October 29, 1982

日本

The Barbara

PDR

-293

55 840801

Memo For: Harold Harty, PNL Project Manager Harley Kirschenmann - EG&G Project Manager

From: Willard Altman, NRC Project Manager

Subject: Draft Assessment Methodologies, Site Visit Case Studies, Long-Term QA Review

I have reviewed the Assessment Plans prepared by PNL and EG&G and presented at our joint meeting on October 28, 1982. Based on what was presented, we still have some work to do to get the plans to where they directly address the needs for information gathering for the site visits. To get them where I want them, and merged, I think it would be useful to start with our basic objectives and work forward from there.

The basic objectives of the LTR (as stated in Secy 82-352 and elsewhere) are to:

- for plints that have had identified problems in QA or construction, identify the root causes for their breakdowns
- 2) for plants that have apparently successful program, determine the essential ingredients that make them work (i.e., the root causes of success)
- 3) Based on observation and study of programs in both categories, develop recommendations for NRC policy modifications that, if implemented, should provide greater assurance against future quality breakdowns. The main vehicle for achieving 1, 2, and 3 is the series of site visits (04 case studies). Hence, 1, 2, and 3 become objectives of the site visits. The series of visits is the centerpiece of the TR. Largely based on the success or failure of the site visits will the LTR succeed or fail. Therefore, it is critical that the site visits not only satisfy the above objectives, but that the link be obvious. That is,

it should be clear to anyone who reviews the site assessment methodology (NRC management, peer panel, intervenors) that the assessment methodology logically leads to answers to 1, 2, and 3. Hence, I would set a fourth objective for the series of site visits:

4) It is imperative that the site visit methodology be understandable to interested observers and that its logic is clear and quite obviously leads to the answers to Objectives 1, 2, and 3.

180 190 190

And Same

You will note that the LTR is supposed to arrive at answers to a number of more specific questions than Objectives 1, 2, and 3, above. The complete list of topics at this writing for which the LTR and its site visits are supposed to provide answers or insights was provided to you in my letter of October 19, 1982, which included a copy of a draft format for the reports of the QA case studies (OACS format). This draft format was prepared to ensure we covered everything expected of the site visits in the site visits and that the fact that we had covered everything would be clear to any interested reader. This leads to a fifth objective:

5) The site visit methodology must clearly and logically provide insights into or answers to topics covered in the QACS report (the format of October 19, 1982).

In addition, we have to address the question of how do we know whether a program is good or bad, i.e., what are the criteria we use to determine whether a program is successful or not. This leads to a sixth objective:

6) The site visit methodology should include a set of indicators or criteria which we can use, consistently from plant to plant to determine if a program is successful or not, and relative to other plants visits, how successful.

One of the growing concerns of NRC in recent years is the impact NRC activities and site visits have on licensees. Accordingly, we need to be very sensitive as to how much of the licensee's/contractor's time we take up. This means that we do not want to spend any more time at the site/corporate HQ than necessary, or inundate the licensee with any more people than necessary. Accordingly, we have a seventh objective:

1

r

7) The site visit methodology should provide as minimal a burden as possible on the licensee, consistent with achieving the other objectives of the site visits. Accordingly, the length of site visits should be kept to the minimum necessary to obtain answers to Objectives, 1, 2, 3, 5 (to the OACS report questions) and 6 (evaluation). Moreover, the team size should be kept to the minimum necessary to achieve 1, 2, 3, 5, and 6.

One other objective: the NRC regional and resident inspectors are a critical source of information and entree to the licensee. To the extent possible, we want to involve him to the degree he wishes to be involved, consistent with obtaining the best information available to satisfy the other objectives. This would lead to Objective 8:

8) The site assessment methodology should be flexible enough to provide for varying levels and kinds of involvement by resident/regional inspectors.

