Long
Island
Power
Authority

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LSNRC-2097

AUG 0 2 1993

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Response to Request for Plant-Specific
Information to Support an Exemption from
the Training Rule (10CFR50.120)
Shoreham Nuclear Power Station - Unit 1
Docket 50-322

Ref: (1) NRC letter dated June 25, 1993 to Licensees of Plants in the Decommissioning Process from B.K. Grimes and R.L. Bangart; subject: Implementation of the Training Rule (10CFR50.120).
(2) Conference call between the NRC and Licensees of Plants in the Decommissioning Process, July 7, 1993.

Gentlemen:

In the Reference 1 letter, the NRC staff requested licensees of plants in the decommissioning process to evaluate needed training, considering the specific conditions at their facilities, for the nine categories of nuclear power plant personnel affected by the training rule. The staff also stated that if licensees feel that development of a SAT-based training program in any of these areas is unnecessary at their facility, then they may indicate the specific reasons why such SAT-based training is unnecessary, and the nature of the existing training programs. The NRC would then review the information submitted and where adequate justification is provided, would issue on its own motion any appropriate exemptions from the training rule.

The Long Island Power Authority (LIPA) has evaluated needed training at the Shoreham Nuclear Power Station and concluded that implementation of a SAT-based training program in all of the categories is unnecessary. LIPA considers the current training and qualification program to be adequate and believes that the NRC should consider granting a full exemption to LIPA from the requirements of 10CFR50.120. Attachment 1 to this letter provides the reasons for this conclusion.

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As recommended in the Reference 2 conference call, a brief description of the training provided to the nine categories of nuclear power plant personnel has been provided in Attachment 2.

If you have any questions or require additional information, please do not hesitate to contact my office.

Very truly yours,

L. M. Hill
Resident Manager
Shoreham Station

RAP/ab
Attachments

cc: L. Bell
C. L. Pittiglio
T. T. Martin
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ATTACHMENT 1

TO

LSNRC-2097

WHY A FULL EXEMPTION FROM 10CFR50.120 SHOULD BE GRANTED TO LIPA

The Long Island Power Authority (LIPA) is a political subdivision of the State of New York. As a matter of state law, LIPA is only authorized to acquire the Shoreham Nuclear Power Station and then close and decommission it. LIPA is not authorized to operate a nuclear power plant. Furthermore, LIPA does not own any other power generating facilities. Therefore, training needs for LIPA employees are limited to those areas associated solely with the maintenance and decommissioning of SNPS.

Shoreham Does Not Operate

The new training rule states that "The training program must incorporate the instructional requirements necessary to provide qualified personnel to operate and maintain the facility in a safe manner in all modes of operation." LIPA does not "operate" Shoreham in any mode. However, if in the NRC's view, decommissioning is considered to be a mode of operation, then it would be the only mode that applies to Shoreham. LIPA only maintains certain basic systems in service (none of which are safety-related) in order to support decommissioning, and maintains several components/systems operable in order to comply with the Possession-Only License.

Plant Status

Shoreham is permanently shutdown and defueled. It has held a Possession-Only License since June 20, 1991. Additionally, the Shoreham Decommissioning Plan, implementing the DECON decommissioning alternative, was approved and a Decommissioning Order issued on June 11, 1992. The majority of the decommissioning project has already been completed, with the balance expected to be completed in 1994. Work completed includes the most complicated and highest man-Rem jobs such as removal of the RPV internals and removal of the RPV itself. Approximately 94% of the estimated quantity of contaminated material has been removed from the site. The remaining decommissioning work includes the Spent Fuel Pool (SFP) components, Liquid Radwaste System and Fuel Pool Cooling and Cleanup System.

The Spent Fuel Pool components will remain at Shoreham until the fuel has been removed from the pool, however, the Fuel Pool Cleanup and Cooling Systems are already in the process of being dismantled. (There is insignificant decay heat from the fuel, and a temporary demineralizer has been installed to maintain pool water quality.) Most liquid radwaste

processing is expected to be complete by the end of 1993, and this system is also currently undergoing decommissioning under a phased approach.

A large number of plant systems are no longer in use. These systems have been either fully or partially layed up or else removed as part of the decommissioning process. Most of the systems which remain in service are habitability systems such as HVAC and electrical power distribution. With fewer systems to operate and maintain, the training requirements for operators, mechanics, technicians, etc., have been reduced considerably.

