

APR 30 1991

Docket Nos. 50-390, 50-391
License Nos. CPPR-91, CPPR-92

Tennessee Valley Authority
ATTN: Mr. D. A. Nauman
Senior Vice President,
Nuclear Power
6N 38A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

Gentlemen:

SUBJECT: ENFORCEMENT CONFERENCE SUMMARY
(NRC INSPECTION REPORT NOS. 50-390,391/90-30 AND 50-390,391/90-31)

This letter refers to the Enforcement Conference held at our request on April 12, 1991. This meeting concerned activities authorized for your Watts Bar facility. The issues discussed at this conference were related to the potential violations discussed in the subject Inspection Reports. The agenda included: activities that led to the December 1990 Stop Work Order; root causes and corrective actions taken to date; and clarifications and criteria for resumption of work at Watts Bar.

A list of attendees and a copy of your handout are enclosed. We are continuing our review of these issues to determine the appropriate enforcement action.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosures will be placed in the NRC Public Document Room.

Should you have any questions concerning this matter, please contact us.

Sincerely,

Original Signed By
BRUCE A. WILSON

Bruce A. Wilson, Chief
TVA Projects

Enclosures:

1. List of Attendees
2. Handouts

cc w/encls: (See page 2)

9105080171 910430
PDR ADOCK 05000390
Q PDR

LE01110

Mr. D. A. Nauman

2

cc w/encls:

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Tennessee Valley Authority
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400 West Summit Hill Drive
Knoxville, TN 37902

J. B. Waters, Director
Tennessee Valley Authority
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W. F. Willis
Chief Operating Officer
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D. Nunn, Vice President
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R. F. Wilson
Vice President, New Projects
Tennessee Valley Authority
6N 38A Lookout Place
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Dr. M. O. Medford
Vice President, Nuclear Assurance
Licensing and Fuels
Tennessee Valley Authority
6N 38A Lookout Place
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Honorable Robert Aikman
County Judge
Rhea County Courthouse
Dayton, TN 37321

Mr. Oliver D. Kingsley, Jr.
President, Generating Group
Tennessee Valley Authority
6N 38A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

Honorable Johnny Powell
County Judge
Meigs County Courthouse
Route 2
Decatur, TN 37322

E. G. Wallace, Manager
Nuclear Licensing and
Regulatory Affairs
Tennessee Valley Authority
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Tennessee Valley Authority
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General Counsel
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Michael H. Mobley, Director
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John H. Garrity
Site Vice President
Watts Bar Nuclear Plant
Tennessee Valley Authority
P. O. Box 800
Spring City, TN 37381

State of Tennessee

bcc w/encls: (See page 3)

APR 30 1991

Mr. D. A. Nauman

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bcc w/encls:

S. D. Ebnetter, RII
J. L. Milhoan, RII
B. A. Wilson, TVAP/RII
S. C. Black, NRR
G. C. Lainas, NRR
F. J. Hebdon, NRR
K. P. Barr, TVAP/RII
B. Bordenick, OGC
M. S. Callahan, GPA/CA
H. H. Livermore, TVAP/RII
A. R. Long, TVAP/RII
P. S. Tam, NRR
J. Lieberman, OE
G. R. Jenkins, EICS
Document Control Desk

NRC Resident Inspector
U.S. Nuclear Regulatory Commission
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~~TVA/RII~~

~~ALong:vyg
04/ /91~~

TVA/RII

KBarr
04/24/91

EICS/RII

GJenkins
04/24/91

ENCLOSURE 1

LIST OF ATTENDEES

NAME

TITLE

NRC STAFF

S. D. Ebnetter
J. L. Milhoan
G. C. Lainas

B. A. Wilson
G. R. Jenkins

C. A. Julian
K. P. Barr
F. Jape

P. S. Tam
G. A. Walton
H. H. Livermore
J. Luehman

B. Uryc
A. R. Long
R. D. Gibbs

Regional Administrator, Region II, (RII)
Deputy Regional Administrator, RII
Assistant Director, Nuclear Reactor
Regulation (NRR)
Chief, TVA Projects, RII
Director, Enforcement and Investigation
Coordination, RII
Chief, Engineering Branch, RII
Section Chief, Watts Bar, RII
Section Chief, Test Programs Section
RII
Senior Project Manager, NRR
Senior Resident Inspector, RII
Senior Project Engineer, RII
Senior Enforcement Specialist, Office
of Enforcement
Senior Enforcement Specialist, RII
Project Engineer, RII
Reactor Inspector, RII