Another objective is to ensure that we do not focus on the OA organization and program to the exclusion of other contributors to quality. The ninth objective is:

9) Goal is quality - quality is put in by project management team. OA program is only one tool to achieve quality -

We don't want to make the mistake of spending a disproportionate amount of our effort exclusively talking to folks in the quality department. We will talk to them, but we want to focus at least as much effort on corporate management and attitude, on project management and construction, and on contractors and craftsmen as we do on the licensee QA organization.

In the context of the above, I have the following observations about the plans presented yesterday:

### EG&G Plan

Addresses Objectives 1, 2, 4, 6, 7, 8.

Needs more details for all objectives.

Substantially more effort needed in 3, 5, 6, 9.

#### Battelle Plan

Too minor a focus on 1, 2, 3, 9.

Does not meet objectives 4, 5, 7, 8.

Too heavy a focus on 6, almost to exclusion of some other objectives.

I would like you to caucus with your staffs to review my comments and determine the effort needed to bring the plans in line with the above objectives. I wruld like you to review your Assessment Plans and develop an approach to modifying our plans to meet the above objectives. You may want to think about integration with the other plan, but at this point I want first to see what it will take to bring either plan into conformance with the above objectives, and we can plan our time from there.

> Willard Altran NRC Project Manager

C: Pil staff EGSG staff Juan Heidenreich

## Addendum to Memo of October 29, 1982

Several other objectives should be included in our considerations. Some of them are implicit in 5, but are important enough to be highlighted separately.

- We need to review and analyze proposed solutions and the other
  OA initiatives or fixes for their efficacy and practicality.
- 11) In conjunction with 10, we need to collect and develop data and information suitable for cost benefit analysis.
- 12) To the extent possible develop input to and a source of information for other tasks in the LTR and other NRC QA initiatives.
- 13) Provide the flexibility to incorporate lessons learned from previous site visits.

EVALUATION DOCUMENT - PROCEDURE (How to do the job)

Or Case Study Sie Usit Man

## TABLE OF CONTENTS

- 1. Introduction (Background)
- II. Statement of Objectives
- 111. Scope of Assessment

Number of Visits

- IV. Summary Overview (includes Approach)
- V. QA Case Study (Plant Specific)
  - A. Previsit Activities Team Formation Identify Postulated Root Causes
  - B. Field Work (Regional/Corp/Site)
    - Approach

Schedule of interview/exit interview - validation Guidelines for team member

Methodology - plant generic/plant specific

Areas explored/questions asked (interview instrument for each entity)

Field Notevook

Develop preliminary site assessment

C. Post Visit Activities

OACS Report Format

VI. Comparison Methodology

Criteria

#### Validation

211. Develop Recommendations Methodology (Dig Picture)

111. Preparation of Final Report

# Project Meeting Attendance - October 28, 1982

Willard Altman	NRC Project Manager		
Dan Garland	PNL Consultant		
Robert J. Sorenson	PNL Manager, Safeguards and Regulatory Analysis		
John Heidenreich	NRC Consultant (N. T. Kist and Associates)		
Ivan Garcia	DOE-RL		
Richard I. Smith	PNL project staff		
Scott Heaberlin	PNL project staff		
Miles G. Fatrick	PNL project staff		
Ken Carroll	EG&G Project Manager		
Harold Harty	PNL Project Manager		
in an Presidence	state here quality fort Trates and		
way willing	Elert Project state		

Ballelle

Par of Northwest Laboratories

- Date October 25, 1982
- To Distribution
- from Harold Harty

「「「「「「「」」」「「」」」「「」」」「「」」」」「「」」」」」」

5

- Subject Proposed Agenda for Quality Assurance: Long-Term Review Meeting - October 28-29, 1982
  - Location: Sigma V Building Nez Perce Room

Attendees: Willard D. Altman - NRC John L. Heidenreich - N. T. Kist & Associates Ken Carroll - EG&G Harley Kirschenmann - EG&G (Friday only) Larry Kubicek - EG&G (Friday only) R. J. Sorenson H. Harty S. Heaberlin R. Smith Dan Garland Ivan Garcia - RL-DOE M. G. Patrick - BPMD

