UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

Report Nos.: 50-259/85-19, 50-260/85-19, and 50-296/85-19

Licensee: Tennessee Valley Authority
500A Chestnut Street
Chattanooga, TN 37401

Docket Nos.: 50-259, 50-260 and 50-296 License Nos.: DPR-33, DPR-52, and DPR-68

Facility Name: Browns Ferry 1, 2, and 3

Meeting Conducted: March 14, 1985

Project Engineer: W. H. Ruland 4/3/85
W. H. Ruland Date Signed

Approved by: F. S. Cantrell 4/3/85
F. S. Cantrell, Section Chief Date Signed
Division of Reactor Projects

SUMMARY

An Enforcement Conference was held at the Region II office on March 14, 1985, at 11:00 a.m., EST to review three events: a reactor startup with inoperable water level instruments, failure to perform post-maintenance testing of a control rod (see report 50-259,260,296/85-13 for details), and certain security violations. In addition, TVA had been asked to be prepared, (1) to present their justification for continued operation of BFNP-3 and (2) to identify near-term objectives or milestones for improvement in management of operations. Actually, the first question was rendered moot prior to the meeting by the shutdown of BFNP-3 on March 9.

The Regional Administrator opened the meeting by expressing his continuing concern about violations at Browns Ferry and the fact that operators appear to be making non-conservative decisions when faced with abnormal conditions. NRC staff then summarized their understanding of the events. TVA gave a chronology of the events and the results of their investigations. TVA acknowledged the seriousness of the general problems and demonstrated a very positive attitude toward making immediate improvements in operations through more focused management attention. Dr. Grace and Mr. Parris closed the meeting for NRC and TVA respectively.

REPORT DETAILS

1. Attendance

NRC

J. Nelson Grace, Regional Administrator
J. M. Taylor, Director, Office of Inspection and Enforcement (IE)
J. A. Olshinski, Deputy Regional Administrator
J. T. Collins, Special Assistant to the Director, IE
P. R. Bemis, Director, Division of Reactor Safety (DRS)
J. P. Stohr, Director, Division of Radiation Safety and Safeguards (DRSS)
G. E. Lainas, Assistant Director, Division of Licensing (DL), Office of Nuclear Reactor Regulation (NRR)
D. M. Verrelli, Branch Chief, Division of Reactor Projects (DRP)
K. P. Barr, Branch Chief, DRSS
J. M. Puckett, Director (Acting), Enforcement and Investigation Coordination Staff (EICS)
F. S. Cantrell, Section Chief, DRP
C. A. Julian, Section Chief, DRS
D. R. McGuire, Section Chief, DRSS
W. O. Long, Project Manager, DL, NRR
B. T. Debs, Reactor Inspector, DRS
J. F. Munro, Operator Examiner, DRS
C. A. Patterson, Resident Inspector, Browns Ferry, DRP
W. K. Poertner, Reactor Inspector, DRS
W. H. Ruland, Project Engineer, DRP
W. J. Tobin, Senior Security Inspector, DRSS
G. L. Troup, Senior Radiation Specialist, EICS

TVA

H. G. Parris, Manager, Power and Engineering
J. A. Coffey, Site Director, Browns Ferry Nuclear Plant (BFNP)
L. M. Mills, Manager, Regulatory Performance Improvement Program
K. W. Whitt, Director, Nuclear Safety Review Staff (NSRS)
G. T. Jones, Plant Manager, BFNP
J. W. Hutton, Director, Nuclear Sciences
J. E. Swindell, Plant Superintendent (Operations and Engineering), BFNP
J. D. Carlson, Quality Assurance Manager, BFNP
J. A. Domer, Chief, Nuclear Licensing Branch
D. C. Mims, Engineering Group Supervisor, BFNP
A. L. Burnette, Assistant Operations Supervisor, BFNP
J. D. Wolcott, Reactor Engineering Supervisor, BFNP
R. E. Burns, Instrumentation Maintenance Supervisor, BFNP
B. C. Morris, Compliance Supervisor, BFNP
R. W. Miller, Project Engineer, Sites Services, BFNP
S. B. Jones, Compliance Engineer, BFNP
R. C. Cutshaw, Nuclear Evaluator, NSRS
J. E. Brazell, Public Safety Service, BFNP
R. E. Jackson, Public Safety Service, BFNP

2. Event Discussions

The Regional Administrator indicated that NRC cannot accept new programs or reorganizations in lieu of real results showing improved operations and reduced violations. Neither can we accept other often-mentioned "explanations" of continuing lack of improvement.

Mr. D. M. Verrelli gave an overview of the NRC's concerns related to the operational events. A reactor startup of Unit 3 was performed with discrepancies in reactor vessel water level indication. The operators did not recognize the problem, did not look for a root cause, and did not understand how to interpret reactor vessel low pressure level indications. Mr. Verrelli briefly described events related to TVA's failure to test a control rod after maintenance.

Mr. J. A. Coffey opened the meeting for TVA by stating that TVA takes the events as serious occurrences as does NRC. Mr. G. T. Jones introduced TVA's three part presentation.

a. Discussion of Vessel Water Level Instruments by Mr. D. C. Mims

Mr. Mims presented TVA's findings concerning the mismatch between water level indicators during a Unit 3 startup on February 13, 1985. A mismatch existed between level instruments for one hour. Six minutes after the deviation started, a half scram occurred. The operator immediately raised water level and resumed rod motion after the water level readings started to converge. Reportability questions were resolved on February 15, 1985.

TVA concluded that the event had minimal safety significance but that the problem was not diagnosed correctly during the time frame of the event. Other events involving BWR level problems were reviewed.

