inspection of operational readiness commitments contained in the Sequoyah Nuclear Performance Plan.
 2. Assessment of TVA resources allocated to implementation of the operational readiness Program.
 3. Assessment of the implementation and adequacy of the Sequoyah Nuclear Plant Operational Readiness Program in the following areas:
 - Regulatory Improvement
 - Emergency Planning
 - Operating Experience Improvements
 - Maintenance
 - Pipe Supports
 - Management Involvement
 - Training

The major tasks, responsibility, and resource estimates are described for each of these items in the following pages.

PERT Chart
01-28-86 09:23

OPERATIONAL READINESS

Project: OPSREAD.PJ
Revision: 21



Sequoyah

Subject Area: Regulatory Improvement

TVA committed to strengthen TVA regulatory improvement by identifying unsatisfied commitments; implement a Corporate Commitment Tracking System; Upgrade the quality of LER's and assigning project engineers to major projects.

Lead Responsibility: RII - Weise

Status:

Inspections were conducted as follows:

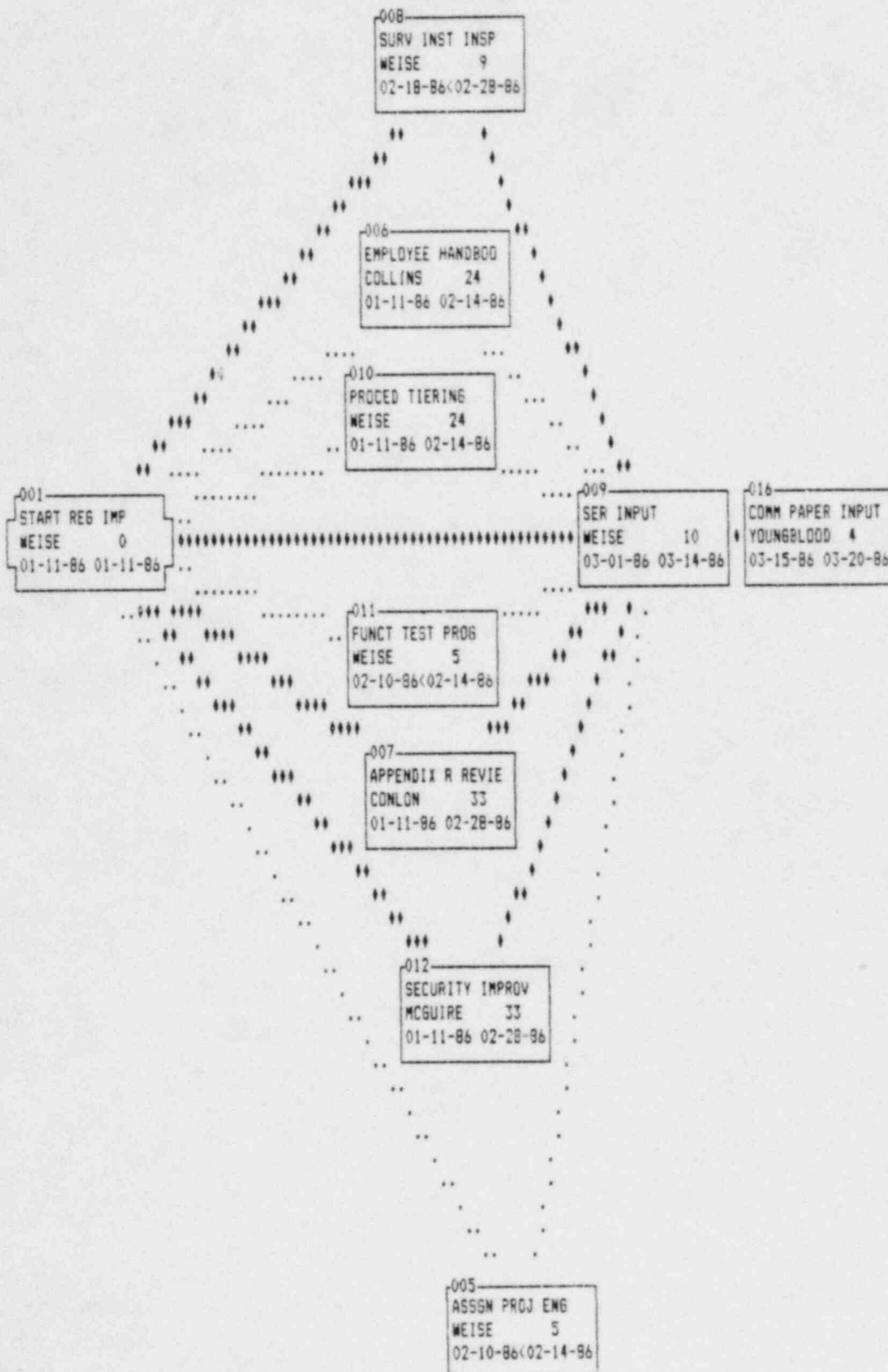
<u>Dates</u>	<u>IR No.</u>
10/28 - 11/1/85	85-37
11/18 - 22/85	85-40
12/9 - 13/85	85-46

Conduct additional inspections of regulatory improvements and prepare SER input by 3/14/86.

REGULATORY IMPROVEMENTS

PERT Chart
01-28-86 09:26

Project: RESIMP.PJ
Revision: 13



Subject Area: Radiological Emergency Preparedness (REP) - Sequoyah

Evaluate the effectiveness of the emergency preparedness items described or committed to in the Sequoyah Nuclear Performance Plan including implementation of the revised Sequoyah Nuclear Plant Radiological Emergency Plan and an evaluation of the program enhancements included in the areas of emergency organization and emergency facilities and equipment.

Lead Responsibility: RII - T. Decker

Major Tasks:

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks)</u>
1. Review the 9/30/85 Revision to the Sequoyah Emergency Plan	RII	Completed
2. Review regulatory significant items identified in the Sequoyah Nuclear Performance Plans as enhancements to the REP program as follows:		
a) Emergency Organization/Accident Assessment Consolidation of Dose Assessment Staff into the Central Emergency Control Center (CECC)		
(1) Review of the effect on the emergency plan (See 1 above)	RII	Completed
(2) Review the effectiveness of the new dose assessment staff during the annual emergency exercise - (Not required for restart)	RII	7 (Total exercise) (2 - RII) (4 - Contractor Support) (1 - IE)
b) Emergency Classification System - Review adequacy and completion of corrective actions committed to by licensee in response to violation 50-327, 328/85-13-02	RII	Completed

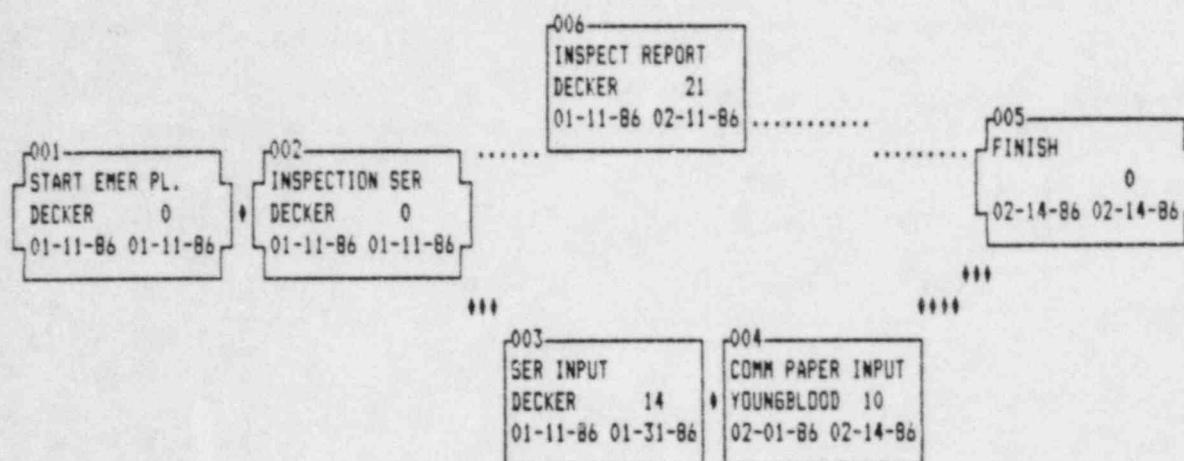
c) Emergency Facilities and Equipment:

(1)	Review of modifications made to satisfy the criteria of NRC bulletin 79-18, "Audibility Problems Encountered on Evacuation of Personnel from High-noise Areas"	RII	75% complete .5 following plant restart
(2)	Review of the SPDS description and documentation via SER of findings	NRR	To be determined by NRR
d)	Training and Drills - Review the changes made to the REP training program	RII	Completed
e)	Annual emergency exercise	RII	Resources identified in 2.a(2) above
3.	Conduct a pre-appraisal of emergency response facilities (ERFs)	RII	3
4.	Conduct an appraisal of ERFs to determine acceptability using Supplement 1 to NUREG-0737 and the draft TI	RII	6 (1 - RII) (1 - IE) (2 - NRR) (2 - Contractor Support)
5.	Complete SER input to document acceptability of findings	RII	.5

EMERGENCY PLANNING

PERT Chart
01-28-86 09:32

Project: EMERGENC.PJ
Revision: 10



SUBJECT AREA: Operational Experience Feedback

Inspect and evaluate the licensee's program and management controls associated with the feedback of operational experience.

LEAD RESPONSIBILITY Region II - Operational Programs Section - B. Debs

RESOURCES NEEDED: 10 man weeks (3 Region II, 7 other)

MAJOR TASKS:

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks)</u>
1. Inspection will involve an integrated look at all functional areas which will include, but are not limited to the Operations Department, Maintenance Department, Training Department, Engineering Department, and TVA Corporate. The effectiveness of information dissemination and responsiveness to operational experience information will be evaluated.	RII	6
2. SER input to be completed	RII	2
3. Complete inspection report	RII	2

ACCEPTANCE CRITERIA/LICENSING ACTION: NUREG 0737 Item I.C.5

GENERIC IMPLICATIONS: To be performed at all TVA sites prior to restart.

SCHEDULE DETAIL: 2/17 - 3/7/86

One week of preparation time is needed. One week of on-site inspection will be performed 2/24 - 28/86. An additional week of effort will be needed by all team members to write report and SER.

SEQUOYAH

Subject Area: Maintenance Program

Follow up on open items from previous maintenance team inspection performed in December 1985.

Lead Responsibility: Region II - Operational Programs Section - B. Debs

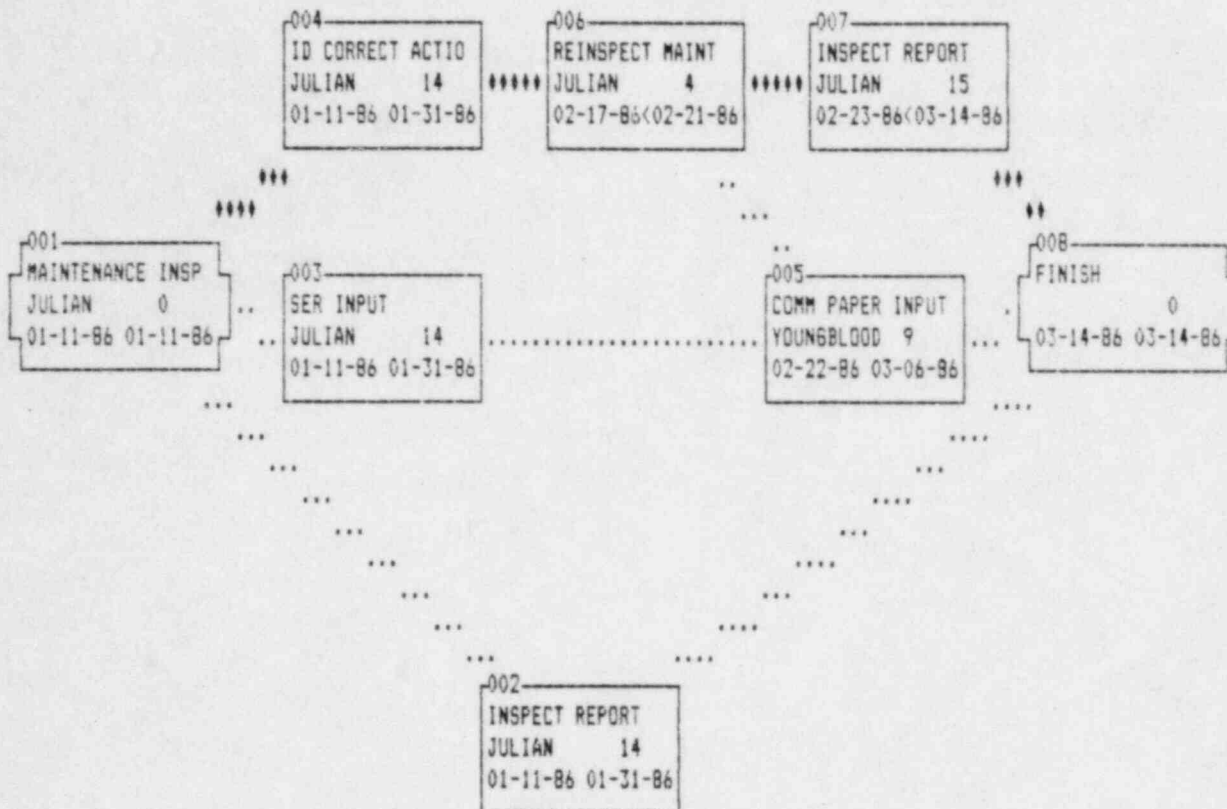
Major Tasks:

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
1. Inspect the functional areas of preventative and corrective maintenance with special attention paid to the licensee's actions taken as a result of the previous Region II maintenance evaluation. This effort includes the inspection of the maintenance organization and activities of the plant staff, backfit and modifications staff including contract assistance. (Onsite inspection 2/17-21/86)	RII	0/0/6
2. The adequacy and implementation of maintenance procedures will be evaluated as well as requisite training. An overall assessment of the licensee's maintenance program and the effectiveness of management controls will be determined.	RII	0/0/4
3. Final SER input, to be done by March 15, 1986.	RII	0/0/2
4. Issue inspection report by March 31, 1986.	RII	0/0/3

MAINTENANCE

PERT Chart
01-28-86 09:35

Project: MAINT.PJ
Revision: 8



SEQUOYAH

Subject Areas: Pipe Support Inspection And Installation Issues

As a result of Region II Inspection on December 16 - 20, 1985, Report No. 50-327, 328/85-49, a violation concerning pipe support inspection and installation was identified.