Thursday, October 28

- 7:15 8:00 Holiday Inn W. D. Altman K. Carroll H. Harty
- 8:00 8:30 Travel to Sigma V
- 8:30 9:00 Introductory Remarks W. D. Altman
- 9:00 10:00 Presentation of PNL Plan H. Harty
- 10:00 11:00 Presentation of EG&G Plan K. Carroll
- 11:00 12:00 Discussion of Plans
- 12:00 1:15 Lunch in Northwest Room
- 1:15 4:00 Discussion of Proposal Flans and Approaches
- 4:00 5:00 Review PNL Interests in LTR Program Sun Room, Sioma III

internal Instribution

RM Fleischman I Garcia D Garland H Harty S Heaberlin MG Patrick RI Smith RJ Sorenson LD Williams LB File

4 62 . KI 17 . Fr

# Friday, October 29

8:30 - 9	:30 Review	of Program	Discussions
----------	------------	------------	-------------

- 9:30 12:00 Agreement on General Content of Assessment Plans and Assignments for Completion
- 12:00 1:15 Lunch in Northwest Room
- 1:15 4:00 Review, Plan, and Establish Site Interview Procedures
- 4:00 5:00 Discussions with L. D. Williams, R. J. Sorenson

# SLIDES FOR

the start

••

PROJECT MANAGEMENT MEETING

SPECIAL STUDY OF NUCLEAR

QUALITY ASSUPANCE

AT

BATTELLE PNL

OCTOBER 28-29, 1982

DR. W. D. ALTMAN. NRC PROJECT MANAGER

the second manual material

"-" and and

# PURPOSES OF MEETING:

0

- TO INTEGRATE SITE VISIT APPROACHES DEVISED BY PNL AND EG&G
- TO PLAN FOR FIRST SITE VISIT
- TO DISCUSS CONTRACTORS IDEAS ON OTHER TASKS IN THE STUDY
  - TO PROVIDE AN OPPORTUNITY FOR CONTRACTORS AND CONSULTANTS TO BECOME ACQUAINTED AND TO WORK WITH EACH OTHER

## PARTICIPANTS:

# NRC

BILL ALTMAN

NRC PROJECT MANAGER

## BATTELLE

HARCLD HARTY PNL PROJECT MANAGER SCOTT HEABERLIN NUCLEAR ENGINEER/ANALYST BOB SORENSON SECTION MANAGER, SG & HUMAN FACTORS DAN GARLAND QA CONSULTANT

## EG&G

HARLEY KIRSCHENMAN MANAGER, EG&G QUALITY DEPARTMENT KEN CARROLL MANAGER, QUALITY PROCUREMENT, PROGRAMS & CONSTRUCTION BRANCH LARRY KUBICEK MANAGER, QUALITY STANDARDS AND

# KIST ASSOCIATES

JOHN HEIDENREICH

CA CONSULTANT

SYSTEMS BRANCH

FIRST SITE VISIT:

c

- MARBLE HILL NOVEMBER 16-19, 1982
- VISIT REGION NOVEMBER 15, 1982
- REGION, RESIDENT INSPECTOR, AND PLANT MANAGEMENT ALL COOPERATIVE
  - HANDOUT MATERIAL ON MARBLE HILL TO BE DISTRIBUTED AT THIS MEETING

.

STUDY SUBTASKS REQUIRING CONTRACTOR ASSISTANCE

- 1. SITE VISITS (CASE STUDIES) AND REPORTS
- 2. ANALYSIS OF NRC'S QA PROGRAM
- 3. REVIEW AND ANALYSIS OF OUTSIDE PROGRAMS
- 4. STUDY ON CERTIFICATION
- 5. FORD ALTERNATIVES, INCLUDING PILOT PROGRAM
- 6. ADVISORY PANE
- 7. STUDY OF CONTRACTS AND THE PROCUREMENT PROCESS
- 8. ASSISTANCE IN PREPARATION OF REFORTS TO CONGRESS AND COMMISSION

NEC ORGANIZATION

160

6

÷.

