

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
PUBLIC SERVICE COMPANY OF	)	Docket Nos. 50-443 OL
NEW HAMPSHIRE, <u>et al.</u>	)	50-444 OL
(Seabrook Station, Units 1 and 2)	)	Off-site Emergency Planning

AFFIDAVIT OF JAMES G. PARTLOW AND VICTOR NERSES

James G. Partlow and Victor Nerses, being first duly sworn, hereby affirm that the responses to the questions set forth herein are true and correct to the best of our knowledge and belief:

Q1: Please state your full name, employer, and occupation.

A1: My name is James G. Partlow. I am the Associate Director for Projects, Office of Nuclear Reactor Regulation of the U.S. Nuclear Regulatory Commission.

My name is Victor Nerses. I am the Seabrook Senior Project Manager, Project Directorate I-3, Office of Nuclear Reactor Regulation of the U.S. Nuclear Regulatory Commission.

Q2: Gentlemen, have you prepared a statement of your professional qualifications?

A2: Yes, statements of our professional qualifications are attached as exhibits to this affidavit.

Q3: Gentlemen, what is the purpose of this affidavit?

A3: This affidavit addresses the question whether the Licensing Board should grant a motion to reopen the record to admit a late-filed contention challenging certain aspects of Applicants' operator training and low power testing program filed by the Massachusetts Attorney General, NECNP, and SAPL ("intervenors"). Specifically, this affidavit discusses whether intervenors' late-filed contention involves a fundamental flaw in the adequacy of Applicants' management and operator training program or the low power testing program and whether their motion to reopen the record raises a significant safety issue which likely could have led to a materially different result had it been considered before the record in this proceeding closed.

Q4: Gentlemen, have you reviewed intervenors' motion to reopen the record and late-filed contention?

A4: Yes, we have. We have also reviewed Applicants' response to the motion. For the reasons made clear by the responses to the questions which follow, it is the Staff's position that intervenors' late-filed contention does not involve a fundamental flaw in the adequacy of Applicants' training program, or low power testing program and that intervenors' motion to reopen the record does not raise a significant safety issue.

Q5: Do you have a position as to whether the June 22, 1989 event involves a fundamental flaw in Applicants' operator training or low power testing program or raises a significant safety or environmental issue?

A5: Yes. It is the Staff's position that the June 22 event neither constitutes a fundamental flaw in Applicant's training and low power

test program nor raises a significant safety issue regarding Applicants' ability to operate the facility safely at full power.

As with an emergency planning exercise, low power testing is, as a practical and coincidental matter, conducted near the end of the full power operating license proceeding; indeed, such testing frequently occurs after the proceeding has been completed and after a full power license has issued. Additionally, in evaluating the results of low power testing, the Staff's concern is not with minor or ad hoc problems occurring during the testing but rather with pervasive or "fundamental" deficiencies which pose significant public health and safety problems.

As described in Chapter 14 of the FSAR, the low power test program is part of the Seabrook initial test program. The program is conducted to assure that the facility performs as designed and can be operated safely, that plant and emergency operating procedures are adequate, and that plant personnel are knowledgeable and prepared to operate the facility in a safe manner. As with any test program, it is expected that, in spite of adequate construction and pre-operational testing and extensive training of personnel, occasional problems may be identified and personnel errors may occur. This is part of the testing process.

Applicants' low power test program was reviewed by the Staff and found to be consistent with regulatory requirements. The Safety

Evaluation Report for the Seabrook Nuclear Power Station, dated March 1983, and Supplement 8 to the Safety Evaluation Report, issued in May 1989, document the Staff's acceptance of the Seabrook initial test program, including the low power test program. The adequacy of Applicants' preparations for low power testing and the readiness of both the licensee personnel and facility have been confirmed by the Staff and is documented in NRC Inspection Report No. 50-443/89-80.

The Staff conducted inspections of Applicant's conduct of low power testing during the period between June 13, 1989 (initial criticality) and June 22, 1989 when the reactor was tripped during the conduct of the natural circulation test. These inspections determined that, with the exception of the errors made during the June 22, 1989 event, the low power test program was satisfactorily implemented in accordance with the license and the plant performed as designed (Insp. Rept. 50-443/89-81).

The NRC designated an Augmented Inspection Team (AIT) to review the June 22, 1989 event. The AIT findings are documented in Inspection Report No. 50-443/89-82, issued August 17, 1989. The AIT concludes that "reactor plant safety was never in question, and with the exception of the significant error of not tripping the reactor at the point first called for by the test procedure and loss of pressure control due to letdown isolation and pressurizer heater deenergization, the operating staff performed well." (p. 6). The

AIT report provides a summary of assessments (pp. 6-9) regarding the facility and personnel performance during and after this event.