Lead Responsibility: Region II

<u>Major Tasks:</u>	<u>Responsibility</u>	<u>Resources (Man-weeks)</u>
<u>ITEM</u>		
1. Issue Region Inspection Report with Violation to Licensee	RII	2
2. Evaluate Licensee's Response to Violation	RII	1
3. Inspect Licensee's Corrective Actions and Evaluate Generic Considerations as it Relates to hardware installation	RII	5
4. Inspect Design Controls and Sample Piping Calculations	IE	6
5. Prepare SER Inputs	RII/IE	4

SEQUOYAH

Subject Area: OPERATIONAL READINESS - MANAGEMENT INVOLVEMENT

Increased management involvement needed to enhance operational readiness of the Sequoyah facility.

Lead Responsibility: RII - S. Weise

Major Tasks:

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks)</u>
1. Conduct an inspection/review of the performance monitoring program established to reduce personnel errors and procedural noncompliance. (2/28/86)	RII (Weise)	1
2. Conduct an inspection/review of the modification program which includes reduction in outage workloads and ECN backlog. (2/28/86)	RII (Weise)	2
3. Conduct an inspection/review of NCR Order corrective actions. (2/28/86)	IE (McKee)	1.5
4. Conduct an inspection/review of the chemistry lab improvements, including QC and housekeeping. (2/28/86)	RII (Collins)	1
5. Conduct an inspection/review of the corrective actions taken to improve the effectiveness of PORC. (2/28/86)	RII (Weise)	1.5
6. Conduct an inspection/review of procurement improvements. (2/28/86)	RII (Bellisle)	1
7. Conduct an inspection/review of the radiological health program including contamination area control and ALARA improvements. (2/28/86)	RII (Hosey)	3

Subject Area: Radiological Effluents and Water Chemistry

Inspect and evaluate the effectiveness of the radiological effluent controls and water chemistry control described or committed to in the Sequoyah Nuclear Performance Plan.

Lead Responsibility: Region II - Radiological Effluents and Chemistry
Section - W. Cline

Major Tasks:

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks)</u>
1. Inspection will involve review and evaluation of effluent and process radiation monitors, especially those monitors which have previously given spurious alarms. Emphasis will be placed on monitor set-points, adjustments, placement/location and calibration.	RII	.4
2. Inspect Post Accident Sampling System modifications. In addition to physical modification review, test and records and staff qualifications and training will be reviewed.	RII	.4
2. Inspect and evaluate modifications of the design of the secondary water system and review implementation of improvements to the water chemistry program. Determine the adequacy of the management control system for the chemistry program.	RII	1.0
4. SER input to be completed	RII	1.0
5. Complete inspection report	RII	1.5

SEQUOYAH

Subject Area: Health Physics

Comprehensive assessment of TVA's management and implementation of the Sequoyah Radiation Protection Program and verification of TVA's radiation protective related commitments contained in the Sequoyah Nuclear Performance Plan.

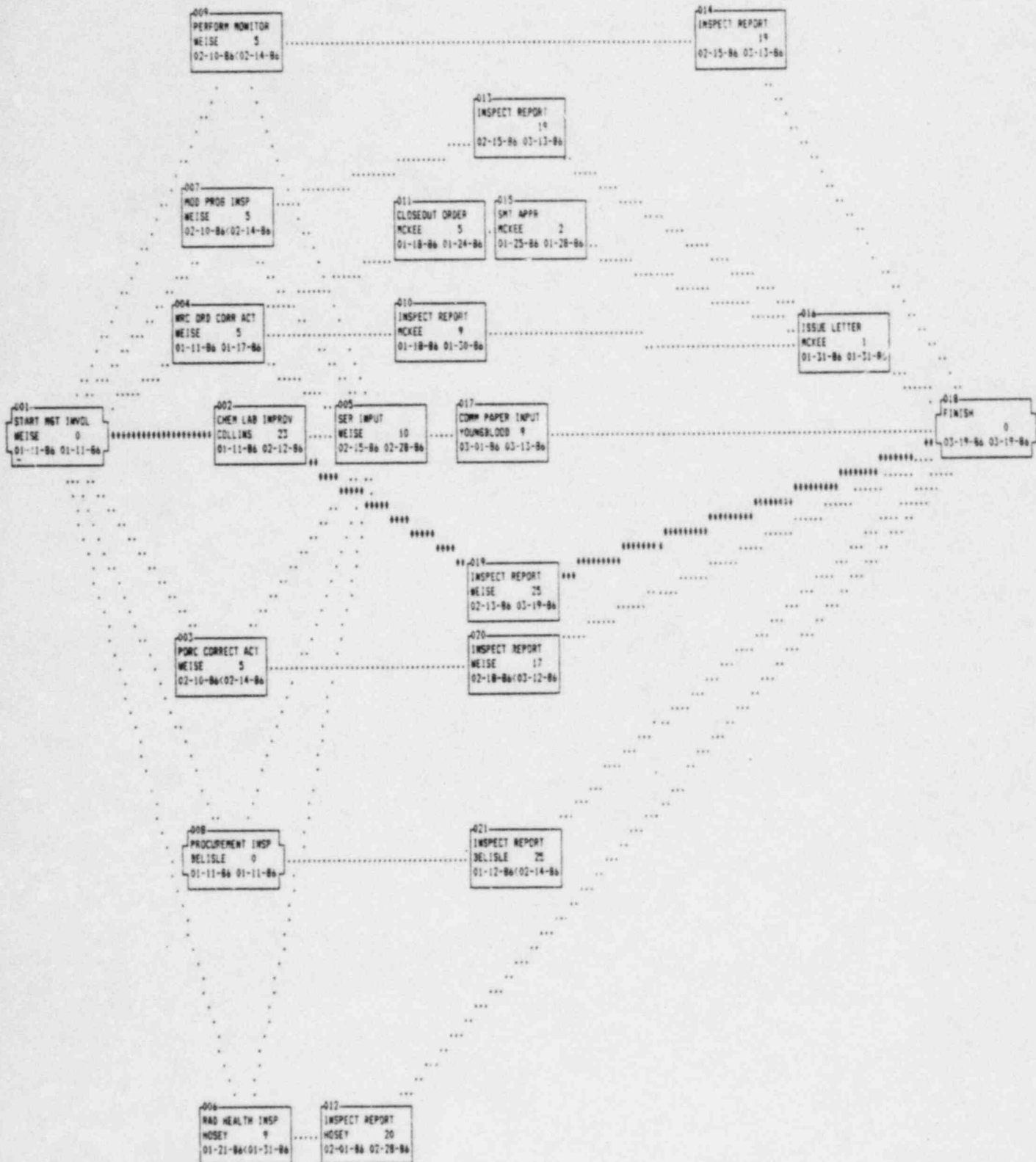
Lead Responsibility: RII - C. Hosey

Major Tasks:

<u>ITEM</u>	<u>RESPONSIBILITY</u>	<u>RESOURCES (MAN-WEEKS)</u>
1. Verification by direct inspection of the effectiveness of the radiation protection items described to or committed to in the Sequoyah Nuclear Performance Plan (1/31/86)	Region II	0.7
2. Prepare SER input on the acceptability of radiation protection commitments (2/14/86)	Region II	2
3. Assessment of management and supervisory resources to administer radiation protection program (1/31/86)	Region II	0.1
4. Review of nonroutine events (1/31/86)	Region II	0.1
5. Followup on allegations (1/31/86)	Region II	0.1
6. Followup on noncompliance and inspector identified items (1/31/86)	Region II	0.1
7. Perform portions of selected IE inspection procedures (1/31/86)	Region II	0.8
8. Assess effectiveness of corrective action for licensees identified audits and review findings (1/31/86)	Region II	0.1
9. Prepare inspection report for all HP items (2/7/86)	Region II	1.0
10. Reinspect to confirm corrective actions for any item opened during initial inspection (3/15/86)	Region II	1.0

MANAGEMENT INVOLVEMENT

PERT Chart
01-28-86 15:07



SUBJECT AREA: To inspect the effectiveness of Sequoyah Licensed and Unlicensed Operator Training

LEAD RESPONSIBILITY: Region II - Operational Programs Section - B. Debs

RESOURCES NEEDED: 11 man weeks (4 Region II, 9 other)

MAJOR TASKS:

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks)</u>
1. Inspect the licensed and unlicensed operator training program in accordance with existing routine inspection procedures. This inspection will also look at the licensee's on-site requalification program and TVA training center assistance and involvement. Although this inspection will be conducted under the routine inspection program, all TVA plants will be inspected in short succession after Sequoyah, since deficiencies found at any plant may be indicative of deficiencies at other plants within the TVA structure. Recent Browns Ferry license examination results will be used, in-part, to identify deficient training areas.	RII	6
2. SER input to be completed	RII	4
3. Generate Inspection Report	RII	1

ACCEPTANCE CRITERIA/LICENSING ACTION:

Contained in Inspection Procedure 41400, 41701

GENERIC IMPLICATIONS: To be performed at all TVA sites prior to restart.

SCHEDULE DETAIL: 2/10 - 28/86

One Region II inspector and three others from IE, or contractor will be needed. Team will prepare for one week, conduct on-site inspections week of 2/17 - 21/86, and write report and SER one additional man week. One additional RII man week will be needed for report completion.

SUBJECT AREA: Ensure the Sequoyah Requalification Program has been successful in maintaining the competency of licensed personnel for the restart and safe operation of the facility.

LEAD RESPONSIBILITY: Region II Operator Licensing Section - B. A. Wilson

RESOURCES NEEDED: 14 man weeks (6 Region II, 8 other)

MAJOR TASKS:

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks)</u>
1. Conduct audit of TVA administered written requalification examinations. Five sets of written exams were administered by TVA in the Fall of 1985.	RII/OLS	2
Schedule: Review quality of TVA written RO and SRO examinations. Regrade at least six (three RO and three SRO) examinations. Both to be performed at Sequoyah Training Center week of 1/27/86.		-
Resources: 2 man weeks (audit plus documentation of findings - SER input).		
2. Conduct simulator examinations for approximately 50 percent of Sequoyah licensed personnel.	RII lead	10
Schedule: Weeks of 2/17/86 and 2/24/86. One Region II Examiner plus 2 other NRC Examiners each week.		
Resources: 6 man weeks (2 man weeks each; Region II, Region III, and Headquarters, OLB). 4 man weeks preparation.		
3. Complete SER and examination report.	RII	2

ACCEPTANCE CRITERIA/LICENSING BASIS:

Results are acceptable if they meet the standards of Examiner Standard ES-601 for an acceptable requalification program.

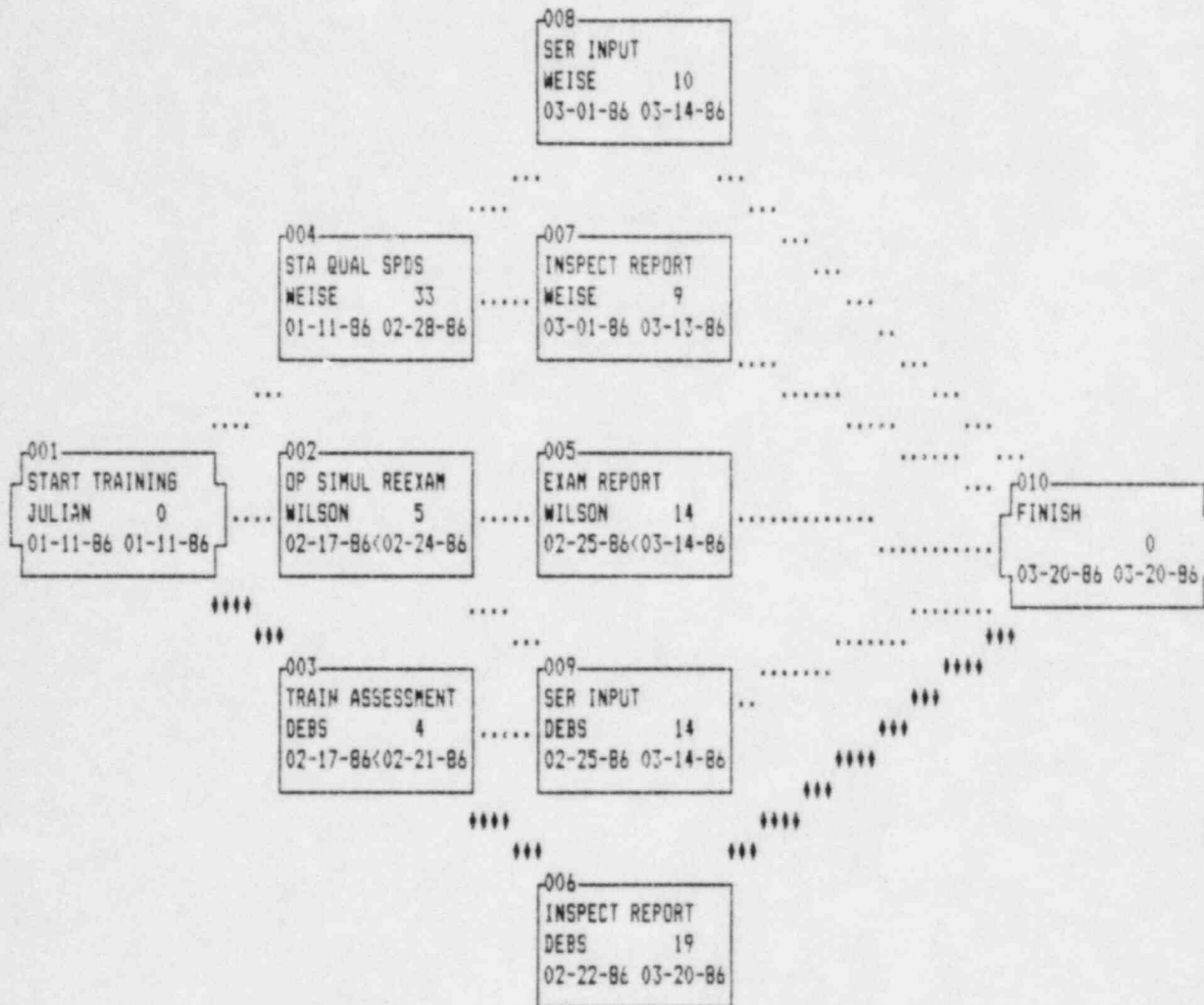
GENERIC APPLICATIONS:

Requalification exams have been performed at Browns Ferry with unsatisfactory results. Requalification exams must be performed at Watts Bar prior to licensing.