TVA STAFF

D. A. Nauman
D. E. Nunn
J. H. Garrity
M. O. Medford

L. E. Martin
E. G. Wallace

Senior Vice President, Nuclear Power
Vice President, Nuclear Projects
Vice President, Watts Bar Site
Vice President, Nuclear Assurance,
Licensing and Fuels
Watts Bar Site Quality Manager
Manager, Nuclear Licensing and
Regulatory Affairs

ENCLOSURE 2

TENNESSEE VALLEY AUTHORITY
WATTS BAR NUCLEAR PLANT
ENFORCEMENT CONFERENCE

APRIL 12, 1991

WATTS BAR NUCLEAR PLANT
ENFORCEMENT CONFERENCE
APRIL 12, 1991

AGENDA

INTRODUCTIONS

D. NAUMAN

OVERVIEW

D. NUNN

TVA DISCUSSION OF ENFORCEMENT ISSUES

J. GARRITY

ACTIVITIES THAT LED TO THE DECEMBER 21,
1990 STOP WORK ORDER

ASSESSMENTS

ROOT CAUSES OF THE PROBLEMS THAT LED TO
THE STOP WORK ORDER

CORRECTIVE ACTIONS TAKEN SUBSEQUENT TO
THE STOP WORK ORDER

STATUS OF CORRECTIVE ACTIONS TAKEN TO
DATE

CLARIFICATIONS

CRITERIA FOR RESUMPTION OF WORK AT WATTS
BAR

TVA CLOSING REMARKS

M.
MEDFORD

OVERVIEW

BACKGROUND

CONSTRUCTION AND CONSTRUCTION RECORD PROBLEMS
SINCE EARLY 1980s

ATTEMPTS TO FIX QUALITY ISSUES THROUGH PROGRAM,
PROCESS, AND MANAGEMENT CHANGES

FALL 1990 INITIATION OF QUALITY IMPROVEMENT INITIATIVES

MANAGEMENT UNDERSTANDING OF NATURE AND SCOPE OF
PROBLEMS YIELDED 12/90 WORK STOPPAGE

WBN FOCUSED ONLY ON PROBLEM IDENTIFICATION AND NOT
ON PROBLEM IDENTIFICATION AND TIMELY SOLUTION

PROCESS IMPROVEMENTS UNDERWAY OR NEEDED IN:

DESIGN

DESIGN INTERFACE WITH CONSTRUCTION

CONSTRUCTION AND CONSTRUCTION INSPECTION

MATERIALS

SYSTEM STATUS CONTROL

PRESTART TEST

CLOSURE

OVERVIEW (cont.)

ASSESSMENT/CORRECTIVE ACTION

CONSTRUCTION

PROBLEMS

EXISTING WORK PROCESS SYSTEM AND ORGANIZATION
CANNOT CONSISTENTLY ACHIEVE REQUIRED QUALITY

CULTURAL ISSUES

CONST. SUPV. AND MGMT. ADEQUACY/INEFFECTIVE
OVERSIGHT

CRAFT ACCOUNTABILITY AND TRAINING

NO RECOGNITION OF PROBLEM BY CONST. MGMT.

NO DRIVE TO COMPLETE PROJECT

SELF-PROTECTIVE / DEFENSIVE

ACTIONS

ORGANIZATION

MGMT./SUPV. CHANGED TO KNOWN PERFORMERS
DOWNSIZE

IMPLEMENT PROVEN WORK PROCESSES AND CONTROLS
FROM BFN AND INDUSTRY

QUALITY PIPELINE MONITORING AND FEEDBACK FOR
LINE MANAGEMENT ACCOUNTABILITY

PERSONNEL ASSESSMENTS

PERFORMANCE MEASUREMENT

QUALITY RESPONSIBILITY MATRIX

OVERVIEW (cont.)

QUALITY ASSURANCE PROBLEMS

INADEQUATE IDENTIFICATION AND COMMUNICATION OF
PROBLEMS TO SENIOR MANAGEMENT

PROGRAM FUNCTIONALLY ADEQUATE BUT COMPLEX

QUALITY ACHIEVED NOT CONSISTENT WITH INDUSTRY

LACK OF LINE MANAGEMENT ACCOUNTABILITY FOR
QUALITY

FAILURE OF QA ORGANIZATION TO ASSURE LINE
MANAGEMENT ACCOUNTABILITY FOR QUALITY

ACTIONS

STRENGTHEN QA MANAGEMENT

QUALITY PIPELINE MONITORING AND FEEDBACK FOR LINE
MANAGEMENT ACCOUNTABILITY

PERSONNEL ASSESSMENTS

PERFORMANCE MEASUREMENTS

QUALITY RESPONSIBILITY MATRIX

OVERVIEW (cont.)