0

÷

RES GA MOVED INTO IE

" NER QA NOT MOVED YET

SEPTEMBER IE REORGANIZATION PLAN REJECTED

NEW REORGANIZATION ON EDO'S DESK - LEAVES QA A BRANCH, BUT PUTS IN DIFFERENT DIVISION

\$

RESOLUTION STILL UP IN AIR

- 2. Other points from Marble Hill:
  - . Want to develop data regarding the size of the licensee QA organization onsite relative to the number of construction personnel onsite. Also, want numbers of contractor QA/QC personnel at various stages. Idea is to develop ratios at various stages of construction and do a trend analysis - like in 79-11. Numbers only tell part of the story, but we want to know what they are.
  - Also want to document history of project and history of QA/OC program.
  - . Goal is quality quality is put in by project management team. OA program is only one tool to achieve quality -

We don't want to make the mistake of spending a disproportionate amount of our effort exclusively talking to folks in the quality department. We will talk to them, but we want to focus at least as much effort on corporate management and attitude, on project management and construction, and on contractors and craftsmen as we do on the licensee QA organization.

- There are several things we want to be sure to look for throughout (in project management, in QA department, in contractors, etc.). They include:
- . Adequacy of staffing
- . Qualifications of staffing
- . Training of staff
  - Criteria for selection (actual, not just written)
- . Indoctrination of staff in commitment to quality
- Attitudes toward quality (importance of quality relative to production and meeting schedules)

For QA/GC personnel, independence from production and authority to stop work

As part of this, want to look at levels of constances that have to approve a quality-related finding on typus (including staffing incluests)

Concensation of staff

Experience of staff, including experience in nuclear projects, and experience in construction projects

3

- Familiarity of construction personnel and site engineers with applicable ASME codes, ANSI standards, IEEE standards, etc.
- Channels of communication in all directions and use of these channels
- 3. Looking at the NRC inspection report 79-11 on Marble Hill and Attachment E. the July 10, 1979, inspection report of the National Board of Boiler and Pressure Vessel Inspectors, the question arises of how could the situation have been so bed and NRC had not discovered it or recognized the extent of the breakdown?

This leads to the observation that as part of the case studies, we want to look at the extent, frequency, and depth of the NRC inspection program at these sites, both before and after significant problems were identified.

4. Look at keppler's testimony on Zimmer, June 10, 1982. Be sure we include a look at the following things on a generic basis:

### Weaknesses

- . Traceability of materials
- . Felsification of records
- . Herassment/intimidation of OC inspectors
- . Control of structural steel welding
- . Licensee's overview of ongoing work
- . \*Designation, control, and verification, design document changes
- Disposition of nonconforming items
- . Subcuntractor OA programs
- . Accouncy of audits

#### Ins revenents

- Augmented QA staffing (increased from n to 224)
- Libraded procedures
- learning of QC inspectors
- , 100 reinspection of contractor QC inspection
- . Kar Pationeriont changes
- . Proceeding toenates) expertise of utility's on staff

5. Another lesson from Zimmer plant we want to look at on a generic basis:

. The Zimmer problem was exacerbated (in Keppler's view) by the combination of a small, inexperienced utility with a constructor relatively inexperienced in building commercial nuclear facilities

We want to look at the hypothesis that lack of nuclear experience by either the utility or the contractors or both tends to be a contributing factor to major QA/QC breakdowns. If this is not true generically, for what cases is it true and why, and for what cases is it not true (either way, inexperienced utility with a good construction program or experienced utility with a bad construction program) and why.