TRAINING

PERT Chart
01-31-85 08:48

Project: TRAIN.PJ
Revision: 11



SEQUOYAH

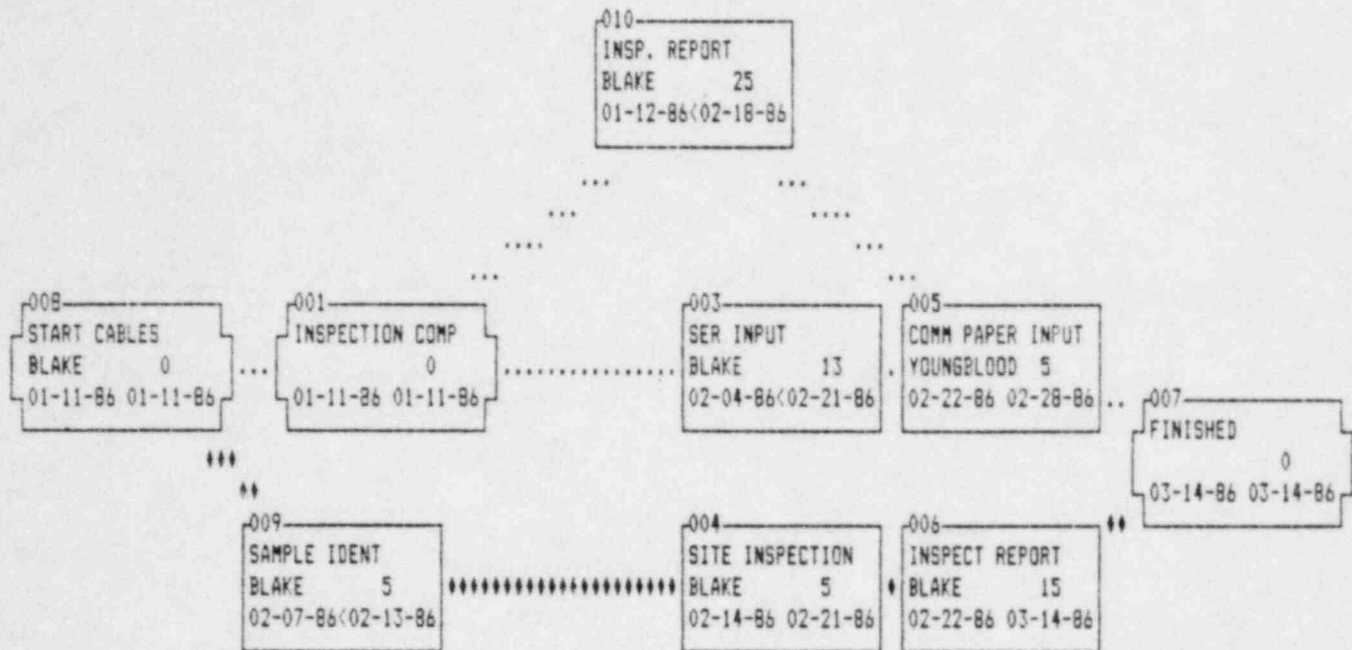
Subject Areas: Cable Tray Supports

Followup on cable tray seismic support issues identified in
Inspection Report No. 50-327, 328/85-29.

Lead Responsibility: Region II (Blake)

<u>Major Tasks:</u>	<u>Responsibility</u>	<u>Resources (Man-weeks)</u>
1. Inspect Licensee's Corrective Actions and Evaluate Generic Considerations as it Relates to Cable Tray Seismic Supports.	RII	Complete
2. Issue Region Inspection Report	RII	2
3. Prepare SER Inputs (2/21/86)	RII	4

CABLE TRAY SUPPORTS



SEQUOYAH

Subject Area: Technical Specification Revisions

Technical Specification Revisions are in process. One is related to the proposed organizational changes at TVA and Sequoyah facility. The remaining are routine in nature.

Lead Responsibility: NRR - C. Stahle

Major Tasks:

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
1. Organizational Revisions	NRR/FOB	2/0/0
(a) Review offsite organization for facility management and technical support		
(b) Review facility organization		
(c) Prepare SER for the issuance of TS		
(d) Issue amendment package by 2/7/86		
2. Acoustical Monitor Devices	NRR/EICSB	1/0/0
(a) SER Completed for issuance of T.S.		
(b) Issue Amendment Package by 2/7/86		
3. Positive/Negative Trip Meter Revisions	NRR/RSB	2/0/0
(a) Review proposed T.S. changes		
(b) Prepare SER		
(c) Issue Amendment Package by 2/7/86		
4. Containment Penetration Devices Table Deletion and Radiological Effluent T.S. Revisions completed (1/4/86)		

SEQUOYAH

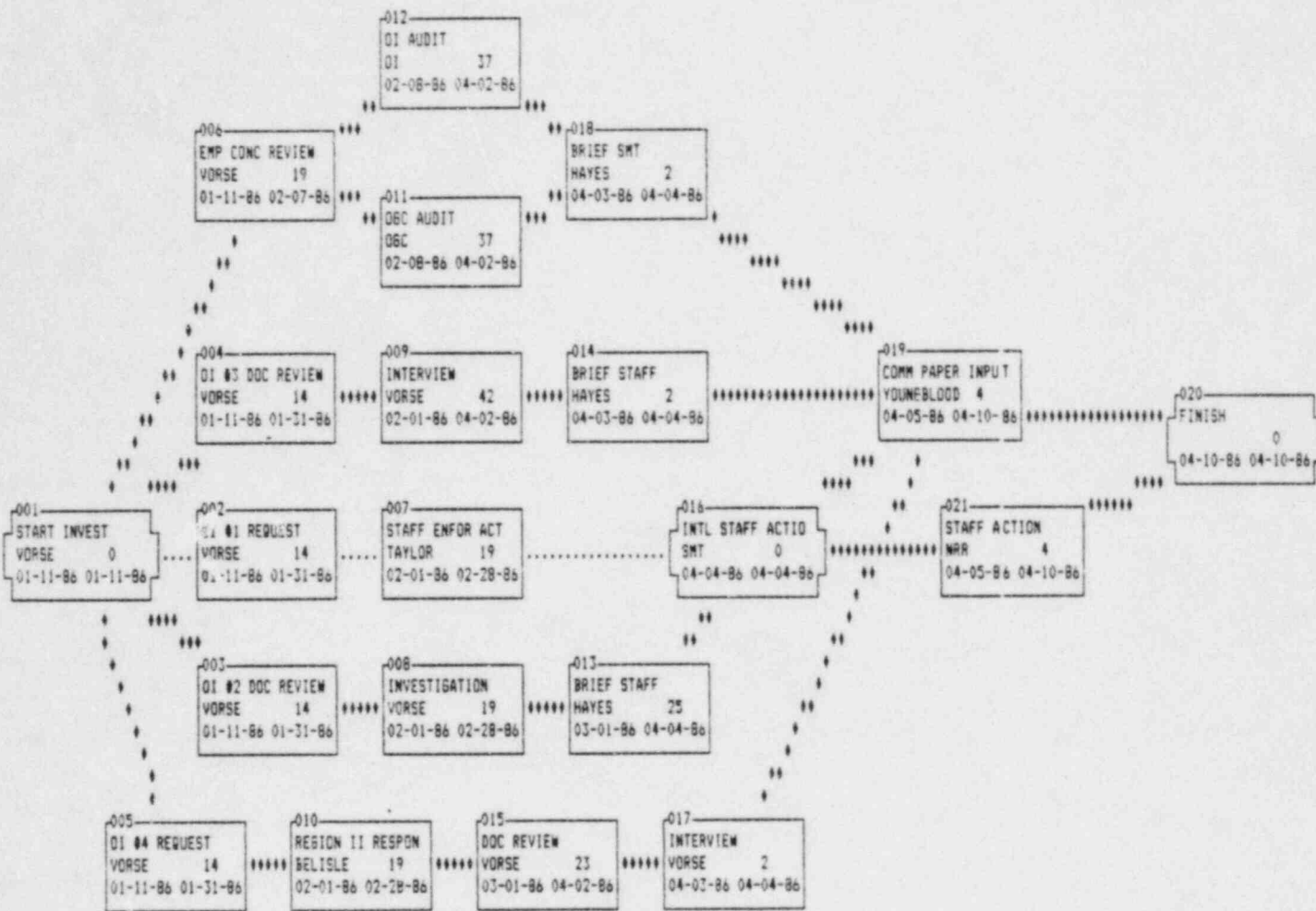
Subject Area: Wrongdoing, Intimidation and Harassment Issues

To Be Provided by OI

OFFICE OF INVESTIGATIONS

PERT Chart
01-28-86 10:07

Project: SE901.PJ
Revision: 7



.... (Link) +... (Critical link) ☐ (Task) ☐ (Critical task)

SEQUOYAH

Subject Area: Concerns in NSRS Reports

The NSRS reports contain information germane to issues raised by the ERT program, allegations and H. Myers' concerns. Therefore, these reports are being reviewed to provide additional information for the review of the issues raised on TVA facilities. There are approximately 67 NSRS reports that have been issued on Sequoyah or are generic in nature. NRR has lead responsibility for 13 of these and RII, OI, and IE has lead responsibility for 54.

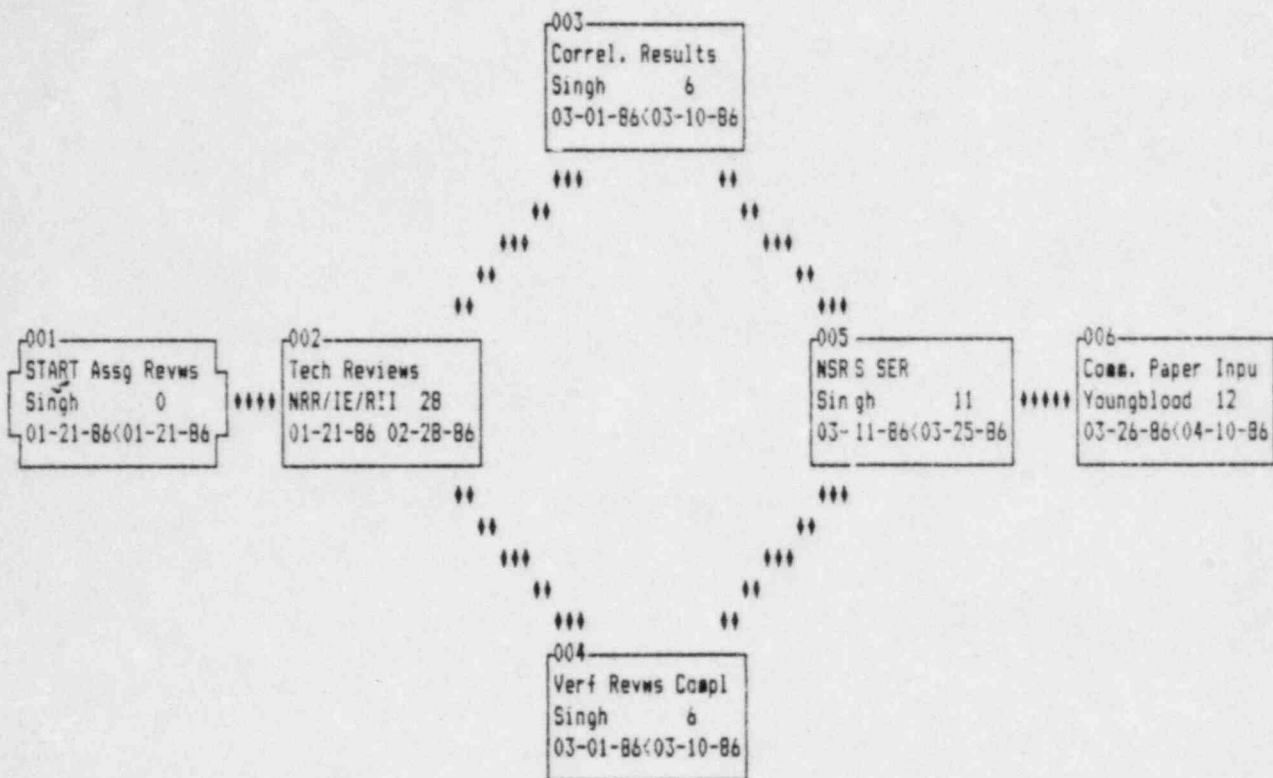
Lead Responsibility: NRR - B. K. Singh

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
1. NRR assign responsible reviewers (1/21/86)	NRR (Singh)	1/0/0
2. Review and prepare evaluation for applicability. Provide results to NRR. (2/28/86)	RII/NRR/IE/OI (Singh)	7/1/4
3. Correlate and review NSRS reports with employee concerns, allegations, and other concerns to assure technical reviews are complete and corrective actions are identified. (3/10/86)	RII/NRR/IE/OI	7/1/4
4. Prepare NSRS SER input (3/25/86)	NRR (Singh)	5/0/0

* Note: TVA must provide final investigation reports on Sequoyah-specific employee concerns by 2/14/86 to support this effort.

NSRS CONCERNS

PERT Chart
01-29-86 10:11



SEQUOYAH

Subject Area: Corporate Activities

Certain corporate issues must be resolved prior to the restart of Sequoyah. These issues include: establishment of a commitment tracking system, increased involvement of the TVA Board, management changes, and changes to the program of QA audits.

I. Board Actions

The TVA Board of Directors and Board members are not sufficiently informed and involved in nuclear plant performance to provide corporate oversight, direction and support of nuclear activities.