ENGINEERING PROBLEMS

INSUFFICIENT QUALITY MONITORING AND FEEDBACK

TVA ENGINEERING STRAINED BY STARTUP OF EBASCO

BACKLOGS HIGH

OLD ECN's

DCN CLOSURE

CAQ's, etc.

DESIGN INTERFACES MARGINAL

ACTIONS

SHIFTING TVA TOWARDS OPERATIONAL SUPPORT

DOWNSIZE

RESOLVE PROCESS AND BACKLOG PROBLEMS

QUALITY PIPELINE MONITORING AND FEEDBACK

PERSONNEL ASSESSMENT

PERFORMANCE MEASUREMENT

QUALITY RESPONSIBILITY MATRIX

OVERVIEW (cont.)

IN SUMMARY

FUNDAMENTAL AND BASIC CHANGES ARE BEING IMPLEMENTED
AT WATTS BAR

METHOD OF CONSTRUCTION

CONTRACTOR FOR CRAFTS
MANAGEMENT CHANGES INCLUDING USE OF
CONTRACT MGMT.
WORK PROCESSES IMPROVEMENTS
QUALITY MONITORING

QUALITY ASSURANCE

QUALITY LEADERSHIP
FORCING LINE ACCOUNTABILITY

ENGINEERING

DOWNSIZING
FOCUS ON QUALITY AND BACKLOG REDUCTION

OTHER

MATERIALS
SYSTEMS STATUS CONTROLS
PRESTART TEST PROGRAM
CLOSURE THROUGH ENGINEERING TO FINAL RECORDS
USE OF INTEGRATED SCHEDULE TO CONTROL ORDERLY
COMPLETION OF WORK

KEY QUESTIONS

ARE THE ROOT CAUSES SIMILAR TO THOSE IDENTIFIED IN PREVIOUS CORRECTIVE ACTION PROGRAMS?

DO THE CORRECTIVE ACTIONS ADDRESS THE ROOT CAUSES?

HOW ARE THE CURRENT CORRECTIVE ACTIONS DIFFERENT FROM PREVIOUS CORRECTIVE ACTIONS SUCH THAT RECURRING PROBLEMS WILL BE PREVENTED?

HOW WILL TVA KNOW THAT THE CORRECTIVE ACTIONS ARE STAYING ON THE RIGHT TRACK?

HAS ENTIRE ORGANIZATION, AT ALL LEVELS, GOTTEN THE MESSAGE, AND HOW DO CORRECTIVE ACTIONS REFLECT THAT FACT?

BACKGROUND

REVIEWED MAJOR PREVIOUS ASSESSMENTS/CORRECTIVE
ACTIONS PLANS BACK TO 1985

PREVIOUS CORRECTIVE ACTIONS ONLY TREATED
SYMPTOMS

FUNDAMENTAL APPROACH TO CURRENT ISSUES - ATTACK
UNDERLYING CULTURAL PROBLEMS THAT REMAIN AND
CORRECT FLAWED PROCESSES

POST-STOP WORK
ACTIVITIES

DECEMBER 21 - STOPPED WORK IN ELECTRICAL
CONSTRUCTION

BEGAN EXAMINATION OF MECHANICAL, ETC.