- Some other key problems from Zimmer we ne d to look for on a generic basis:
  - . Adequacy of in-process inspection program
  - . Deletion or alteration of key criteria, instructions, records, heat numbers, etc.
  - . Conformance with ASME code, etc.
  - . Conformance of installation to design
  - . Documentation, handling, voiding, dispositioning, and follow-up of nonconformances
  - . A-E procedures for verifying design calculations
  - . A-E procedures for conformance with FSAR
  - . A-E procedures for documenting design deviations
  - . Control and approval of design chances
  - . Independence of utility and subcontractor GA programs
  - Adequacy of audits of subcontractor by subcontractor QA program, by utility QA program
  - Adequacy of utility audits of self, of construction, of CA
    Plant cleanliness and graffiti
- We need to look at how NRC manpower requirements for investigating and following up on CA breakdowns are met.

Are sufficient qualified people assigned to the investigation. both technical staff and (criminal) investigators

What is the induct of this diversion of inspection resources on the noutine inspection program? How adenuate is our inspection. program at sites that have not been identified as problems? Does this diversion of resources increase the probability of another QA breakdown happening and going undetected by NRC?

- How committed is NRC to correcting these problems? DO NRC's actions suggest they are really serious about the QA problems or do they send a different message to licensees and the public? How adequate is the level and qualifications of NRC staffing (both in HQ and regions)? How adequate is the level and qua ifications of NRC investigators (from Office of Investigation)?
- How does spending 5000 NRC manhours on Zimmer in the first six months of 1982 impact the NRC inspection program in R III?
- See Udall's statement of September 14, 1982. Why wasn't the severity of the problems at Zimmer recognized before construction was virtually complete?
  - . For the problem plants, we need to determine how the problems were identified, by whom, at what stage in construction, and what involvement NRC had in detecting/recognizing the severity of the OA breakdown.
  - We need to determine what the NRC effort had been prior to discovery and why this effort did not recognize the problem.
  - . How can NRC assure the safety of other reactors if NRC did not recognize a breakdown having the magnitude of the Zimmer breakdown?
- 9. See Earl Borgman's (CG&E) testimony of September 14, 1982. He said that HJK. "in its role as constructor, has the first line responsibility for the CA program covering its construction activities at zimmer".
  - . Is this statement true?

an martin

. . . .

- . Is this statement consistent with good QA practice in construction of a nuclear power plant?
- . If one accepts this statement, then where does CGLE's responsibility lie! Second line? Third line?
  - what does this statement sungest about the root causes of the CA breakdows at Zimmer?

10. See testimony of Donald Milan, Chief Inspector of Onio. He said that if the National Board and the NRC had been auditing in close liaison with each other in the past (as they are now) the problems we are faced with at Zimmer could have been averted.

- . When we go to R III and Zimmer, we want to learn how the National Board and NRC have set up an interface and how well it is working.
- . We want to test Milan's hypothesis at Zimmer and the other problem plants that had NRC and the National Board been working together earlier, the problems and their extent would have been recognized much earlier or they would not have occurred at all.
- . How does this hypothesis apply to other groups that NRC might work with cooperatively rather than independently?
- See Milan's statement on the level of NRC staffing: 2000 construction workers and at the very most 3 or 4 NRC inspectors (usually 1 or 2). He says that regardless of how highly trained or capable the NRC inspectors might be, they cannot keep pace with the construction activity.
  - . Is this true?
  - Assuming that NRC will not be able to devote more than 2 or 3 MY per construction site, what measures (on the part of the licensee, A-E, constructor, outside group, etc.) are necessary in order for NRC to stay on top of the construction activity at a level sufficient to ensure that another Zimmer, Midland, or Marble Hill does not happen.
- 12. Should National Board Audit Team activity be vritten into the Federal regulations as a condition for issuance of an operating license?
  - . What are the pros and cons?
    - If yes. why?
    - If no, why bot?

ENCLOSURE 1 to Actuan Letter to PRUL and EFA+6 desteel Oct 2,1982

## First Page

- 1. Name of reactor, utility
- II. Dates of field work, and places visited
- 11. Names and Organizations of SSA team members
- IV. Persons contacted, their organizations and positoins
- V. Literature reviewed in conjunction with this visit
- V1. Description of plant in terms of the following:

EWP or PWR, No. Mwe, no. of units, utility name and corporate HQ, name of AE, names of major contractors, NSSS, etc., also date of CP, date of OL (expected if plant in construction), % complete if in construction.