Lead Responsibility: NRR - L. Crocker

Major Tasks:

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
1. Review the following proposed actions that were submitted on 11/1/85 as well as anticipated revisions to the Board actions.	NRR	2/0/0
a) Review the employment of a Senior Nuclear Advisor to the TVA Board.		
b) Review the methods of increased reporting to and control by the TVA Board		
c) Review the increased intensity of oversight and reporting by the Nuclear Safety Review Staff (NSRS)		
d) Review increased level of support from either TVA resources		
e) Review establishment of an Office of Inspector General		
f) Review other Board support adjustments		
2. Prepare SER on the acceptability of above and any proposed actions (2/28/86)	NRR	1/0/0

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
3. Review applicable employee concerns and prepare SER input. (3/6/86)	NRR	1/0/0

II. Management Changes

Management changes are needed to strengthen TVA regulatory performance, including retaining additional experienced personnel to upgrade TVA's corporate performance.

Lead Responsibility: NRR - L. Crocker

Major Tasks:

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
1. Review the proposed changes to strengthen regulatory performance and the qualifications of additional key personnel to the TVA organization. (2/28/86)	NRR	1/0/0
2. Prepare SER input on the acceptability of management changes. (2/28/86)	NRR	1/0/0
3. Review applicable employee concerns and prepare SER input. (3/6/86)	NRR	1/0/0

III. Commitment Tracking System

TVA lacks a integrated commitment tracking system that provides assurance that NRC commitments are tracked and responded to. Plant operational offices and sites have individual tracking systems but they do not assure integration of all regulatory commitments.

Lead Responsibility: RII - S. Weise

Major Tasks:

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
1. Conduct corporate and site inspections to evaluate commitment tracking system (2/14/86)	RII (S. Weise)	0/0/2

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
2. Prepare SER input (2/28/86)	RII (S. Weise)	0/0/2

IV. QA Audits

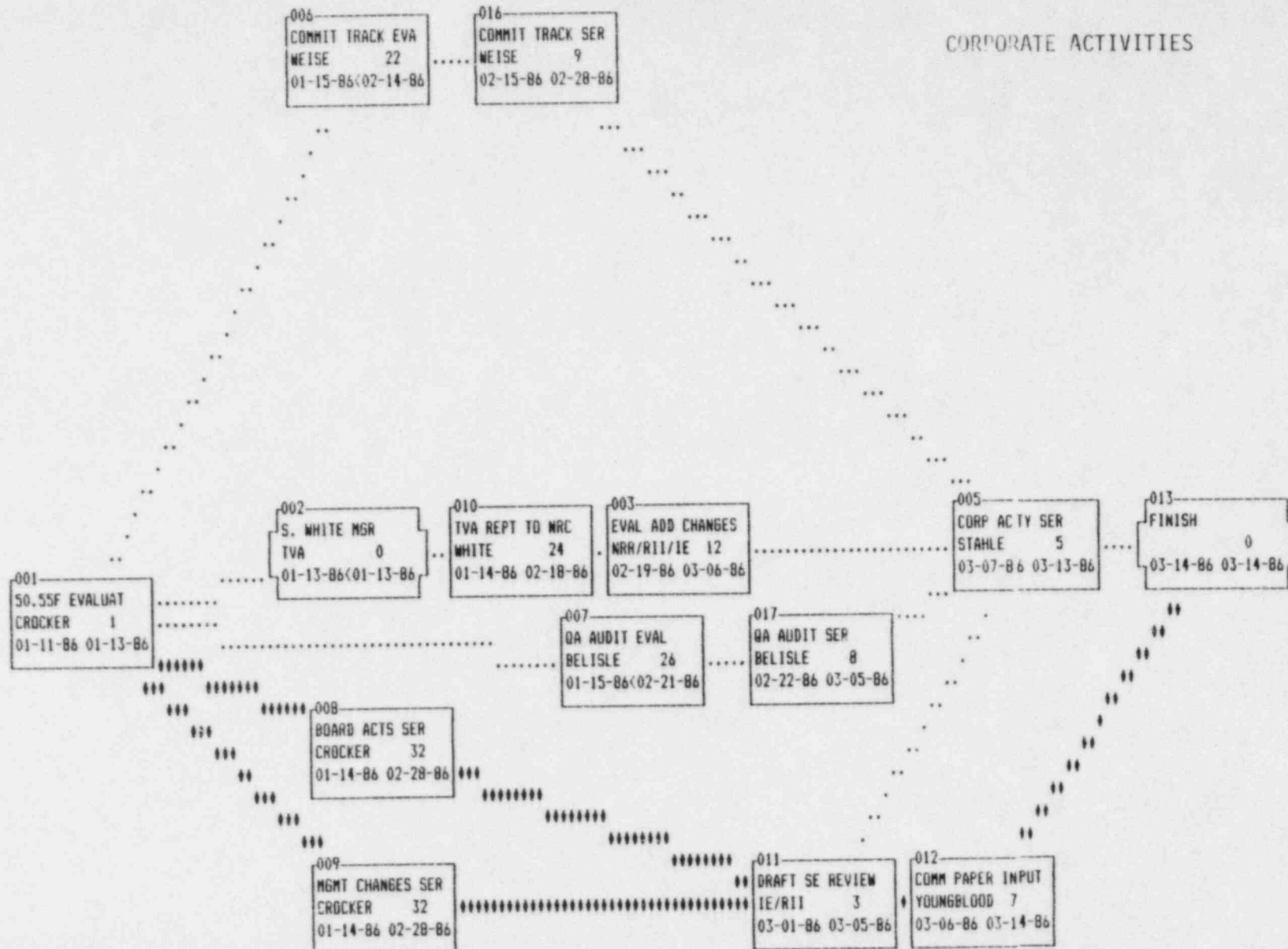
TVA lacks a program for escalating QA Audit findings to the appropriate levels of management to assure timely resolution of those findings.

Lead Responsibility: RII - A. Belisle

Major Tasks:

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
1. Conduct onsite inspection and evaluate TVA program for escalation of QA audit findings (2/21/86)	RII (Belisle)	0/0/3
2. Prepare SER input (3/5/86)	RII (Belisle)	0/0/4

CORPORATE ACTIVITIES



SEQUOYAH

Subject Area: Quality Assurance

Evaluate TVA's Quality Assurance program enhancements at Sequoyah and TVA corporate offices.

Lead Responsibility: Quality Assurance Program Section DRS, Region II
A. Belisle

Major Tasks:

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
1. Itemized verification by direct inspection of 25 selected QA related commitments contained in the Sequoyah Nuclear Performance Plan.	RII	/ /5
2. Itemized verification by direct inspection of 13 selected QA related commitments contained in the Corporate Nuclear Performance Plan.	RII	/ /2
3. Assessment of the adequacy of the management resources allocated to the administration of the Corporate and Sequoyah Nuclear Plant QA Program.	RII	/ /5
4. Prepare SER Input	RII	/ /2
5. Complete inspection report	RII	/ /2

Status of Significant Completed Activities at Sequoyah

Electrical Design Calculation: The staff reviewed TVA's electrical design calculation effort during a Sequoyah site visit on January 13-14, 1986. The staff preliminary conclusions were that the calculations were being performed properly. The staff did identify that testing should be considered in order to validate the calculational models. The recommendation for such testing is being identified in writing to TVA.

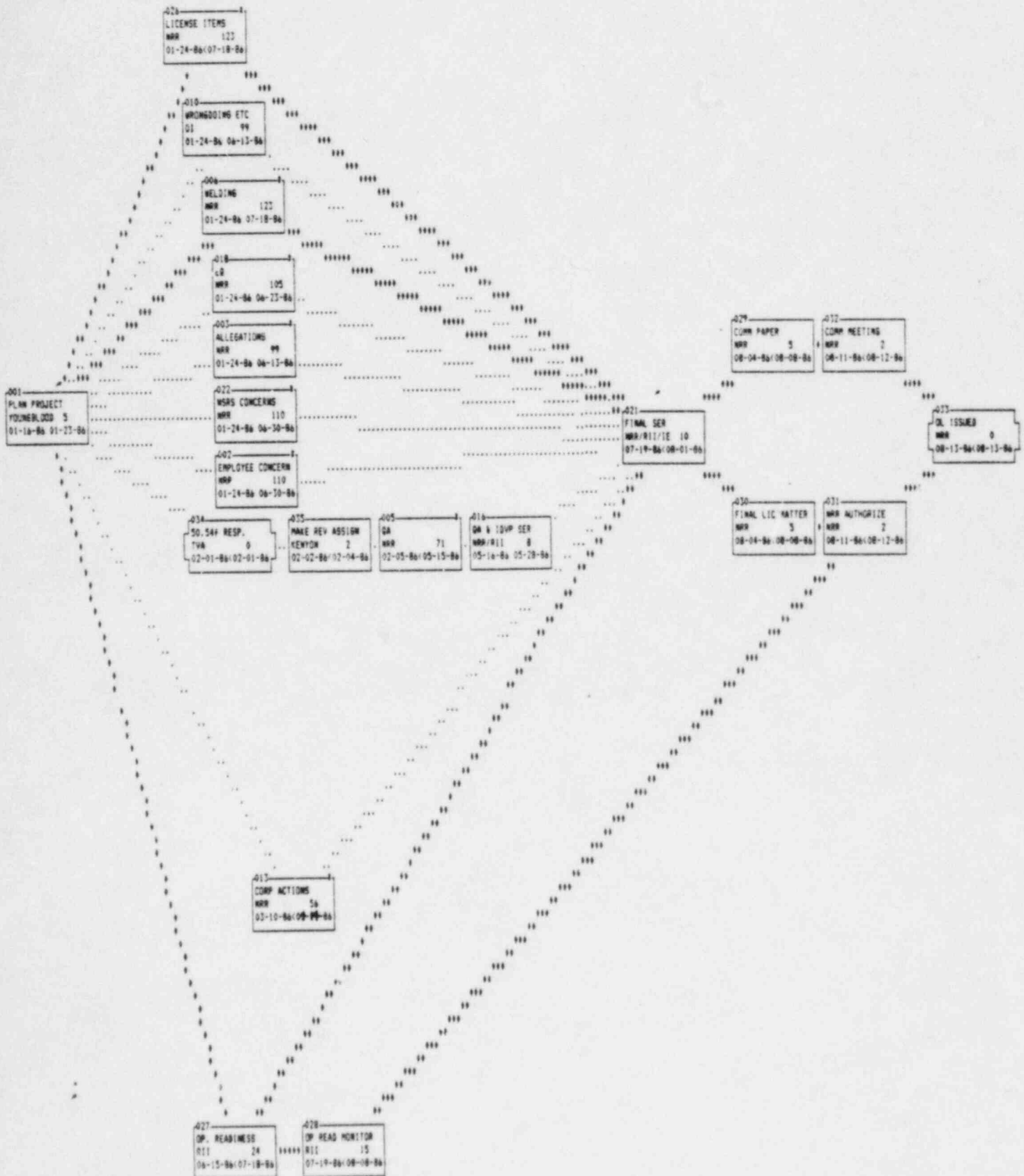
Equipment Qualification: An inspection of the equipment qualification status of the Sequoyah facility was coordinated at the Knoxville office and Sequoyah site during January 6-17, 1986. The inspection revealed that approximately 62/91 of the qualification documentation packages had been completed. Additionally, hardware modifications remain to be completed on 30/62. Of the packages that were reviewed, the staff identified no major programmatic concerns. However, the staff did note their concern that numerous issues, some of which could impact qualification packages that had been completed, still had to be resolved. Also of concern is resolution of the qualification of certain rockbestos cables and an issue regarding the harsh environment due to a postulated high energy line break. These concerns are being transmitted in writing to TVA.

Employee Concern Program: The staff conducted a review of the employee concerns program during the week of January 13, 1986. The staff is developing additional information requests for TVA in order to resolve issues raised during the review.

WATTS BAP ISSUE SUMMARY

<u>ISSUE</u>	<u>LEAD RESP.</u>
1. Employee Concerns (applie. to Watts Bar)	NRR
2. Allegations	NRR
3. Concerns in NSRS Reports	NRR
4. Quality Assurance	NRR
5. Welding	NRR
6. Equipment Qualification	NRR
7. TVA Organization	NRR
8. Licensing Items	NRR
9. Wrongdoing, Intimidation and Harassment Issues	OI
10. Operational Readiness	RII

ERT Chart
1-28-88 16:22



WATTS RAR

Subject Area: Employee Concerns

There are approximately 1600 safety related employee concerns that have been received through the ERT program. Specific lead responsibilities will be assigned after completion of FRC sort. General areas of concern are listed below:

- | | |
|--------------------------------------|----------------------------------|
| 1. Welding | 12. Materials Traceability |
| 2. Cable/Electrical Calculations | 13. Material Problems |
| 3. Instrumentation | 14. ERCW |
| 4. Operational Events/Qualificaitons | 15. Design Calculations |
| 5. NCR Problems | 16. Hangers |
| 6. Construction Control | 17. Expansion Anchors |
| 7. Document Control | 18. Other Civil |
| 8. Personnel Qualifications | 19. Miscellaneous Equipment |
| 9. Procedure Revision Control | 20. QA Program |
| 10. Paint and Rust | 21. QA Records |
| 11. Fire Barrier Penetrations | 22. Intimidation and Harrassment |

Lead Responsibility: NRR - B. K. Singh

Major Tasks:

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
1. NRC review progress of ERT resolution (1/16/86)	RII/NRR/FRC	1/0/1
2. FRC complete sort of K-forms enter on data base (2/3/86)	FRC **	
3. NRR assign responsible reviewers on basis of FRC sort (2/7/86)	NRR (Singh)	2/0/0
4. Conduct inspection per TI 2512/15 and issue inspection reports. Factor in relevant K-forms, investigation reports allegations, NSRS reports, and H. Myers' concerns. (5/30/86) Note: NRR to provide supporting information.	IE (Spessard)	10/24/20

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
5. SER inputs issued upon completion of review (4 weeks after final investigation report* issued by TVA)	RII/NRR/IE	2/2/2
6. Review TVA Report (6/30/86)	RII/NRR/IE	1/1/1
7. Final SERs issued (6/30/86)*	NRR (Singh)	2/0/0

* Note: TVA must provide final investigation reports on employee concerns by 6/1/86.

