



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

September 29, 1988

Docket No. 50-260

LICENSEE: Tennessee Valley Authority

FACILITY: Browns Ferry Nuclear Plant, Unit 2

SUBJECT: MEETING SUMMARY REGARDING BROWNS FERRY FUEL LOAD

On September 13, 1988, members of the OSP staff met with TVA at the Sequoyah site to discuss Browns Ferry fuel load. A list of attendees is attached as Enclosure 1. A copy of the slides used by Tennessee Valley Authority (TVA) is attached as Enclosure 2.

Mr. White, Senior Vice President, Nuclear Power stated that fuel load at Browns Ferry is an important milestone because it will allow the operators to develop a renewed sense of plant operations and accountability for operating under Technical Specifications and limiting conditions.

TVA's presentation began with a description of their system evaluation process which is a part of their System Preoperability Checklist (SPOC) procedure. The staff expressed concern that TVA's process for determining system operability does not include an explicit analysis of incomplete generic programs. TVA stated that the SPOC process includes identification of incomplete work and evaluation and rationale for postponement, as well as a system for control of deferred work. There are three programmatic areas (79-02/79-14, civil calculations and cable separation) for which the discovery phase will not be complete prior to fuel load. For these programs, TVA will have completed enough of the discovery phase to make a determination that no large problems requiring significant physical modifications should be found.

TVA presented their technical bases for plant conditions to be met for fuel load, which is defined in the FSAR, Appendix G. The staff requested clarification on this point. Operational conditions as defined by TVA did not include closing the vessel, and the staff requested and received a clarification on how required work for different conditions would be controlled. Also, TVA responded to staff questions regarding other events (e.g., loss of reactor vessel level, fire, flooding) that are included in their analysis, but not shown on the handout.

The definition of fuel load boundaries was discussed. TVA indicated that their fuel load system boundaries were more limiting than the boundary required by Technical Specifications (TS). To this end, TVA stated that redundant trains will be operable, even though only one train is required by TS in the refuel mode, in order to minimize the impact of having to schedule a system out-of-service for work. It is TVA's position that no additional TS or exemptions will be required for fuel load. For those programs where corrective actions have not been completed, an engineering and 50.59 analysis will be performed as part of the SPOC process. Post fuel load work will be controlled using system train outages.

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TVA's schedule shows post fuel load work encompassing approximately four to six months. The majority of the work is for seismic hangers, ductwork and supports, and electrical cables. TVA believes that scheduling and controlling this work under the TS will make the operators more accountable for the plant. Preventive maintenance (unless an engineering evaluation justifies deferral) and surveillance instructions will be up to date before a system can be returned to service. TVA management stated that systems will not be permitted to remain inoperable for long periods of time.

Following a brief NRC staff caucus, Mr. Partlow, OSP Office Director, informed TVA that we will agree with their plan to load fuel subject to the following provisions. TVA must docket a description of its plans (as well as a response to the staff's July 27, 1988 letter) including a complete list of accidents considered for fuel load. All deferred work is to be defined, and its impact assessed. The program and system evaluations, as well as system boundary definitions and outstanding work within those boundaries, for return to service must be reviewed by an independent party and the results of their review docketed. This review should assess the assumptions and conclusions of the safety evaluation to support TS compliance. The staff will discuss TVA's plans with its lawyers to confirm TVA's ascertainment that no TS changes or exemptions are required. Also, TVA was informed that our inspection activities will ensure strict compliance with TS. In addition, TVA should identify milestones for significant activities between refueling and criticality. And finally TVA was informed that their Systematic Assessment of Licensee Performance (SALP) period will begin with fuel load.

Original Signed by
Suzanne Black, Assistant Director
for Projects
TVA Projects Division
Office of Special Projects

Enclosures:

- 1. Attendance List
- 2. Agenda and Handouts

cc w/enclosures:

See next page

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Those on Attached List

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NAME	:SBlackas	:FMCCo	:RPierson	:	:	:
DATE	:9/29/88	:9/29/88	:9/29/88	:	:	:

DISTRIBUTION FOR MEETING SUMMARY DATED: September 29, 1988

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DFD
1/1

Mr. S. A. White

-3- Browns Ferry Nuclear Plant

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ENCLOSURE 1

ATTENDANCE LIST

<u>Name</u>	<u>Organization</u>
David Kunsemiller	TVA
Ed Goodwin	OSP/TVA
Rob Pierson	OSP/TVA
C. Brooks	Resident Inspector - Browns Ferry
F. McCoy	OSP
S. Black	OSP/TVA
P. Polk	TVA
M. Branch	OSP/TVA
N. E. Kazanas	TVA
B. Charson	NUS
D. Eisenhut	NUS
Don Hosmer	TVA - Browns Ferry
Pranab Guha	TVA - Browns Ferry
S. A. White	TVA
M. J. May	TVA - Browns Ferry
W. S. Little	OSP
K. D. Ivey, Jr.	OSP
R. Gridley	TVA
C. Crocker	Browns Ferry
R. W. Cantrell	TVA
C. C. Mason	TVA - Browns Ferry
J. R. Bynum	TVA
D. R. Carpenter	Browns Ferry
Guy G. Campbell	TVA - Browns Ferry
C. Fox	TVA

AGENDA

NRC MEETING

TUESDAY, SEPTEMBER 13, 1988, 9:00 A.M.