Although the AIT report correctly identifies the June 22 event as involving significant error, it is important to note that this event should be considered in context with all of Applicants' activities during low power testing. So viewed, this event constitutes but an exception to what otherwise has been evaluated by the Staff as fully acceptable performance during the preparations for and conduct of low power testing.

Such an exception does not constitute a failure of an essential element of the primary program or plan (for example, the operator training program), but rather, errors in not meeting one specific requirement contained within the overall program or plan. To remedy this so as to prevent recurrence of the errors, does not require developing a whole new program or plan or even a significant revision to the existing program or plan. Messrs. Minor and Sholly, the intervenors' affiants, state that some improvements in the training program are warranted (Affiants' affidavit, p. at 22). The Staff agrees but notes that "some improvements" in the training program hardly translates into a failure in the essential elements of the Applicants' established programs or plans and specifically their training program. For these reasons, the Staff does not consider the performance of the management and operators during the natural circulation startup test to evidence a fundamental flaw.

Although a matter of concern to the Staff, the June 22 event, when viewed in the overall context of facility and personnel performance and training at Seabrook throughout the pre-operational and low power testing period does not present a significant safety issue or otherwise indicate a potential threat to the public health and safety.

The AIT report concludes that the June 22 event has little or no reactor safety significance when the reactor plant transient is compared to other analyzed events, such as a steam line break or inadvertent initiation of a coolant loop. Furthermore, no safety systems were challenged and the plant performance during the minor cooldown portion of the transient was consistent with design modeling. It should also be noted that, had the operating crew failed to take action to restore pressurizer level during the transient, the plant operating procedures require the reactor to be tripped when the pressurizer level fell to 5%. The Staff is confident that the trip would have occurred because, as reported by the AIT, plant personnel had understood that the 5% operational limit must be complied with.

The AIT found that the June 22 event was "safety significant" when considering the performance of management and operator personnel during a specific plant test. As other knowledgeable Staff members have attested, some errors were made, personnel did not fully appreciate the importance of adhering to test procedures, and

unacceptable operational practices were exhibited by some personnel in the control room during the conduct of the natural circulation test. (See Martin/Eselgroth Affidavit). The Staff is concerned by this conduct and agrees with Messrs. Minor and Sholly, intervenors' affiants, that some improvement in the training program is needed to prevent recurrence. Applicants have committed to take corrective actions on the existing adherence to procedures policy and to ensure that all New Hampshire Yankee personnel receive initial and continuing training on the clarified policy. The Staff will evaluate the adequacy of these corrective actions.

The Staff regularly assessed the performance of Applicants through the NRC's comprehensive inspection program and the Systematic Assessment of Licensee Performance (SALP) process. During the previous SALP period, Applicants were evaluated as having the following attributes: a high level of technical competence during program planning and implementation; licensed operators who exhibited conservative judgment, a safety conscious attitude, and a highly professional standard of conduct during preoperational testing, core loading, and hot functional testing; and a management organization that has been attentive to problem areas. The Staff continues to believe, as supported by the results of its ongoing inspection program, that the operating staff is well trained, dedicated, highly motivated, and responsive to NRC concerns. During the preparations for low power testing the operating crews were observed to be conducting operations in a professional manner, following operating

procedures, and as being cognizant of ongoing activities. Test activities have been conducted in a smooth, safe, and well coordinated manner. Communication between management and operations staff was satisfactory.

Based on the Staff's direct knowledge and encounters with Applicant personnel, and considering SALP and inspection report findings, and all of the other circumstances noted above, the mistakes made by management and operating personnel during the natural circulation startup test do not represent a breakdown in Applicants' plan and programs. Consequently, the Staff concludes that nothing in the performance of the management or the operators during the natural circulation startup test constitutes a significant safety issue which likely could have led to a materially different result had it been considered before the record in this proceeding closed.

Q6: Attached to intervenors' motion to reopen and late-filed contention is a joint affidavit of Gregory C. Minor and Steven C. Sholly. Have you reviewed this affidavit?

A6: Yes, we have.

Q7: At page 13 of their affidavit, Messrs. Minor and Sholly conclude that the "procedural noncompliance of 22 June 1989 is not an isolated event, but is rather part of a pattern of procedural noncompliance at the Seabrook Station" and is "much more serious since it represents a pervasive noncompliance, involving the entire shift crew on duty at the time of the incident." Do you agree with this conclusion?