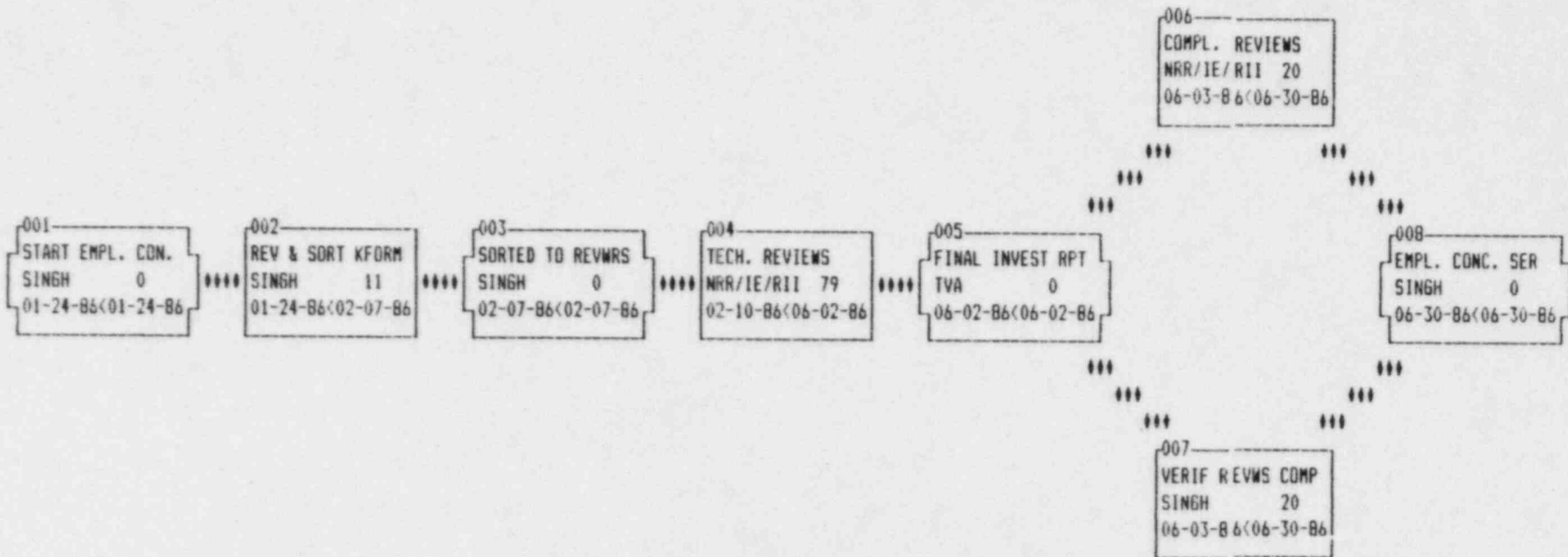
** \$150,000 has been allocated for this support effort.

EMPLOYEE CONCERNS

PERT Chart
01-28-86 11:28

Project: EMPCON.PJ
Revision: 7

EC-4



WATTS BAR

Subject Area: Allegations received by NRC concerning the Watts Bar Nuclear Plant

Lead Responsibility: NRR - T. Kenyon

There are 75 open allegations as of January 13, 1986 carried in the Allegation Management System and 14 allegations received in D. Hick's November 27, 1985 letter which are related to the Watts Bar Nuclear Plant. NRR has the lead review responsibility for 24 of these and RII and OI has lead review responsibility for 65. These are functionally broken down as follows:

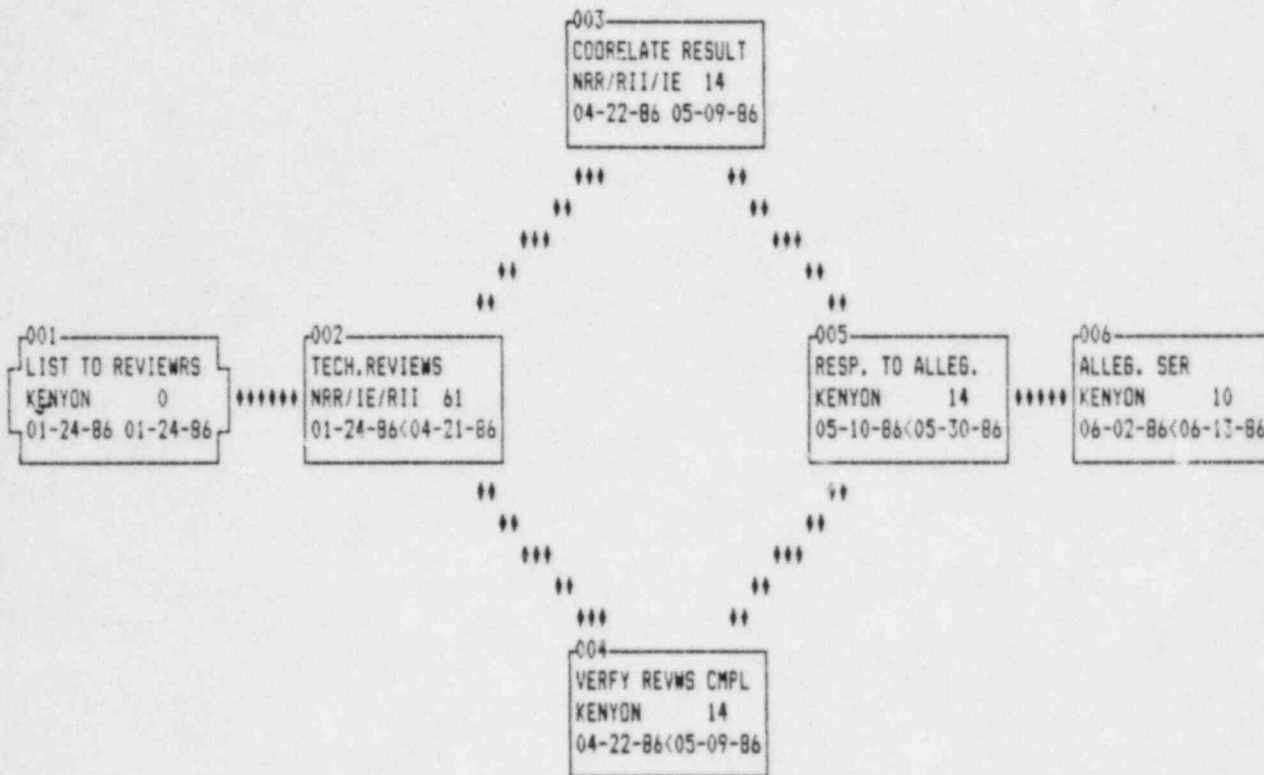
1. Harrasment and Falsification
2. Electrical
3. Piping
4. Structural
5. Equipment
6. Welding
7. Other (Management, QA, Quality, etc)
8. Dallas Hicks' November 27, 1985 letter
 - Intimidation and Harrassment
 - Management
 - Technical

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
1. Assign remaining allegations to reviewers (1/24/86)	NRR (Kenyon)	1/0/0
2. Interview allegers and evaluate significance of allegations.	NRR/RII/IE	10/1/20
3. Review and prepare evaluation based on allegation merit (4/21/86)	NRR/RII/OI/IE	2/1/TBD
4. Correlate results of review of ERT concerns, NSRS concerns, and H. Myers' concerns with reviews of these allegations and define corrective actions (5/9/86)	NRR/RII/OI/IE	2/1/3
5. Verify Reviews completed (5/9/86)	NRR (Kenyon)	1/0/0
6. Prepare responses to allegers (5/30/86)	NRR (Kenyon)	2/0/0
7. Prepare SER input on allegations (6/15/86)	NRR (Kenyon)	2/0/0

ALLEGATIONS

PERT Chart
01-28-86 11:19

Project: ALLEG.PJ
Revision: 10



WATTS BAR

Subject Area: Concerns in NSRS Reports

The NSRS reports contain information germane to issues raised by the ERT program allegations, and H. Myers' concerns. Therefore, these reports are being reviewed to provide additional information for the review of the issues raised on TVA facilities. There are approximately 32 NSRS reports that have been issued on Watts Bar. NRR has lead responsibility for 8 of these and RII, OI, and IE has lead responsibility for 24.

Lead Responsibility: NRR - T. Kenyon

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
1. NRC assign responsible reviewers (1/24 86)	NRR (Kenyon)	1/0/0
2. FRC complete sort of NSRS reports and enter on data base (2/7/86)	FRC **	
3. Correlate and review NSRS reports with employee concerns, allegations, H. Myers concerns, and other concerns to assure technical review is complete and corrective actions are identified. (5/9/86)	RII/NRR/IE OI	2/1/10
4. Prepare SER input upon completion of review (4 weeks after final related ERT investigation report* issued by TVA)	RII/NRR/IE OI	2/1/1
5. Review TVA Report (6/30/86)	RII/NRR/IE	1/1/1
6. Final SERs issued (6/30/86)*	NRR (Kenyon)	1/0/0

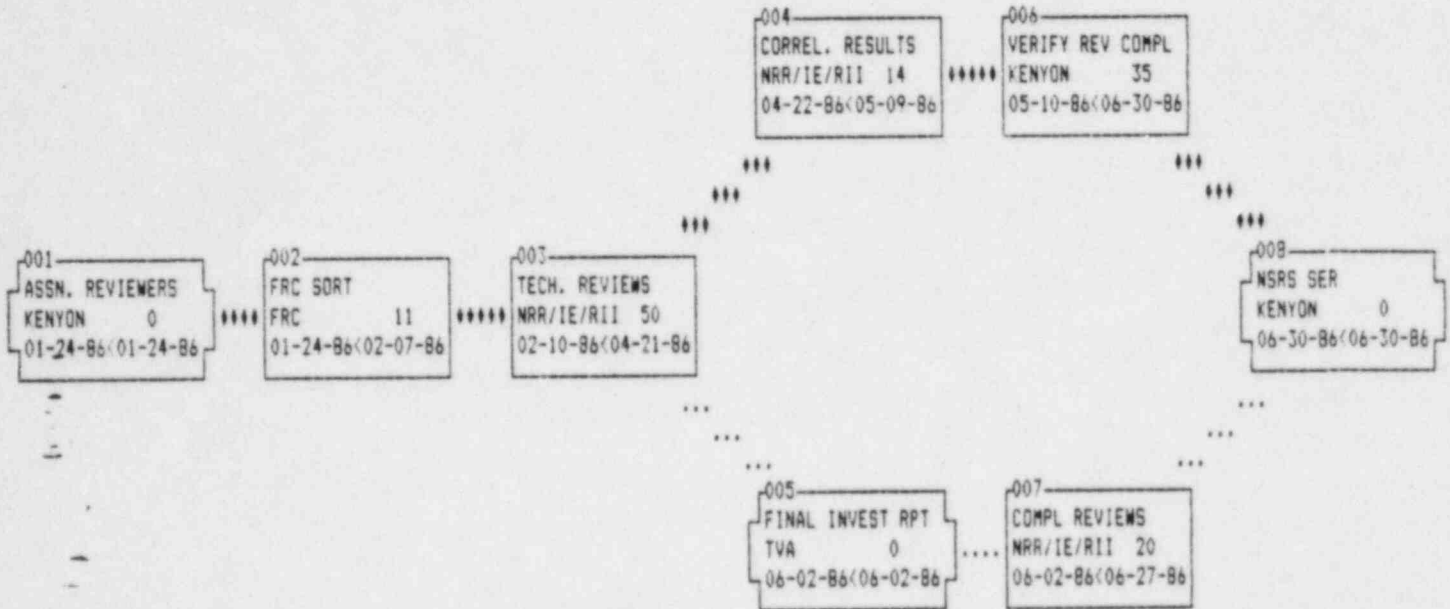
* Note: TVA must provide final investigation reports on employee concerns by 6/1/86.

** Total allocation for this effort listed under employee concerns.

NSRS CONCERNS

PERT Chart
01-28-86 11:34

Project: NSRS.PJ
Revision: 6



WATTS BAR

Subject Area: Quality Assurance

1. On May 30, 1985, the staff requested TVA to demonstrate that the Watts Bar facility meets its licensing commitments. The September 17, 1985 10 CFR 50.54(f) letter requested TVA to provide a compilation of the 3rd party reviews that demonstrate the adequacy of the design and construction of the facility.
2. In addition, the recent ERT program, allegations, and NSRS reports have cast doubts on the adequacy of the design and construction of the facility which must be resolved prior to issuance of the operating license.
3. The staff has not completed its review of the Watts Bar IDVP.
4. The staff is waiting for TVA responses to the September 17, 1985 10 CFR 50.54(f) letter on Watts Bar and the January 3, 1986 letter on "NSRS Perceptions of Watts Bar Status" in order to determine the extent of work required to close this issue.