DECEMBER 30 - STOPPED WORK ON ALL SITE
CONSTRUCTION

JANUARY 1991 - EXTENDED WORK CONTROL
ASSESSMENTS BEYOND CONSTRUCTION

ENGINEERING
MATERIAL MANAGEMENT
QA
PLANT

JANUARY 15 - BRIEFED NRC IN ROCKVILLE ON 12-POINT
PROGRAM

REVISED 12-POINT PROGRAM BASED ON NRC
FEEDBACK

MARCH 12 - BRIEFED NRC IN ATLANTA ON PROGRESS OF
WORK CONTROL ASSESSMENTS, ROOT CAUSES, AND
CORRECTIVE ACTION

ASSESSMENT RESULTS

FURTHER ASSESSMENT OF CORRECTIVE ACTION
PROGRAM UNNECESSARY

WORK CONTROL ASSESSMENT FOUND
FUNDAMENTALLY FLAWED WORK PROCESSES

WORK CONTROL ASSESSMENT PROCESS FOUND
PROBLEMS BEYOND WORK CONTROL

ROOT CAUSES WERE BROADENED TO COVER
FINDINGS

SEPARATE ASSESSMENTS CONVERGED ON SAME
ROOT CAUSES

PERSONNEL HAD LITTLE SENSE OF OWNERSHIP
TASK VS. PROCESS ORIENTATION
NO ACCOUNTABILITY FOR TOTAL PROCESSES'
SUCCESS

ROOT CAUSE OVERVIEW

FOUR GENERAL COMPONENTS

GENERAL PERFORMANCE

ATTITUDINAL

ENVIRONMENTAL

INDIVIDUAL PERFORMANCE

ROOT CAUSE DEVELOPMENT

WORK CONTROL

SELF-ASSESSMENTS

KEPNER-TREGOE

CAUSAL CHAIN ANALYSIS ON EXAMPLES

CORRECTIVE ACTION PROGRAM

CAUSAL CHAIN ANALYSIS

KEPNER-TREGOE

MANAGEMENT ASSESSMENT

ROOT CAUSES

GENERAL PERFORMANCE COMPONENT

INATTENTION TO DETAIL
SUPERVISORY INEFFECTIVENESS
PROCEDURAL COMPLEXITY
PROCEDURAL LACK OF CLARITY
PROCEDURAL NON-COMPLIANCE
INEFFECTIVE IMPLEMENTATION OF QUALITY ASSURANCE/QUALITY
CONTROL
PROGRAM

RESULT: DOCUMENTATION AND SOME HARDWARE DEFICIENCIES.

ATTITUDINAL COMPONENT

DENIAL OF THE NEED FOR CHANGE
FAILURE TO IMPLEMENT RESPONSIBILITIES
INEFFECTIVE FOLLOW-THROUGH OF CORRECTIVE ACTIONS
INATTENTION TO DETAIL

RESULT: CONTINUATION OF PREVIOUSLY IDENTIFIED
UNACCEPTABLE PERFORMANCE

ENVIRONMENTAL COMPONENT

ORGANIZATIONAL STRUCTURE
CHANGING LEADERSHIP DIRECTION
INCORRECT FOCUS
INAPPROPRIATE PRIORITIES
UNCLEAR EXPECTATIONS

RESULT: INEFFECTIVENESS IN RESOLVING ISSUES

INDIVIDUAL PERFORMANCE COMPONENT

INAPPROPRIATE BELIEFS REGARDING PERSONNEL RESPONSIBILITIES
REGARDING QUALITY
INCORRECT MINDSET THAT "INSPECTING IN QUALITY" WAS APPROPRIATE.

RESULT: FAILURE OF INDIVIDUALS TO COMPLETE QUALITY WORK RIGHT
THE FIRST TIME

ROOT CAUSE INSIGHTS

FOUR COMPONENTS OF ROOT CAUSE AND RELATED SYMPTOMS INDICATE EMBEDDED, LEARNED CULTURAL BARRIERS TO SUCCESSFUL BEHAVIOR AND CHANGE BELOW THE SENIOR MANAGEMENT LEVEL

ORGANIZATION FOCUSED MORE ON PROBLEM IDENTIFICATION THAN AGGRESSIVE IDENTIFICATION AND SOLUTION

THERE ARE NO QUICK, SIMPLE SOLUTIONS TO THESE ISSUES

LONG TERM, PERMANENT CHANGE REQUIRES FUNDAMENTALLY DIFFERENT ACTIONS TO RESOLVE

SOLUTIONS REQUIRE THAT NEW BEHAVIORS HAVE TO BE LEARNED AS AN ORGANIZATION THROUGH WORK

CORRECTIVE ACTIONS TAKEN
SUBSEQUENT TO THE
STOP WORK ORDER

MAJOR CORRECTIVE ACTION CATEGORIES:

MANAGEMENT FOCUS

ORGANIZATION

QUALITY MONITORING, INDICATORS

TRAINING

PROCEDURES

ACCOUNTABILITY

REWORK

QUALITY ORGANIZATION IMPROVEMENTS

MANAGEMENT FOCUS

SENIOR MANAGEMENT REVIEW TEAM

BACKLOG REDUCTION

SCHEDULE COORDINATION AND ACCOUNTABILITY

QUALITY INDICATORS/ACTION LEVELS

EMPHASIS ON PROCEDURAL ADHERENCE

OTHER

RECONSTITUTED MANAGEMENT REVIEW COMMITTEE (MRC)
AND DAILY CONTACT WITH SENIOR MANAGEMENT REVIEW
TEAM

SENIOR MANAGEMENT TEAM CURRENTLY ACTING AS MRC

BALDRIDGE (TQM) ASSESSMENT/MANAGEMENT OFFSITE

SCREEN OF OLD PROBLEM INDICATORS

ROOT CAUSE CAPABILITY ASSESSMENT AND UPGRADE

DEDICATED RESOURCES FOR QUALITY PROBLEMS

RECOVERY DAILY MEETINGS, STATUS CHARTS, AND REPORTS

WATTS BAR ORGANIZATION

**PRES. OF
GENERATING
GROUP**
O.D. KINGSLEY, JR.

**SENIOR
VICE PRESIDENT
NUCLEAR POWER**
D.A. NAUMAN

**VICE PRESIDENT
NUCLEAR PROJECTS**
D. NUNN

**NUCLEAR POWER
HUMAN RESOURCES**
P. JORDAN

**NUCLEAR ASSURANCE
LICENSING &
FUELS**
M. MEDFORD

WATTS BAR SITE ORGANIZATION

**VICE PRESIDENT
WBN SITE**
J. GARRITY
(9/90)

SITE CONTROLLER
R. SEAY
(11/77)

**ENGINEERING &
MODIFICATIONS**
H. WEBER
(4/91)

**OPERATIONS
PLANT
MANAGER**
J. SCALICE
(10/89)

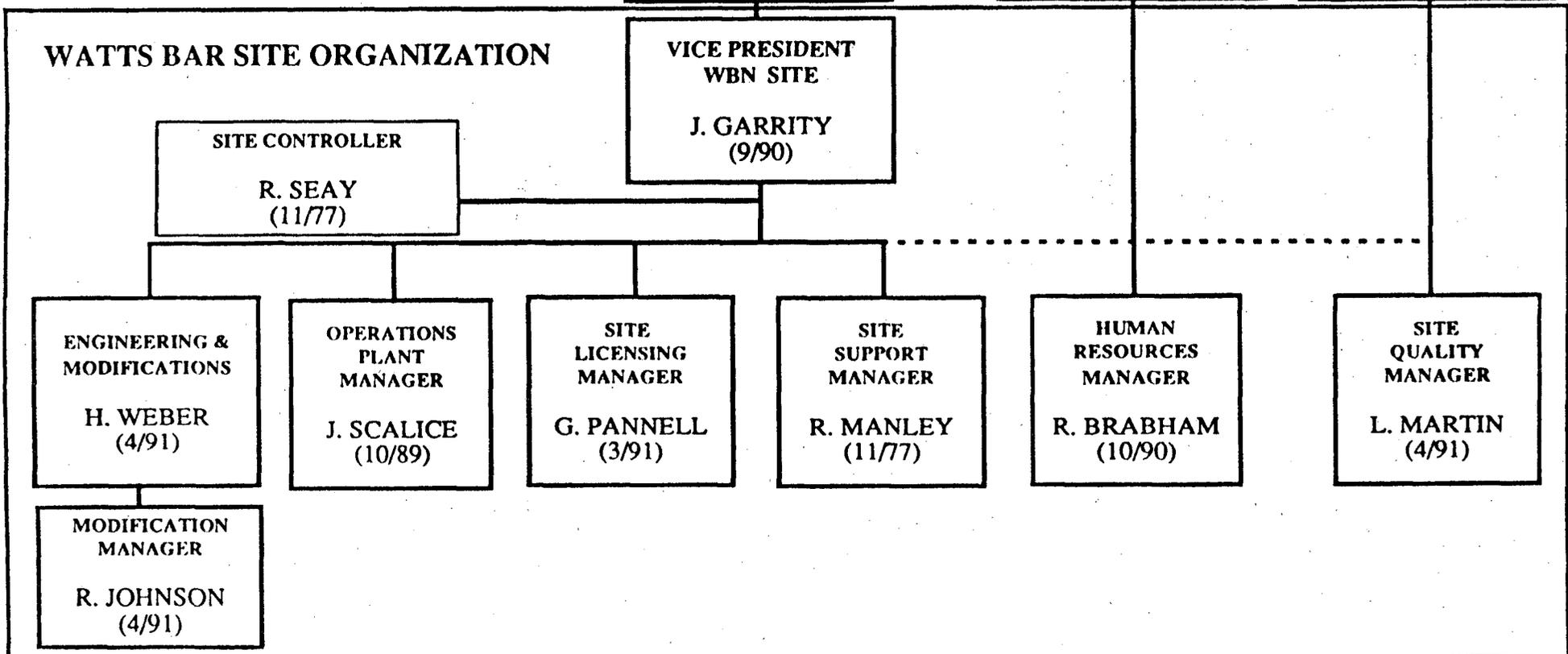
**SITE
LICENSING
MANAGER**
G. PANNELL
(3/91)