## Second Page

- <u>Summary of Findings</u> This section should include salient points regarding OA program or organization characteristics, significant problems that have occurred, why they occurred, what was done to correct them and how successful remedial action has been. If no significant problems have occurred, a description of those features of programs that seem to contribute to its accorrent success.
- \*1215 Cullity Essuperce Case Study

2

This writeup should be about one page long and contain the bottom line regarding what can be said about their plant and its CA program. In the summary we should highlight those site specific findings that we think may have generic applications.

# Third Page and Successive Pages

# II. General Topics

A. Description of the licensee's QA program, its organization, and its interfaces within and outside the licensee organization. Include key dates (brief history), size of the organization, how it is structured, its responsibilities, its authorities, reporting chain of command internally and externally. Include aspects that contribute to the strengths and/or weaknesses that will be highlighted in sub-sequent sections.

This section should include quantitative as well as qualitative information: how many QF inspectors in what specialties, how many construction workers, how many welders, etc.

B. Description of CA problems that have developed at the plant, and how and by whom they were identified.

- C. Analysis of why the above problems developed, i.e., what were the root causes. We are interested in identifying the programmatic deficiencies that led to the identified QA problems. In this section, each postulated root cause should be justified in terms of supporting evidence: i.e., inspection reports, investigation reports, interviews with inspectors, discussions with licensee, discussions with A/E, craftsmen, etc. If something is opinion, label it as such. We need to document the logic train that brought us to our conclusions.
- Description of remedial action taken to address the identified QA problem, whether it solved (or failed to solve) the problem, and how it was decided upon (describe involvement of NRC and licensee in arriving at and implementing remedial action). This section should detail the costs associated with the remedial action costs to the licensee in terms of lost time construction delays, unplanned shutdowns, etc. It should also describe costs in terms of people and dollars. Costs to the NRC (investigations, extra inspection and licensing actions, etc.) in terms of people and impact on the routine NFC program.
- E. Description of the positive aspects of the CA program, both historically and presently. If the plant has undergone remedial actions, what can we learn from the success or failure of the remedial program, especially

in a generic sense. If the QA program has not had major problems, why not? Are there some key aspects that seem to make the program successful, or is it just another major breakdown waiting to be discovered? What we want to arrive at in this section are the basic underlying characteristics of a successful QA program.

4

## III. Specific Lessons Learned

A. Implications of this case study for improvement of QA programs for design.

This section should include lessons learned from this QA study that suggest possible approaches or solutions to improve licensee's QA programs for design. Suggested approaches should be evaluated critically in terms of whether they would really solve problems and their costs and benefits should be discussed and weighed.

B. Implications of this case study for improvement of QA programs for <u>construction</u>.

Similar content as for design section. etc.

5

C. Implications of this case study for improvement of OA programs for <u>startup</u>.

Etc.

D. Implications of this case study for improvement of QA programs for testing.

Etc.

E. Implications of this case study for improvement of QA programs for maintenance

£tc.

F. Implications of this case study for improvement of QA programs for operations.

Etc.

9

G. Implications of this case study for improvement of QA programs for contracting and procurement.

6

- H. Implications of this case study for improvement of QA programs with regard to management.
- Implications of this case study for improvement of QA programs with regard to training.
- J. Implications of this case study for improvement of QA programs with regard to organizational structure and flow of information.
- K. Implications of this case study for improvement of QA programs with regard to project management.
- IV. Implications of this case study with respect to suggested approaches for improvement of QA.
  - A. Implications with respect to Ford Alternative 1:

Providing a basis for quality assurance and quality control, inspection, and enforcement actions through the adoption of a-more prescriptive-approach-te-an approach which is more prescriptive than that currently in practice for defining principal architectural and ergineering criteria for the construction of cormerical nuclear power plants;