Lead Responsibility: NRR - T. Kenyon

Major Tasks:

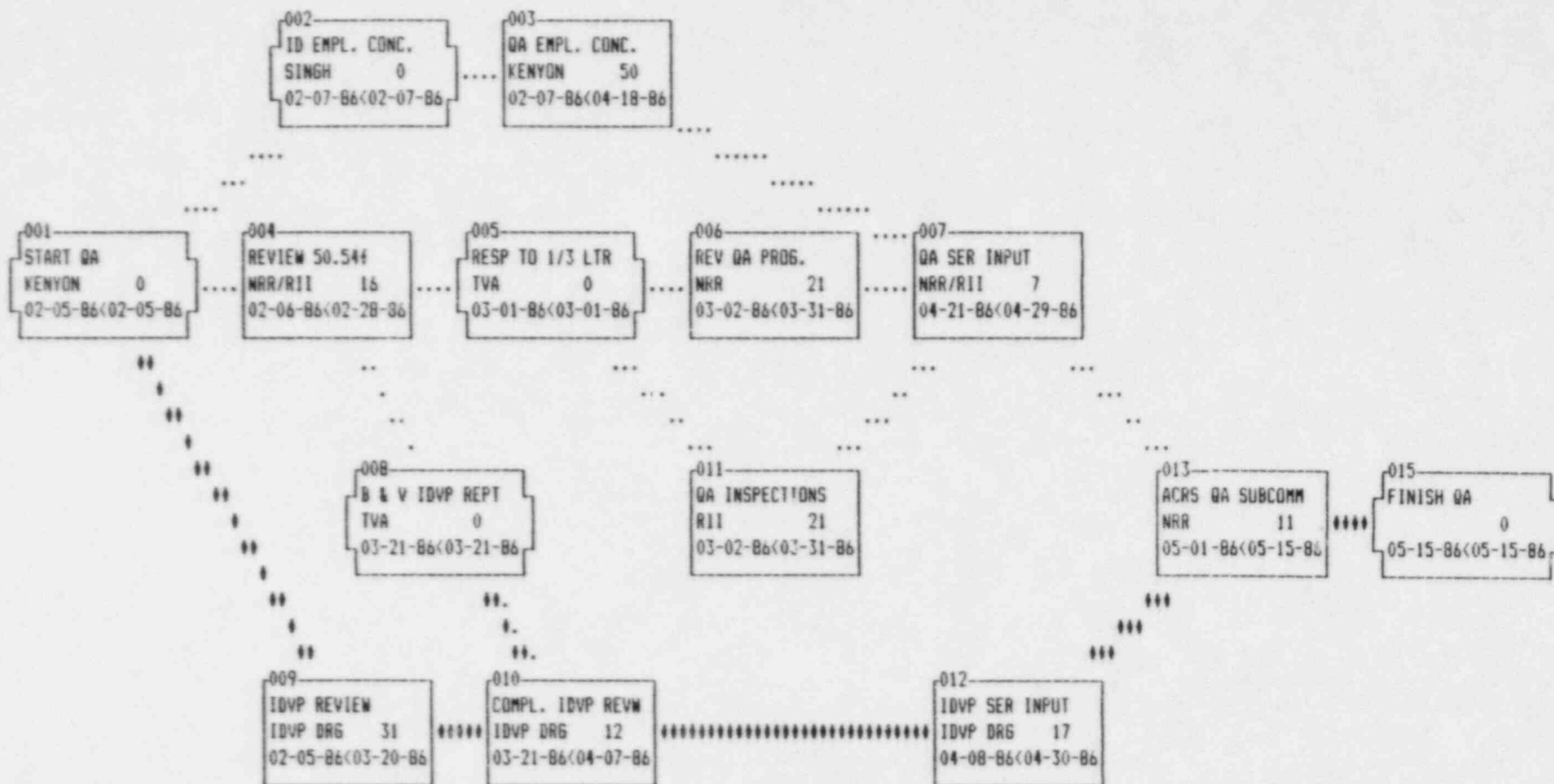
<u>Item</u>	<u>Responsibility</u>	<u>Reviewer</u>	<u>Resources (Man Weeks) NRR/IE/PII</u>
1. Review acceptability of 10 CFR 50.54(f) response (2/28/85)	NRR/RII	IDVP DRG	3/0/1
2. Review TVA response to NRC letter of January 3, 1986 (3/31/86)	NRR		3/1/1
3. Conduct onsite inspections of QA Program (3/31/86)	PII		0/0/6
4. Complete IDVP review			
- review applicable allegations, NSRS reports, and employee concerns (on IDVP only)	NRR/RII	IDVP DRG	3/0/1
- complete IDVP SER input and revise as necessary due to above concerns (4/30/86)	NRR/RII	IDVP DRG	3/0/1
5. Review resolution of allegations, NSRS reports, employee concerns, etc. on QA (4/18/86)	NRR/RII/IE	IDVP DRG	*

* Resources allocated in allegations and NSRS sections.

<u>Item</u>	<u>Responsibility</u>	<u>Reviewer</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
6. Review acceptability of QA organizational changes, as necessary (4/21/86)	IE		0/1/0
7. Write SER confirming acceptability of QA program and required field modifications (5/1/86)*	NRR/RII	IDVP DRG	1/1/1
8. Brief ACRS QA subcommittee (5/15/86)	NRR		1/0/0

* Note: TVA must provide final reports regarding resolution of applicable NSRS and employee concerns on QA and the B&V IDVP by 3/21/86.

QUALITY ASSURANCE



WATTS BAR

Subject Area: Welding

1. Over 400 welding concerns have been raised through the ERT program, allegations, and during the Region II's inspection of the plant. The staff has established a welding review effort with contract assistance to establish a staff position with respect to the licenseability of Watts Bar.
2. Concerns raised include welder qualifications and training, upkeep of adequate welding records, weld material control, use of improper welding techniques, etc.
3. TVA is still in the process of determining extent of welding problems and establishing a proposed plan to resolve issues.

Lead Responsibility: NRR - B. D. Liaw

The NRC Task Group on Welding at TVA (under NRR lead) will have the overall lead responsibility. The Task Group consists of the following:

B. D. Liaw - NRR representative and the Overall manager;

R. L. Spessard - I & E representative

A. R. Herdt - Region II representative

C. Czajkowski - BNL representative to coordinate consultant team

Major Tasks:

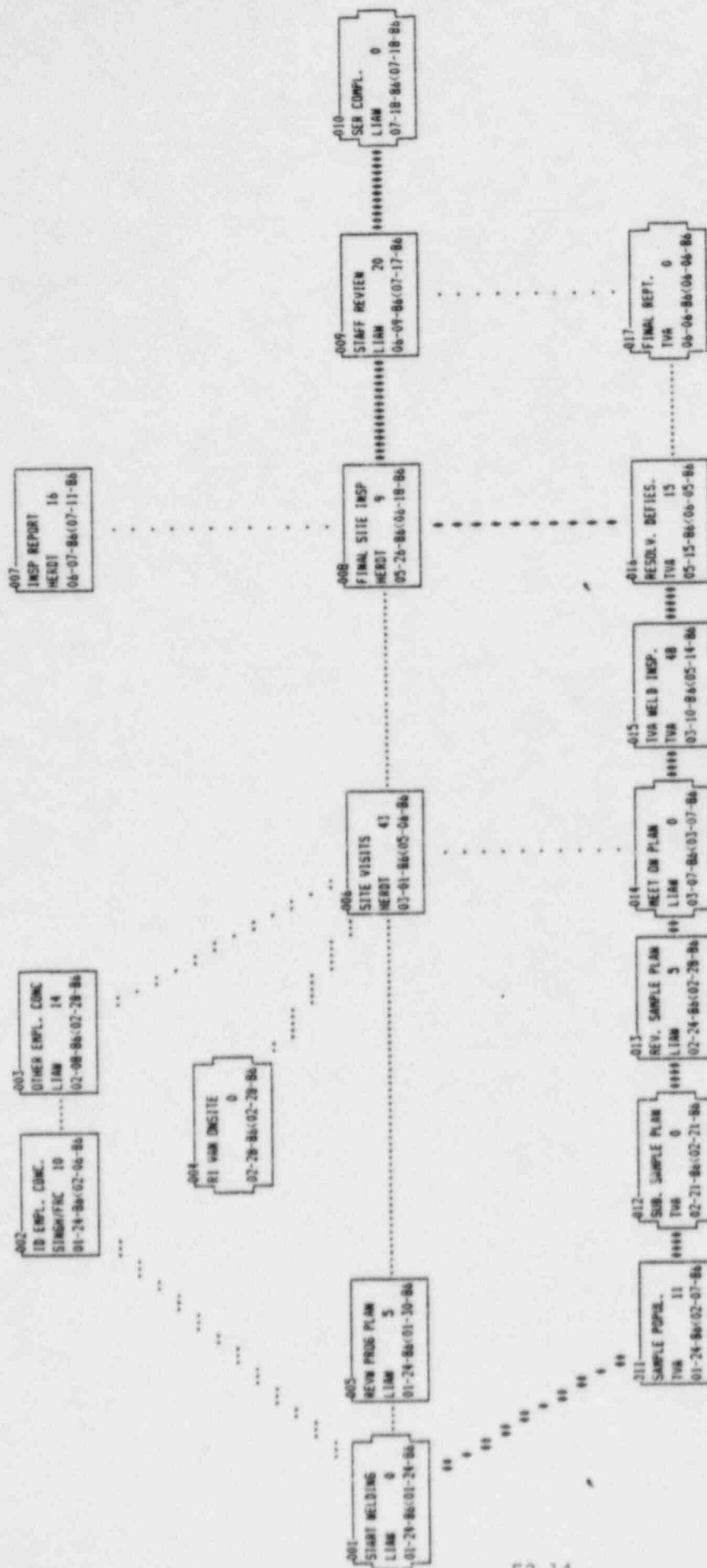
<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
1. Meeting with TVA on 12/12/85 - general discussion on areas of concern TVA should address in their program plan	NRR	complete
2. Meeting with TVA on 1/7/86 - of the overall program plan	NRR/IE/RII	1/1/1 (complete)
3. TVA to complete Phase 1 of "paper chase" on 1/15/86.	TVA	complete
4. TVA to formally submit detailed program plan on 1/17/86. (received 1/21/86)	TVA	complete
5. TVA to provide staff with definition of populations for reinspection with justifications on (2/21/86 est.)	TVA	

<u>Item</u>	<u>Responsibility</u>	<u>Resources (Man Weeks) NRR/IE/RII</u>
6. NRC staff prepares and meets with NRC consultant team to review plan and supporting information on (2/28/86)	NRR/IE/RII	6/1/1
7. Meeting with TVA Welding Office Project on 3/7/86 to discuss staff comments on program plan details and population definitions. NRC consultant team to attend.	NRR/IE/RII/BNL	2/1/1
8. NRC consultant field trips in 2 to 3 groups, accompanied by NRC staff (3/1/86 to 4/30/86).	NRR/IE/RII/BNL	4/2/2
9. TVA to complete welding program implementation audit, physical reinspection of welds in accordance with staff approved plans, engineering evaluations of defects found, and to determine the scope of additional reinspection, if necessary (2/24/86 to 5/23/86).	TVA	
10. TVA to implement deficiency resolution, as required with schedule to be determined. (5/23/86)	TVA	
11. Inspect deficiency resolution.	RII	3/3/3
12. TVA to issue final report two weeks after final reinspection, if no deficiencies identified and agreed to by NRC (estimated by 6/6/86).	TVA	
13. NRC consultants to complete review of TVA's final report 3 weeks after receipt of report. (6/27/86)	NRR/BNL	4/2/2
14. NRC staff to prepare SER 6 weeks after receipt of TVA's final report. (7/18/86)	NRR	6/2/2

Note: Contractor resources expected to be approximately \$300,000 for this effort.

WELDING

PSBT Chart
01-28-86 11:23



WATTS BAR

Subject Area: Equipment Qualification

1. Problems with the Watts Bar EQ program are similar to those discussed on Sequoyah by Westec, Inc. TVA has indicated that, upon completion of the work being performed on Sequoyah's EQ program, the applicant will correct similar problems with Watts Bar equipment qualification.
2. Problems uncovered by the Westec, Inc. review involve insufficient documentation of qualification of equipment and possible lack of qualification of installed equipment.
3. The magnitude of the problems with the Watts Bar EQ program has not yet been determined due to TVA's and NRC's attention to the Sequoyah issues.

Lead Responsibility: NRR, EICSB - F. Rosa

Major Tasks *:

<u>Item</u>	<u>Responsibility</u>	<u>Resources</u> (Man Weeks) <u>NRR/IE/RII</u>
1. Review revised NUREG-0588 submittal and prepare SER input (4/30/86)	NRR	2/0/0
2. Review resolution of applicable allegations, NSRS reports, and employee concerns for acceptability (4/30/86)	NRR/IE/RII	2/ /2
3. Conduct Onsite Inspections (4/1-30/86)	NRR/IE/RII	2/ /8
4. TVA correct deficiencies and modify systems as appropriate	TVA	
5. Audit documentation at TVA Engineering Offices and review modifications at Watts Bar site (6/20/86)	NRR/IE/RII	1/ /2
6. Identify EQ employee concerns/allegations, etc. and evaluate as part of onsite inspections	NRR	2/0/0

<u>Item</u>	<u>Responsibility</u>	<u>Resources</u> (Man Weeks) <u>NRR/IE/RII</u>
7. Write SER and complete inspection report regarding acceptability of Watts Bar EQ for fuel loading (6/23/86)	NRR	2/2/4

* Notes:

a) TVA must provide the following submittals to support NRR review:

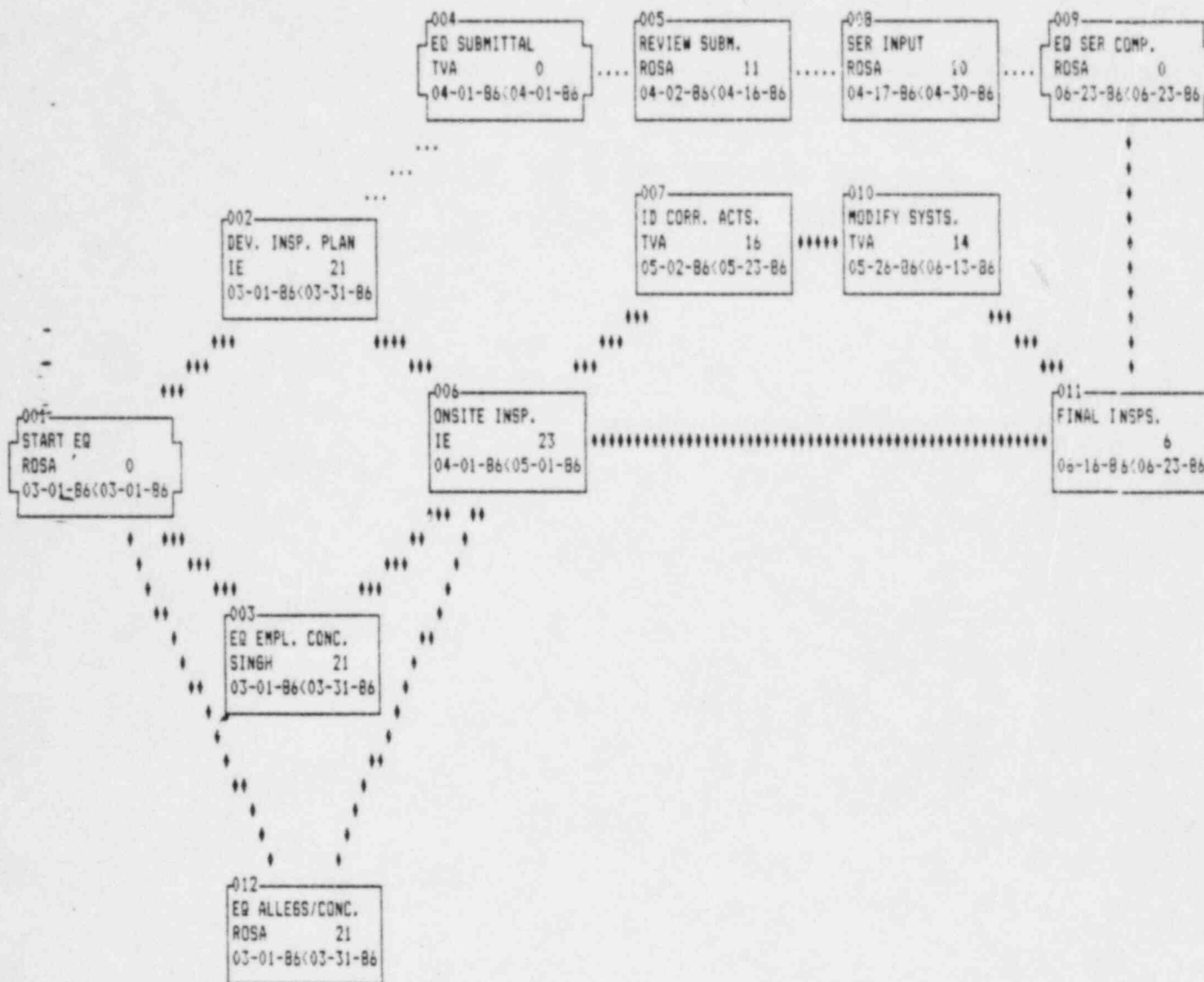
1. Revised NUREG-0588 submittal (4/1/86)
2. Verification that EQ work on Watts Bar is complete (4/16/86)
3. Final investigation reports of applicable employee concerns (4/16/86)

b) \$100,000 has been estimated for EQ contractor support

EQUIPMENT QUALIFICATION

PERT Chart
01-28-86 11:16

Project: EDREVW.PJ
Revision: 5



.... (Link) **** (Critical link) [] (Task) [] (Critical task)