**SITE
SUPPORT
MANAGER**
R. MANLEY
(11/77)

**HUMAN
RESOURCES
MANAGER**
R. BRABHAM
(10/90)

**SITE
QUALITY
MANAGER**
L. MARTIN
(4/91)

**MODIFICATION
MANAGER**
R. JOHNSON
(4/91)



WATTS BAR NUCLEAR PLANT
ENFORCEMENT CONFERENCE
APRIL 12, 1991

At the request of TVA, this page has been withheld
from public disclosure in accordance with 10 CFR
2.790(a)5.

QUALITY MONITORING/INDICATORS

PIPELINE SYSTEMS FOR
CONSTRUCTION
ENGINEERING
MATERIALS

QUALITY INDICATORS
IN-PROCESS
AT COMPLETION
MANAGEMENT

IMPROVED QUALITY TREND REPORTS AND MANAGEMENT
REPORTS

TRAINING

CONSTRUCTION

QUALITY CONTROL

FIELD ENGINEER

CERTIFICATION OF CRAFT

REPORTABILITY TRAINING

PROFESSIONAL MANAGEMENT DEVELOPMENT PROGRAM
(CORP)

ORIENTATION TO NEW SYSTEMS/PROCESSES WITH
EMPHASIS ON QUALITY

PROCEDURES

NEW WORK CONTROL PROCEDURE

WORK CONTROL CENTER

SCAR/ACP AND CAQR ROLLOVER

MODIFICATION AND ADDITION INSTRUCTIONS

ACCOUNTABILITY

PERSONNEL ASSESSMENTS

QUALITY RESPONSIBILITIES MATRIX

PERFORMANCE MONITORING AND FEEDBACK

DISCIPLINE AND RECOGNITION

QUALITY DATA FEEDBACK

QUALITY REPORT CARDS

DELEGATION TRAINING

REWORK

SAFETY NET REVIEWS

ECN CONVERSION

CALCULATION REVIEW/REWORK

WESTINGHOUSE/TVA INTERFACE REVIEW

QUALITY ORGANIZATION

QA WILL EMPHASIZE LINE ACCOUNTABILITY FOR
QUALITY

MANAGEMENT CHANGES

IMPROVED INSPECTION REPORTS

IMPROVED USABILITY OF TRENDING REPORTS

IMPLEMENTED REVISED CORRECTIVE ACTION
PROGRAM

CORRECTIVE ACTION STATUS

<u>ITEM</u>	<u>STATUS</u>
1. PLANS	ALL RECOVERY WORK CONTAINED IN LEVEL 2 SITE WORK SCHEDULE. STATUSED DAILY AT 8 A.M. REVIEW MEETING. RESTART LOGIC REPRESENTED
2. RIF/LAYOFF	COMPLETE
3. PROBLEM ASSESSMENT	COMPLETE
4. PERSONNEL ASSESSMENTS MANAGEMENT EMPLOYEES	COMPLETE - CRITICAL ASSESSMENT COMPLETE - ONGOING ASSESSMENT
5. PROCEDURES/PROCESS IMPROVEMENTS	IN REVIEW - CONSTRUCTION (OPTED FOR ADVANCED BFN VERSIONS)
6. ORGANIZATIONAL CHANGES	ONGOING

CORRECTIVE ACTION STATUS

<u>ITEM</u>	<u>STATUS</u>
7. CAQR MGT IMPROVEMENTS PROCEDURES MRC/SR MGMT COMMITTEE BACKLOG REDUCTION	COMPLETE COMPLETE ON SCHEDULE
8. TRAINING	COMPLETE - MODULES EXECUTION ON HOLD
9. SAFETY NET/ INTERIM REVIEW	COMPLETE - PROCEDURE WORK PROCEEDING
10. QUALITY MONITORING PIPELINE	COMPLETE - REV 2 USERS MANUAL COMPLETE - IMPLEMENTATION (ENG, MATERIAL)
11. QIP INTEGRATION	*
12. CAUTIOUS RESTART	FUTURE