BFN SYSTEM READINESS FOR FUEL LOADING

INTRODUCTION

J. R. BYNUM

ENGINEERING RELEASE OF SYSTEMS

R. W. CANTRELL

• PROCESS

• PROGRAMMATIC ISSUES - ENGINEERING GUIDANCE

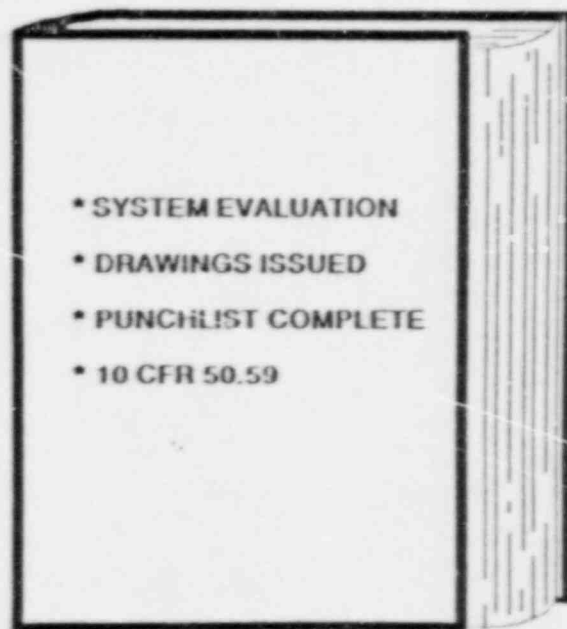
SCOPE AND CONTROL OF POST FUEL LOAD

G. G. CAMPBELL

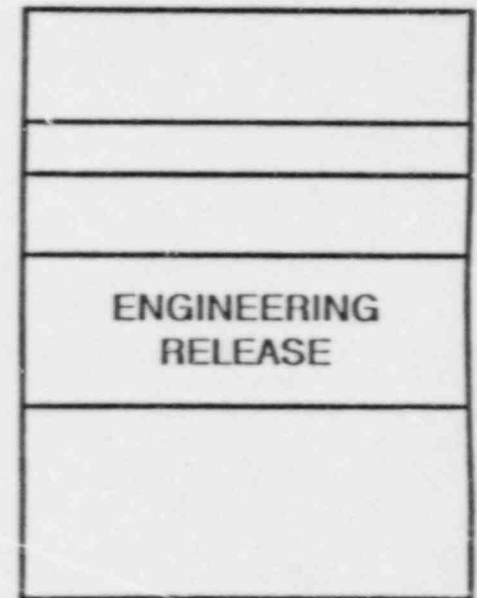
DISCUSSION

PROCEDURAL SYSTEM EVALUATION

ENGINEERING
GUIDANCE
DOCUMENTS



SPOC



TECHNICAL BASIS FOR PLANT CONDITIONS TO BE MET - FSAR, APPENDIX G

(1) OPERATIONAL CONDITIONS

- OPEN VESSEL
- AMBIENT TEMPERATURE
- NEGLIGIBLE DECAY HEAT

(2) OPERATIONAL EVENTS

- LOSS OF SHUTDOWN COOLING

(3) ACCIDENT MITIGATION

- FUEL HANDLING ACCIDENT

(4) EXTERNAL EVENTS

- EARTHQUAKE
- LOSS OF OFFSITE POWER

STATUS OF TECHNICAL PROGRAMS

- TOTAL NUMBER OF TECHNICAL PROGRAMS 41
- PROGRAMS WITH DISCOVERY COMPLETE AT FUEL LOAD 38
EXCEPTIONS: - 79-02/79-14
- CIVIL CALCULATIONS
- CABLE SEPARATION
- PROGRAMS WITH CORRECTIVE ACTION TO BE COMPLETE 15
WITHIN THE FUEL LOAD BOUNDARY

PROGRAMS FOR WHICH DISCOVERY WILL NOT BE COMPLETE:

- 79-02/79-14
- CIVIL CALCULATIONS
- CABLE SEPARATION

EXAMPLE PROGRAMS FOR WHICH CORRECTIVE ACTIONS WILL NOT BE COMPLETE:

- ENVIRONMENTAL QUALIFICATION TO MEET 10 CFR 50.49
- APPENDIX R FIRE PROTECTION
- AC/DC CALCULATIONS
- CABLE AMPACITY
- CABLE INSTALLATION

SCOPE AND CONTROL OF POST FUEL LOAD WORK

- SYSTEMS ARE RETURNED TO SERVICE USING SPOC
- SYSTEMS REQUIRED TO BE OPERABLE WILL PERFORM THEIR SAFETY FUNCTIONS FOR THE APPLICABLE PLANT CONDITIONS
- TOTAL SCOPE OF WORK SCHEDULED BETWEEN FUEL LOAD AND RESTART IS 4 TO 6 MONTHS. MAJORITY OF WORK IS FOR:
 - SEISMIC HANGERS
 - DUCTWORK AND SUPPORTS
 - ELECTRICAL CABLES
- WORK WILL BE CONTROLLED USING SYSTEM TRAIN OUTAGES

BFW SYSTEM READINESS FOR FUEL LOADING

CONCLUSIONS

- TECHNICALLY SOUND GUIDELINES ESTABLISHED
- DEFICIENCIES KNOWN AND EVALUATED
- KNOW HOW TO CONTROL THE WORK
- SAFETY NOT COMPROMISED