WATTS BAR

Subject Area: TVA Organization

1. The Watts Bar specific review of TVA's site organization is required to be completed prior to licensing. Items to be reviewed include site specific organization, job descriptions, management personnel qualifications, personnel training, etc.
2. Changes made to TVA's management as a result of corporate concerns raised in the September 17, 1985 10 CFR 50.54(f) letter will be reviewed on the Sequoyah docket, and should require little review effort on Watts Bar.

Lead Responsibility: NRR/FOB - L. Crocker

Major Tasks *:

<u>Item</u>	<u>Responsibility</u>	<u>Reviewer</u>	<u>NRR Resources (Man Weeks)</u>
1. Review changes made by S. White and Followup review of Corporate changes made under Sequoyah Docket (3/24/86)	NRR/FOB	Crocker	2
2. Review resolution of applicable allegations, NSRS reports, and employee concerns for acceptability (partially complete) (3/31/86)	NRR/FOB	Crocker	1
3. Complete Watts Bar specific review (4/7/86)	NRR/FOB	Crocker	1
4. Write SER confirming acceptability of organizational changes (4/14/86)	NRR/FOB	Crocker	1

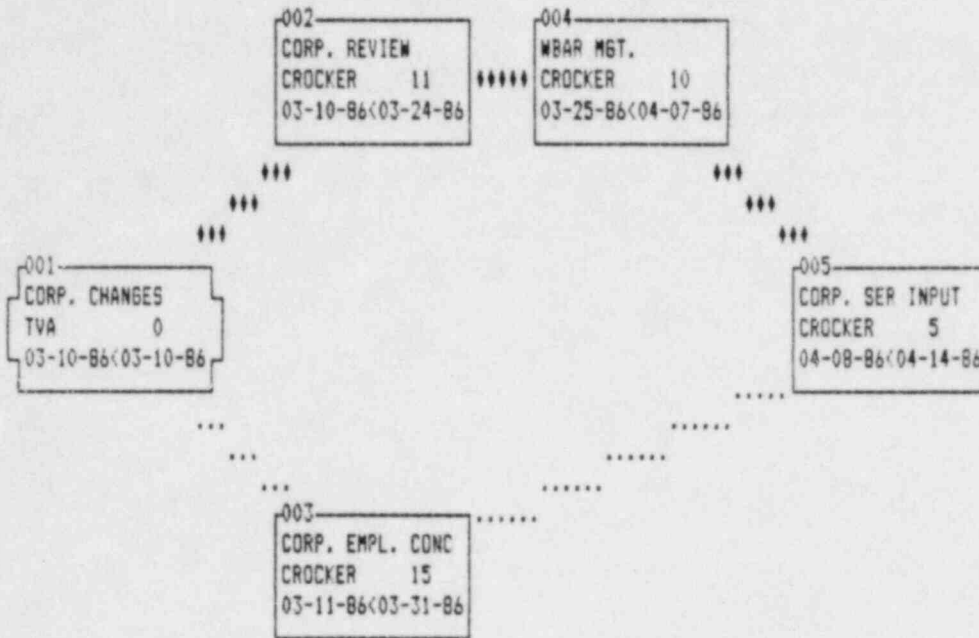
*Note: TVA must provide following submittal to support NRR review:

1. Final changes to Corporate Organization (initiated by S. White) (3/10/86)
2. Watts Bar specific FSAR/T.S. organization changes (3/10/86)
3. Final investigation reports of applicable employee concerns (3/7/86)

CORPORATE ACTIONS

PERT Chart
01-28-86 11:37

Project: CORPACT
Revision:



WATTS BAR

Subject Area: Other License Items and Technical Specification Issues

1. There are approximately 20 open issues/Technical Specifications for which a final SER has not been written.
2. There are approximately 50 open/confirmatory issues for which an SER has been written but never issued. These SERs are not to be issued until the staff has determined the effect of the ERT program and allegations on these issues.
3. FSAR Amendment 56 and the Technical Specification certification letter were received in late 1985. The impact of these documents on the FSAR/Technical Specification review has not yet been determined.
4. Additional modifications to the FSAR and Technical Specifications are expected as a result of the ERT program. The impact of these changes has not yet been determined.

Lead Responsibility: NRR - T. Kenyon

Major Tasks: Specifics assignments can be found in Attachment

<u>Item</u>	<u>Responsibility</u>	<u>NRR Resources (Man Weeks)</u>
1. Complete review of remaining open/confirmatory items (including FSAR 56) and write SERs (3/14/86)	NRR	40
2. Complete Review of Technical Specifications (4/14/86)	NRR/FOB	8
3. Correlate and review all NSRS, TVA employee concerns, and other concerns and allegations with all completed open/confirmatory items to assure technical review is complete, corrective actions are identified, and SER does/does not require updating. (6/13/86)*	NRR	10
4. Review additional FSAR amendments/ Technical Specification changes, as appropriate (schedule to be determined upon receipt of changes) (estimate completion by 6/30/86)	NRR	20

* Note: TVA must provide final investigation reports on employee concerns by 6/1/86.

WATTS BAR STATUS OF CASEWORK

01/06/86

DIVISION OF PWR LICENSING-A

Review Branch	Reviewer*	Subject	TVA Input	SSER Received	SSER Issued	Comments
EB/MES	TBD Rothberg (F)	Technical Specification re: PIV leakage criteria	Rec'd			CRGR approval rec'd; new criteria to be incorporated into TS
EB/MES	TBD Rothberg (F)	Inservice pump and valve test program	3/27/85 4/12/85 4/29/85 10/3/85			SSER 5 requires update due to recent submittal
EB/MES	Pulsipher (Chu)	Technical Specification re: Annulus inleakage	Rec'd			Filtration analysis
EB/MES	TBD Palla (F)	MSLB (Inside containment)	Rec'd			SSER 5 requires update due to work by Duke Power
EB/MTES	Elliot	Pressure/Temperature limits on Unit 2	Rec'd			Not req'd for F.L - Unit 1
EB/MTES	TBD Hum (F)	PSI Program	Rec'd			SSER 5 requires update due to recent submittal

*(F) designates former reviewer

WATTS BAR STATUS OF CASEWORK

01/06/86

DIVISION OF PWR LICENSING-A

Review Branch	Reviewer*	Subject	TVA Input	SSER Received	SSER Issued	Comments
RSB	Jensen	a) Natural Circulation tests	TBD			Awaiting input from TVA; not req'd for licensing
		b) Charging pump flow w/mini flow valves open	TBD			12/13/85 submittal under review; telecon needed
		c) Uncontrolled rod withdrawal w/pumps operating and breakers closed	TBD			12/13/85 submittal under review; telcon needed
PSB	TBD Hearn (F)	MSLB outside containment	TBD			Awaiting info from TVA
PSB	West Kubicki (F)	Fire Protection	Rec'd			Need final concurrence re: deletion of NFPA paragraph

E3-22

*(F) designates former reviewer

WATTS BAR STATUS OF CASEWORK

01/06/86

DIVISION OF PWR LICENSING-A

Review Branch	Reviewer*	Subject	TVA Input	SSER Received	SSER Issued	Comments
EICSB	Gill (?) Knox (F)	a) Tech Specs re: 1) Inverter connected to emergency power supply 2) MOV Thermal Overload b) 5th Diesel Generators	Rec'd Rec'd Rec'd			12/13/85 submittal under review 12/13/85 submittal under review 12/16/85 submittal review under; TVA has requested review prior to F.L.
FOB	Crocker	TVA reorganization	TBD			11/1/85 submittal under review for Sequoyah. Awaiting Watts Bar specific submittal.

E3-23

*(F) designates former reviewer and/or branch

WATTS BAR STATUS OF CASEWORK

01/06/86

DIVISION OF PWR LICENSING-A

Review Branch	Reviewer*	Subject	TVA Input	SSER Received	SSER Issued	Comments
EQB (F)	LaGrange (F) Garg (F)	Equipment Qualification	TBD			a) Awaiting confirmation that certain equipment has been replaced prior to F. L. b) TVA to revise EQ submittal; audit may be required prior to F.L.
EQB (F)	Bagchi (F)	Seismic EQ	TBD			4/30/85 submittal under review; awaiting info from TVA

*(F) designates former reviewer and/or branch

WATTS BAR STATUS OF CASEWORK

01/06/86

DIVISION OF SAFETY REVIEW & OVERSIGHT

Review Branch	Reviewer*	Subject	TVA Input	SSER Received	SSER Issued	Comments
RRAB	TBD	PORV Isolation System (II.K.3.1 & II.K.3.2)	Rec'd			Awaiting concurrence w/SER

MISCELLANEOUS

E3-25	EB/PWR-B	Rajan	IDVP	Rec'd		Awaiting input from RII
	EICSB/BWR	Trehan				
	EICSB/PWR-A	Gill				
	RII	Weise				
	RII	Blake				

- NOTES: 1) FSAR AMENDMENT 56 SUBMITTED 11/27/85; new items/concerns may be raised
 2) T.S. CERTIFICATION LETTER SUBMITTED 12/13/85; new items/concerns may be raised

WATTS BAR STATUS OF CASEWORK

01/06/86

OFFICE OF INSPECTION & ENFORCEMENT

Review Branch	Reviewer*	Subject	TVA Input	SSER Received	SSER Issued	Comments
DQASIP/QAB	Spraul	Changes to QA program due to TVA reorganization	11/1/85, 11/27/85	TBD 12/27/85		Submittal under review
DEPER/EPB	Gaitainis	Emergency Planning	Rec'd			Generic plan under review; FEMA report requires incorporation into SER

WATTS BAR STATUS OF CASEWORK

01/06/86

OFFICE OF NUCLEAR MATERIAL SAFETY & SAFEGUARDS

Review Branch	Reviewer*	Subject	TVA Input	SSER Received	SSER Issued	Comments
DFCMS/UFLB	TBD	Tech Specs re: Criticality Monitor Exemption	Rec'd			Submittal under review
DS/PRSLB	Gaskin	Physical Security Plan	TBD			TVA to augment system, input from TVA not scheduled

WATTS BAR STATUS
SSER 5 ITEMS

Staff review of the following items is complete and a final SER has been written for each item. The SERs will not be issued until the NRC staff has determined the effect of TVA employee concerns on these issues.

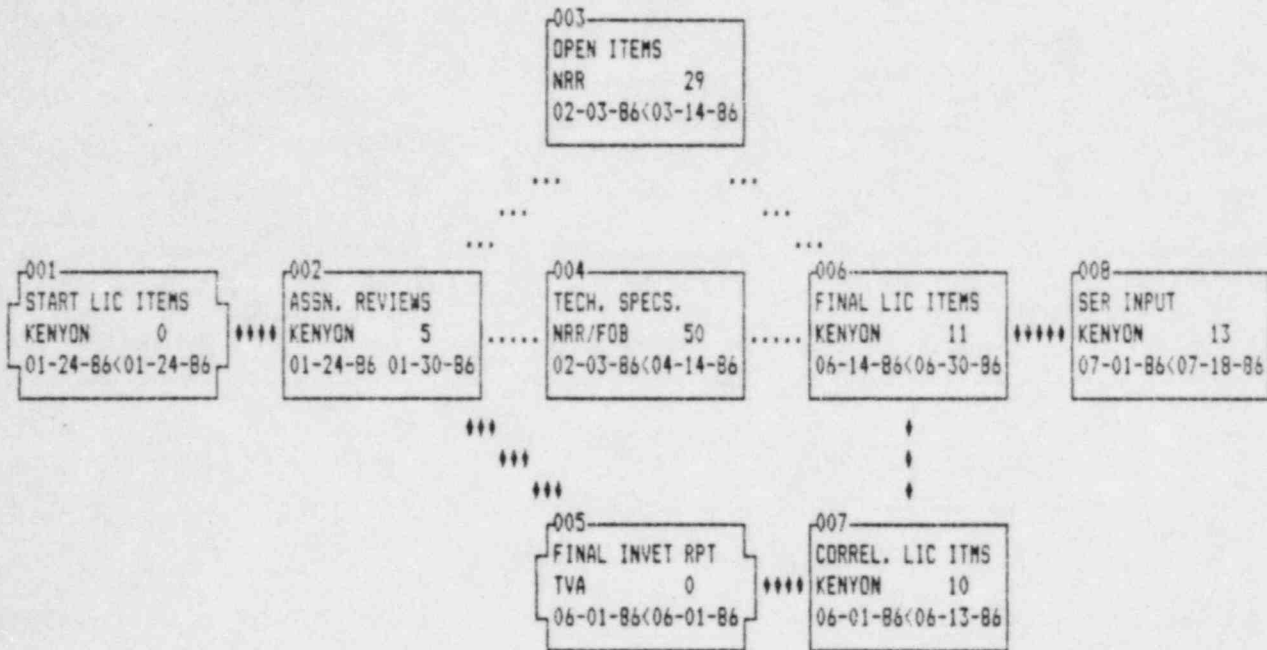
<u>Subject</u>	<u>Section</u>
Upgrading ERCW system to seismic Category I	3.2.1
Seismic classification of structures, systems, and components important to safety	3.2.1
Flow measurement uncertainties	4.4
ICCI	4.4.8
Installation of RHR flow alarm	5.4.3
Installation of RCS vent system	5.4.5
Ice condenser ice weight	6.2.1
Installation of containment pressure monitors	6.2.1
Installation of containment water level monitor	6.2.1
Modifications to chemical feedlines	6.2.4
Containment isolation valve designation	6.2.4
Containment purge/vent valve operability (II.E.4.2)	6.2.4, Apps. I, J, and K
Installation of containment hydrogen monitor	6.2.5
Degraded core H ₂	6.2.5, App. C
Leakage bypass system	6.2.6
ECCS system (SER corrections)	6.3.2
Chlorine detector	6.4
Filter efficiencies (RBPVs)	6.5.1.3
Installation of acoustic monitors	7.8.1
Power systems concerns	8