CLARIFICATIONS

NRC INSPECTION REPORT 390,391/90-30

NRC IR 90-30

FAILURE OF LICENSEE TO
PROPERLY OBTAIN OR
IDENTIFY HOLD ORDER FOR
WP-K-MO-8413A PRIOR TO
COMMENCING WORK
ORDER/TESTING

RESULTS OF FURTHER TVA REVIEW

EVIDENCE INDICATES THAT FOREMEN
OBTAINED HOLD ORDERS FOR WORK
UNDER THIS WORKPLAN ON 7/10/90
AND LOGGED THE HOLD ORDER NOS.
IN WP-KM-08413A-1 "HOLD
CHECKLIST"

SUMMARY
SIGNIFICANT CORRECTIVE ACTIONS

WORK CONTROL AND OTHER PROCEDURES CLARIFIED
AND SIMPLIFIED

SIGNIFICANT REDUCTIONS IN BACKLOGS

INDIVIDUALS UNDERSTAND THEIR QUALITY
RESPONSIBILITIES

CONSTRUCTION

QUALITY PIPELINE IN PLACE

QUALITY INDICATOR SYSTEM IN PLACE TO GUIDE
MANAGEMENT ACTION

KEY QUESTIONS

ARE THE ROOT CAUSES SIMILAR TO THOSE IDENTIFIED IN PREVIOUS CORRECTIVE ACTION PROGRAMS?

DO THE CORRECTIVE ACTIONS ADDRESS THE ROOT CAUSES?

HOW ARE THE CURRENT CORRECTIVE ACTIONS DIFFERENT FROM PREVIOUS CORRECTIVE ACTIONS SUCH THAT RECURRING PROBLEMS WILL BE PREVENTED?

HOW WILL TVA KNOW THAT THE CORRECTIVE ACTIONS ARE STAYING ON THE RIGHT TRACK?

HAS ENTIRE ORGANIZATION, AT ALL LEVELS, GOTTEN THE MESSAGE, AND HOW DO CORRECTIVE ACTIONS REFLECT THAT FACT?

MANAGEMENT OBJECTIVES
RESTART OF CONSTRUCTION

ASSURANCE THAT HISTORICAL PROBLEMS ARE
UNDERSTOOD AND WILL NOT REPEAT

NEW WORKPLAN FORMAT AND PROCEDURES, RELATED
PROCEDURES SIMPLIFIED AND COMBINED

BACKLOGGED PROBLEMS ADDRESSED

PROCESS IMPROVEMENTS

DESIGN ENGINEERING

CONSTRUCTION AND INSPECTION

MATERIALS

SYSTEM STATUS CONTROL

PRESTART TESTING

CLOSURE

CORRECTIVE ACTION PROGRAM IMPROVEMENTS

QUALITY MONITORING PIPELINE AND QUALITY
PERFORMANCE INDICATORS IN PLACE

ORGANIZATION CHANGES

TRAINING

ENGINEERING AHEAD OF CONSTRUCTION

PLANS FOR CAREFULLY MONITORED, SLOW RESTART

ENFORCEMENT DISCRETION

TVA STOPPED WORK WHEN IT NO LONGER HAD
CONFIDENCE THAT CONSTRUCTION WORK COULD
PROCEED WHILE ADDRESSING PROBLEMS

TVA HAS DEVELOPED AND IS AGGRESSIVELY
IMPLEMENTING A WIDE-RANGING, COMPREHENSIVE
PROGRAM OF SELF-ASSESSMENT AND CORRECTIVE
ACTIONS

TVA WILL NOT RESUME CONSTRUCTION UNTIL IT IS
SATISFIED THAT IT IS PREPARED TO DO SO

ALL OF THE POTENTIAL VIOLATIONS OCCURRED PRIOR
TO THE WORK STOPPAGE

TVA RECOGNIZES THAT NRC AGREEMENT WILL BE
OBTAINED PRIOR TO RESUMING CONSTRUCTION

NO FURTHER REGULATORY PURPOSE WOULD BE
SERVED BY ESCALATED ENFORCEMENT