Results of the TVA event investigation revealed no definitive cause for the level indication problems. Corrective actions to prevent event recurrence have been and will be taken. Operators, STAs, and plant management have been trained to recognize water level problems and to understand startup water level indication. A plot of indicated yarway versus actual level will be displayed in the control room. An inspection of Units 1 and 2 reference leg piping will be performed for Unit 1 at the next refueling outage and for Unit 2 during the present outage.

b. Discussion of Control Rod Event by Mr. G. T. Jones

Events surrounding the failure of TVA to test a control rod after maintenance were reviewed. First-line supervisors and managers were at fault. Craft supervision did not provide workers with complete instructions. The procedure, correct but cumbersome, was not followed.

Disciplinary action has been taken (loss of pay for the individual involved). The appropriate procedures have been revised.

c. Discussion of Management Control Concerns

Mr. J. A. Coffey stated that TVA will offer no excuses or new programs. TVA, he stated, shares the NRC's concerns about the near-term management control problems at Browns Ferry. TVA will require management control by implementing a policy that holds people accountable for their actions.

Mr. G. T. Jones described operating principles and a new shift staffing plan intended to re-focus BFNP personnel toward improvement in daily activities. Mr. Jones presented a new shift staffing plan. The Assistant Shift Engineer (ASE) will be assigned to specific units. An SRO will be assigned to each control room per shift, allowing the Shift Engineers (SE) to tour the plant as necessary to control work on the unit(s). The additional staffing requirements will create a shortfall of five ASEs in a five shift rotation. A shortfall of one SE and eight ASEs will exist for a six shift rotation, which is the goal of BFNP. Five SROs from the training center will be transferred next week to BFNP to support the additional staffing requirements.

Mr. Jones reviewed BFNP's management refocus plan. Two Assistant Operations Supervisors (AOS) will be assigned; one for the operating unit(s) and one for the outage unit(s). Both AOSs would report to the Operations Supervisor, who would report to the Superintendent of Operations and Engineering. An Assistant Operations Supervisor would handle procedures and manning. A separate STA unit would be established, dedicated to support the shift. The maintenance management organization would be strengthened by the addition of a dedicated on-shift maintenance manager (five days a week). Craft maintenance personnel would be assigned to specific units. Overall shift management would be enhanced by the addition of a senior on-shift manager.

A staffing plan schedule was presented. Five shift operator staffing would be in place on March 20, 1985. The engineering and maintenance staffing plan would be in place on April 20, 1985. May 20, 1985 was given as the target date for six shift rotation.

Certain actions have been accomplished to meet the staffing plan: offered positions for one senior shift manager; added an additional nuclear engineer; reassigned ASEs; and obtained additional SROs.

Plant policy was established such that "operational evolutions are not to proceed with any degraded condition or unexplained anomaly in existence."

Mr. Parris summarized TVA's position concerning actions to be taken at BFNP. He stated that Unit 3 will not be started until TVA is satisfied. Improvement at BFNP will take a team effort.

Mr. Verrelli stated NRC's current position on the issues. He stated that the jury is still out concerning the cause of the water level indication problems with Unit 3. NRC expects to be kept abreast of TVA's findings. NRC will get back to TVA concerning the control rod testing problems. Mr. Verrelli further stated that everyone at BFNP must get involved to solve their problems, senior management to the craft workers.

Mr. J. T. Collins commented that everyone at BFNP must be sensitized to operational problems. Anything less is unacceptable.

Mr. J. M. Taylor made two points. First, that excellence in operations should be the number one goal of an operating plant. Second, that problems at BNFP have received national attention.

Mr. C. A. Julian questioned TVA's desire to make prompt reports to NRC as required. He also stated that TVA management often does not get the correct story in a timely manner. Mr. J. D. Carlson responded for TVA, saying that the NRC's thirst for knowledge gets in the way of obtaining the true story.

Mr. Julian also cautioned TVA concerning the provisions of 10 CFR 55.31e for the SROs returning to BFNP from the training center.

Dr. Grace closed the meeting by thanking TVA for their presentation. He also stated that improvement must come from within TVA. NRC cannot and will not attempt to manage for TVA. However, NRC will not relent but will perservere in doing its job to make sure TVA management brings about necessary improvements in operations and reduced violations.

A short discussion on security violations was then held (See Report No. 259/260/296/85-08).

April 3, 1985

ENCLOSURE 2

ENFORCEMENT CONFERENCE AGENDA

March 14, 1985

I.	Opening Remarks	J. Nelson Grace
II.	Statement of NRC Understanding of Operational Events and Associated TVA Shortcomings	D. M. Verrelli
III.	TVA Discussion of Operational Events	
	a. Introductory Remarks	J. A. Coffey/ H. G. Parris/ G. T. Jones
	b. Presentation Concerning Inoperable Water Level Instruments	D. C. Mims
	c. Presentation Concerning Post-Maintenance Testing of a Control Rod	G. T. Jones
	d. Discussion Concerning General Problems of Management Control at Browns Ferry	J. A. Coffey/ G. T. Jones
	e. Summary	H. G. Parris
IV.	Current NRC View of Above Issues	D. M. Verrelli
V.	Comments	J. M. Taylor/ J. T. Collins
VI.	Remarks Regarding Reportability and Training of Operators	C. A. Julian/ J. D. Carlson
VII.	Closing Comments Regarding Above Events	J. Nelson Grace
VIII.	Opening NRC Remarks Concerning Security Violations	D. M. Verrelli
IX.	TVA Security Presentation	J. E. Swindell
X.	Closing Comments	J. P. Stohr