<u>Subject</u>	<u>Section</u>
Relocation of component cooling booster pumps	9.2.2
Performance testing of communications system	9.5.2
D/G reliability (NUREG/CR-0660)	9.5.4.1
Quality classification of D/G auxiliary system piping and components	9.5.4.1
Missile protection modifications for diesel generator vent lines	9.5.4.2
D/G fuel oil storage and transfer system	9.5.4.2
Temperature alarm for D/G room	9.5.5
D/G crankcase explosion	9.5.7
Turbine overspeed protection	10.2
Turbine bypass valve	10.4.4
H ₂ /O ₂ monitoring system	11.3
II.F.1	11.7.1
Primary Coolant Outside Containment	11.7.2
Health physics program	12.6
Installation of high-range in-containment monitor	12.7.2
Initial test program	14
Noncritical systems test program	14
Leakage bypass system	15.4.1
Technical Specification issues	16
Control room design	18
I.C.7	13.5.2
Supplement 1 to NUREG-0737	13.5.2

LICENSING ITEMS

PERT Chart
01-28-86 11:21

Project: LICITMS.PJ
Revision: 4



WATTS BAR

Subject Area: Wrongdoing, Intimidation and Harassment Issues

To Be Provided by OI

WATTS BAR

Subject Area: Operational Readiness

To Be Provided by Region II

BROWNS FERRY ISSUE SUMMARY

<u>Issue</u>	<u>Review Responsibility</u>
1. Site Management Organization	NRR (Crocker)
2. Operational Readiness Program	RII (Cantrell)
3. Maintenance Improvement Program	RII (Debs)
4. Site Master Schedule	No Specific Action
5. Integrated Schedule for NRC Required Modifications	NRR (Clark)
6. Seismic Issues	RII (Blake)
6a. Seismic Qualification of Cable Trays	RII (Blake)
6b. Piping and Supports	RII (Blake)
6c. HVAC	RII (Blake)
6d. Torus Piping	NRR (Liaw)
7. Design Control	IE (Spessard)
8. Disposition of Contractor Recommendations	NRR (Clark)
9. Environmental Qualification Program	IE (Zech)
10. Independent Safety Engineering Group	NRR (Crocker)
11. Fire Protection Program	NRR (Hulman)
12. Shift Staffing	NRR (Vassallo)
13. Employee Concerns Program	NRR (Singh)
14. Emergency Response Capability	RII (Decker)
15. Pipe Inspection/Stress Relieving/Repairs	NRR (Liaw)

BROWNS FERRY ISSUE SUMMARY CONT'D.

<u>Issue</u>	<u>Review Responsibility</u>
16. Appendix J Program	NRR (Hulman)
17. Secondary Containment Isolation Dampers	RII (Cantrell)
✓ 18. Diesel Generators	RII (Cantrell)
19. Regulatory Performance Improvement Program	RII (Cantrell)
20. Operator Reexamination	RII (Wilson)
21. Quality Assurance Program	RII (Belisle)
22. INPO Evaluation	IE (Partlow)
23. NSRS Reports	NRR (Singh)
24. Licensing Issues	NRR (Grotenhuis)
✓ Unit 2 Reload/Modification Amendment	NRR
- Appendix R Exemption	NRR
- Appendix J Exemption	NRR
- Amendment on Organizational Changes	NRR
- Pipe Inspections (GL 84-11)	NRR
- RHR Crossties Amendment	NRR
- RETS Amendment	NRR
- PASS	NRR/RII
- NDT Surveillance Specimens	NRR
- ATWS Rule Modifications	NRR

BROWNS FERRY ISSUE SUMMARY CONT'D.

<u>Issue</u>	<u>Review Responsibility</u>
- SPDS	NRR
- DCRDR	NRR
- Appendix R Fire Hazards Analysis	NRR
- Amendment on Smoke Detectors	NRR
- Inservice Pump and Valve Test Program	NRR/RII
- ECCS Logic Test Interval Amendment	NRR
- Clarification of Tech. Specs.	NRR
25. Limitorque Valve Motor Operator Inspections	RII (Debs)
26. Restart Test and Inspection Program	RII (Cantrell)
27. Modified Design Review	RII (Blake)

BROWNS FERRY NUCLEAR PLANT
SITE SIGNIFICANT ACTIVITIES FOR PERIOD ENDING 2/7/86

The following significant activities are scheduled to start or finish during the next two weeks. They are not listed in order of significance.

Unit 2

1. Removal of last identified cable sample for environmental qualification testing - pending 3C diesel outage. All other cable samples have been removed.
2. Environmental qualification-related maintenance and modification work on identified limit torque valve continuing (59 valves/0 completed).
3. Finish piping and electrical modifications on scram discharge instrument volume.
4. Start work associated with installation of the high-density fuel storage racks in units 2 and 3.
5. Finish replacement of "C" SRM dry tubs.
6. Start major reactor water cleanup system outage.
7. Finish stored cable reels inspections for acceptability.
8. Start Section XI valve internals inspections.
9. Resolve minimum bend radius requirements for conduit.

Other Items

1. INPO annual site evaluation team here for two weeks beginning January 20, 1986. Exit schedule is for January 31, 1986.
2. Site will continue reorganization task force reviews with the Site Director.
3. Miscellaneous licensing issues meeting on January 30, 1986, with NRC in Bethesda, Maryland.
4. Procedure review for modification-related work:
Draft of NQAM changes that affect modifications reviewed and forwarded to Chattanooga.
5. The procedures upgrade program will start on Monday, January 27, 1986.

JDZ:KEH
1/24/86
0534h

WATTS BAR NUCLEAR PLANT - UNIT 1 MAJOR ACTIVITIES:
JANUARY 27-FEBRUARY 9, 1986

Cable Pulling	Cable pulling was released on 1/23/86.
Instrumentation	Tubing rework has begun on unit 1.
Intake Pumping Station	Continuing work on ERCW and HPFP pumps
Rotopeening	Rotopeening is continuing on unit 2 steam generators. Eddy current testing to begin on all four steam generator hotlegs on unit 1.
Reactor Coolant Pumps	Continuing repair/modification to all 4 RCP motors
Stone & Webster Evaluation	Evaluation continues of current design control problems to scope/define any needed actions to achieve licensability
Environmental Qualification	Continuing activities similar to SQH. Field verification of exact location for all equipment in harsh environment will continue (including cables). Continuing installation of Raychem cable splices. Scheduled to replace cables with excessive voltage drop
Main Feedwater Modification	Installation of motor-operated isolation valves on main feedwater headers

WATTS BAR NUCLEAR PLANT UNIT 2
SAFETY-RELATED WORK
JANUARY 27 THROUGH FEBRUARY 7, 1986

Engineering Design

Hangers and Civil

- Zero Period Acceleration (ZPA) Analysis of Piping System
- Rigorous Analyses (Minimal)
- Lateral Seismic Load Analysis on Cat. 1 L Supports
- HVAC Duct Analysis Criteria
- Support Design
- Review of Pipe Support Designs For Stability of Pin Connected Components

Electrical

- Various Electrical Studies, i.e., Undervoltage and Degraded Voltage
- Penetration Short Circuit
- Incore Thermocouple Upgrade
- Reg. Guide 1.97
- Electrical Task Force (Application of Instrumentation "Lessons Learned")

Environmental Qualification

- Radiation Calculations
- Operating Times and Category of Equipment
- Identification of Items To Be Qualified (WBEL)
- Verifying Adequacy of Documentation

Miscellaneous

- Resolution of Employee Concerns
- NCRs (CAQs)
- Equipment Seal Qualification (Ice Condensers)
- ERCH Pumping Station Problems

Resolution of Q-List Items

- Welding Review Project

CONSTRUCTION

Hangers

- Hanger Installation On Various Piping Systems in the RB, AB, and TB

Electrical

- Equipment Installation On Systems To Support Near-Term Transfers
- Side Wall Pressure Calculations In Support of Cable Pulling
- Taking Cable Samples In Support of OE
- Making Inventory of All Onsite Cable For Environmental Qualification
- Recalculation of Values To Support Cable Pulling Due to Revised OE Information

Mechanical

System Hydrostatic Testing of Chemical Volume Ctl. System ;
Rotopeening of Unit 2 Steam Generator By Westinghouse

Instrumentation

Investigation and Correction of Employee Concerns As Related To Unit 2
Installation and Inspection Procedure Review and Rewrite Instrument
Scaling

Welding

In Support of Hanger Installation
Reviewing Historical Files and Maintaining Welding Update Program

Startup Testing and Coordination

Coordinating Preventive Maintenance Program
Investigating Work Release Audit Deviation
Training CEO, HSB, and MOD on As-Constructed Drawings
Conducting N3C-912 Walkdown

0534h
JDZ:KEH
1/24/86

BELLEFONTE NUCLEAR PLANT
ACTIVITIES

January 26 - February 9, 1986

1. Nuclear Operations: working on maintenance and long-term preservation of equipment.
2. Design:
 - a) compiling safety related data to perform cable sidewall pressure calculations,
 - b) performing piping analysis and hanger design, and
 - c) working ECNs.
3. Construction:
 - a) pulling safety related cables and performing sidewall pressure calculations,
 - b) installing safety related hangers,
 - c) working on safety related HVAC systems in control and auxiliary buildings, and
 - d) working on fire protection system in auxiliary and turbine buildings.

0634h

SEQUOIA NUCLEAR PLANT -
Week of January 27, 1986

EMPLOYEE CONCERNS

Site Specific

All information based on current status, 209 total concerns - 124 safety related.

Approximately 40 required for startup.

Reports on 10 of 40 concerns issued and received onsite with 3 reports having 6 PI recommendations.

Approximately 6 new concerns not yet evaluated for factoring into program.

Expecting reports on 25/40 concerns to be issued by 1/31/86.

Generic Program - 30 total issues.

30/30 issues have been evaluated and reports are in final preparation.

3 reports are tied to site specific concerns.

7 reports have 15 recommendations. 1 recommendation is required for restart.

Working on recommendations.

EQ Project

Binder work continuing - releasing approximately 6, making 71/95 released at end of week.

Evaluating 4 SCRs for inclusion into EQ program. 51 have been issued to date.

Rockbestos cable testing--Cable has completed aging portion--EQP personnel will inspect 1/24/86 and evaluate results. Info will be forwarded to NRC week of 1/27/86. LOCA chamber testing will start 1/25/86 for approximately 2 weeks.

Welding Program

NRC inspection exit 1/24/86.

Phase 2 part 2 is ongoing. We are inspecting approximately 600 to 1,000 welds which include both piping and structural welds. Will be complete approximately 1/31/86 provided no additional inspections are required. The Phase 1 report will be submitted to NRC by 1/29/86.

Design Control Survey

The second phase of the Gilbert Commonwealth evaluation completed on 1/24/86 and has resulted in approximately 20 observations and technical issues. These are under review for determination of what actions will be required for startup. This evaluation will be complete by 1/31/86. Resolution of all issues by 2/15/86. USQU evaluations will be complete 1/31/86.

Undervoltage Calculation

Calculation efforts completed 1/22/86. 3 SCRs have been issued as a result of the calculations. The SCRs will result in additional cable pulls, testing, and calculations. One SCR has been evaluated for reportability and determined not reportable. The two additional SCRs should be evaluated next week in the defined SCR process.

A TVA/NRC telecon is scheduled for 1/27/86.

Open NSRS Reports

Sequoyah has evaluated all NSRS reports excluding personnel concerns and has identified one action that should be taken prior to startup. The NSRS has been requested to perform an evaluation of all reports, responses, and open items and identify all items required for startup. This information will be forwarded to NRC when NSRS completes their review.

HR Backlog Review

As indicated in the TVA Nuclear Performance Plan, a review of outstanding HRs will be completed prior to startup. This review will make sure no unworked items will degrade equipment or operation. There has been one review already conducted, but HRs are continually being added and completed and a final review prior to startup is still planned.

Week of February 3, 1986

Employee Concerns

Site Specific

Expecting to issue all reports on all concerns required for startup by 2/15/86.

Investigations and report preparation ongoing.

Generic Program

Working recommendations.

EQ Project

Binder work continuing, releasing approximately 8 making 77/95 released at end of week.

All identified binders scheduled to be complete 2/25/86.

All identified onsite modifications due to EQ Program are scheduled to be completed by 2/17/86. Material receipt problems may delay.

All identified QHDS work scheduled to be complete by 2/17/86.

Rockbestos Cable--LOCA chamber testing continuing. Should complete approximately 2/7/86.

Welding Program

Bechtel will complete final written report on Phase 2 independent audit approximately 2/3/86.

By approximately 2/15/86, we will have all audit and inspection activities complete and in evaluation by the welding project.

Design Control Survey

Evaluating and resolving all findings.

Undervoltage Calculations

Additional calculations, testing, and SCR evaluations continuing as needed.