E. Implications with respect to Ford Alternative 2:

Conditioning the issuance of <u>construction permits</u> for commercial nuclear power plants on a demonstration by the licensee that the licensee is capable of independently managing the effective performance of all quality assurance and quality control responsibilities for the power plant;

C. Implications with respect to Ford Alternative 3:

More effective evaluations, inspections, or audits of commercial nuclear powr plant construction by representatives of independent associations of professionals having expertise in appropriate fields discluding-the-associations-referred-to-in-the-preceeding-sentence}which evaluations, inspections, or audits are more effective than those under current practice;

Implications with respect to Ford Alternative 4:

incrovement of the Commission's organization, methods, and programs for quality assurance development, review, and inspection;

E. Implications with respect to Ford Alternative 5:

Conditioning the issuance of construction permits for commercial nuclear power plants on the permittee entering into contracts or other arrangements with an independent inspector to audit the quality assurance program to verify quality assurance performance.

- F. Implications with respect to establishing a program analogous to the FAA system, including designated NEC representatives, QA holdpoints.
- G. Implications with respect to the <u>effectives of</u> present (not necessarily NRC) <u>nuclear quality assurance standards</u>, especially from the viewpoint of simplifying and updating existing CA standards.
- H. What 'essons learned from this case study should be fed back into the <u>national standards process</u>?
- 1. Implications with respect to TMI Action Plan (NUREG-0660) initiatives
  - 11 Task I.F
  - (2) Task 11.J.

- J. Implications with respect to NRC's <u>cualifying</u> and/or certifying licensee/contractor <u>QA programs</u> including the establishment of <u>holdpoints</u> based on achieving certain levels of QA program certification.
- V. Implications of this Case Study with Respect to NRC Policies and Programs
  - A. Implications with respect to adequacy of existing <u>NRC regulatory</u> <u>base</u> in QA.
  - E. Implications with respect to NRC licensing practices.
  - C. Implications with respect to NRC standards and guidance.
  - D. Implications with respect to NRC research programs.
  - E. Implications with respect to the NRC enforcement programs.
  - F. Implications with respect to NRC <u>inspection program</u> assumptions, definition, and guidance.
  - G. Implications with respect to NRC inspection program implementation.

٠.

- H. Implications with respect to <u>MRC staff</u> expertise, <u>cualification</u> and <u>training</u>.
- 1. Implications with respect to NRC organizational structure.
- VI. Implications of this Case Study with Respect to Other SECY-82-352 Initiatives
  - A. Implications with respect to NTOL licensee self evaluations.
  - E. Implications with respect to requiring licensee <u>CEO certification</u> that plant design, construction, and testing meets FSAR and other licensing commitments.
  - C. Implications with respect to NTOL Regional evaluations.
  - D. Implications with respect to NTOL independent design review.
  - E. Implications with respect to INPO evaluations.
  - F. Implications with respect to NRC inspection initiatives:
    - (1) FAT inspections
    - 121 CAT inspections

- (3) Revision of inspection program
- (4) Integrated design inspection
- (5) Change emphasis from records audit to observation of work
- G. Implications with respect to <u>improved</u> systematic review of 50.55(e) and Part 21 reports by NRC.
- H. Implications with respect to improved NRC soliciting of and review of <u>allegations</u>.
- . Implications with respect to management workshops.
- J. Inclications with respect to stronger <u>enforcement</u> of existing standards for QA/QC personnel.
- K. Implications with respect to <u>establishment</u> of a more formal <u>oualification</u> and <u>certification</u> system for QA/QC personnel.
- 1. Inclications with respect to upgrading guality of craftsmanship.

EDO - Other Items

- (1) Staff from the Events Analysis Branch met with representatives from INPO, AEOD, and RES on November 3, 1982 to discuss proposed rule changes to 10 CFR 21, 50.55(e), 50.72 and 50.73.
- (2) On Monday. November 15, 1982, we will meet with CP&L personnel to discuss the requirements for qualifying the suspect "Raychem" cable being used for Class IE applications.at the Brunswick facility.