A7: No, we do not. Inspection Reports 50-443/89-01, 50-443/89-03, 50-443/89-05 and 50-443/89-06, identify other documented instances where Seabrook personnel have not strictly adhered to procedures. Intervenors point to instances of procedural noncompliance problems in Inspection Report 89-03 at 24 (Intervenors' affidavit at 12),

involving valve positioning errors. Also there was one instance involving the generation of a reactor trip signal when steam generator levels were allowed to drop to the trip setpoint, and the other involved pressurizer power-operated relief testing. The valve positioning errors resulted in a Notice of Violation. Applicants responded to the Notice of Violation on June 26, 1989. In their response, Applicants indicated the need to revise procedures and conduct additional personnel training. Unlike the June 22 event, the valve positioning errors involved a weakness in the plant procedure as well as personnel error. In the Staff's experience, these kinds of relatively minor violations are not unusual during the conduct of operations early in the life of a facility. Occasional noncompliances are found by inspectors even after the early life of a facility. When such instances are found, they are evaluated for their safety significance and severity. The reported instances of procedural noncompliance do not indicate that any pattern of procedural noncompliance exist.

Although the Staff has identified a few instances of inattention to detail which could indicate a possible declining trend in facility performance, the Staff has not found evidence of a pervasive pattern of noncompliance. The personnel actions during the June 22 event do not represent a pervasive noncompliance, but rather a misunderstanding of the requirements imposed by a test procedure and their relationship to requirements imposed by operating procedures. As reported in the AIT report, it appears that this misunderstanding

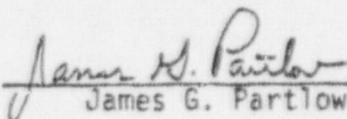
may have led to the decision by the operating crew and test personnel to allow the pressurizer level to fall below 17% (the test procedure limit) when the operational limit was known to be 5%.

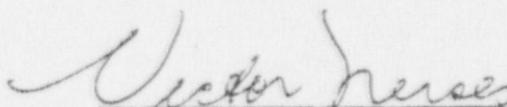
Q8: Gentlemen, based on your responses to the preceding questions, is it the Staff's position then that the June 22, 1989 event does not involve a fundamental flaw in Applicants' operator training or low power testing program and does not raise a significant safety or environmental issue?

A8: Yes it is.

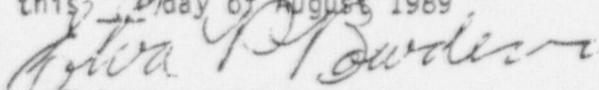
Q9: Gentlemen, does this complete your affidavit?

A9: Yes it does.

  
James G. Partlow

  
Victor Nerses

Sworn to and subscribed before me  
this 16 day of August, 1989

  
My Commission Expires July 1, 1990

My Commission Expires: \_\_\_\_\_

STATEMENT OF  
PROFESSIONAL QUALIFICATIONS  
BY  
JAMES G. PARTLOW

I, James G. Partlow, am the Associate Director for Projects in the USNRC's Office of Nuclear Reactor Regulation. In this position, I am responsible for overall project management activities related to the licensing and inspection of power and non-power reactors. I have served in this position since April 1989.

During my sixteen year career with the NRC, I have held the positions of Inspector and Section Chief in the NRC's Philadelphia Regional Offices and the positions of Branch Chief, Division Director, and Office Director in NRC Headquarters. In my most recent assignment as Director of the Office of Special Projects, I was responsible for carrying out NRC's regulatory programs at the Tennessee Valley Authority (TVA) and Commanche Peak facilities. My assignments as a Branch Chief Division Director have included experience in such areas as leadership of NRC Performance Appraisal Team, development of inspection program policy and procedures, quality assurance programs, reactor security and fitness for duty policy, and procedures for the Systematic Assessment of Licensee Performance (SALP) program.

Prior to joining the NRC in July 1973, I served as a Naval Officer in the Navy nuclear propulsion program. I was assigned to three nuclear powered submarines in operations, engineering and executive officer positions.

I am a graduate of the United States Naval Academy. I received a MS degree in Physics from the U.S. Naval Post-graduate School and a MBA degree from the Stanford University Graduate School of Business.

STATEMENT OF  
PROFESSIONAL QUALIFICATION  
BY  
VICTOR NERSES

I, Victor Nerses, am a nuclear engineer employed by the United States Nuclear Regulatory Commission as the Senior Project Manager for licensing of Seabrook Unit 1. My basic duties are to manage the environmental and safety review of the Seabrook Unit 1 application for an operating license.

My duties involve assuring compliance with applicable NRC rules and regulations and the provisions of the Atomic Energy Act and National Environmental Policy Act. In furtherance of these duties, I am responsible for coordinating the issuance of such documents as Safety Evaluation Reports and Environmental Statements, technical specifications, orders, amendments and licenses.

Before joining the NRC in 1977, I worked for the AEC from 1967 to 1977 as a Project Officer at the Schenectady Naval Reactors Office in Schenectady, New York.

From 1977 to 1981, I held a position as Nuclear Engineer in the Reactor System Branch of the Division of Operating Reactors. From 1981 to the present, I held the position of Project Manager.

I received a B.S. degree in Physics from the University of Rhode Island and a M.S. degree in Physics from Rensselaer Polytechnic Institute. I took additional graduate studies in metallurgy at the Massachusetts Institute of Technology.