With regard to the fuel as noted above, a single core load consisting of 560 slightly irradiated (equivalent to two effective full power days) fuel assemblies is currently stored in the Spent Fuel Storage Pool awaiting transfer to another licensee in the near future. There is no active cooling required for this fuel, and only a temporary demineralizer is in place for water quality purposes. The worst case fuel damage accident possible at Shoreham, which assumes no credit for any mitigation by equipment or operator action, would result in no consequences which would warrant actions to protect the offsite general public.

Radiation Protection

Shoreham was never operated in excess of 5% of rated core thermal power and even this low power operation was for relatively short periods of time. This has resulted in the plant systems and components becoming only slightly contaminated. With the exception of the fuel in the Spent Fuel Pool, there is less than one millicurie of activity in the remaining contaminated systems.

The total decommissioning project dose, as of June 30, 1993, was only approximately 2.7 person-Rem. This dose was incurred during one year of decommissioning work which involved hundreds of people and included the most highly radioactive components on site. Furthermore, of the 1568 people monitored during 1992, only 113 of them received any measurable exposure and none of this group received more than 0.1 rem during the year. Finally, the estimated dose for the remainder of the decommissioning project is only 0.7 person-Rem.

Initial Training Is Not Anticipated

Since decommissioning is nearing completion, there will not likely be any need to hire new licensee personnel. Even if new personnel are hired, the amount of time until the end of decommissioning is limited, and consequently, only limited benefits could be obtained by applying a SAT-based initial training program to these personnel.

Rather than hiring new licensee personnel, LIPA will rely on short-term contractor personnel to fill vacancies during the remainder of the decommissioning project. Contractor personnel are hired on the basis of satisfactory evidence that they possess the skills needed for the job and should not require anything more than basic site-specific training. These short-term contractor personnel are exempt from the requirements of the new 10CFR50.120 regulation. Even if these personnel are assigned to work independently within LIPA's organization, LIPA will ensure that they are qualified to perform the assigned tasks using LIPA's current training programs.

LIPA's Current Training Is Adequate

LIPA's Training Program is outlined in Section 2.4 of the Shoreham Decommissioning Plan. This program contains the elements necessary to meet the requirements associated with maintaining the plant in the defueled configuration. It has also been augmented by the inclusion of specific training commensurate with the varying requirements of the different stages of decommissioning. Examples of this specific training include decontamination and dismantlement techniques.

LIPA's current training programs are adequate to ensure that there are no adverse effects on the public health and safety due to the work performed by licensee personnel. This conclusion is based on the following considerations: 1) The Shoreham fuel has an exposure approximately equal to only 2 effective full power days. This has resulted in the negligible decay heat load of about 200 watts. Therefore, there are no active cooling systems required. 2) The gaseous inventory in the 560 fuel assemblies in the Spent Fuel Pool is relatively small and could not result in a "Part 100" type release even in the event that 100% of the gaseous activity from all assemblies was released. Therefore, there are no accident mitigation features required. 3) In the Safety Evaluation Related to the Order Approving the Decommissioning Plan and Authorizing Facility Decommissioning, the NRC concluded that none of the accidents at Shoreham have potential consequences (radiation doses) in excess of the Protective Action Guidelines recommended by the EPA "A Manual of Protective Actions for Nuclear Incidents," 1991.

LIPA's current Training and Qualification Program was initially configured to support plant operation and was originally based on a systems approach to training. This program, however, has been continuously revised due to the effect of the plant being shutdown, defueled and undergoing decommissioning. Thus, due to the evolving nature of the project and the rapid pace and short remaining time frame for decommissioning, the feedback and revision cycle aspects of the SAT-based approach are no longer effective.

Consequently, the SNPS training program is being supplemented by additions to General Employee Training, all hands meetings, department meetings, tailboard meetings, etc. This approach ensures that personnel are kept informed of important new information as soon as possible.

Conclusion

Implementation of the training rule (10CFR50.120) would be an unnecessary burden on LIPA and would not provide any benefit in maintaining the public health and safety. The decommissioning of Shoreham is nearly complete and thus the time that the rule would apply to LIPA, i.e., November 22, 1993 until license termination, is expected to be short. LIPA anticipates using short term contractors rather than hiring new licensee personnel so initial training of personnel using a SAT-based program will likely never occur. Most of the applicable licensee personnel were initially trained using a SAT-based program. Continuing training as noted above for the decommissioning process, is sufficient considering the limited safety consequences of the maintenance and decommissioning of Shoreham.

Due to the changes to the facility and related work activities which occur as a result of decommissioning, the new rule would require additional revisions to LIPA's training programs. Making additional revisions to the LIPA training programs is not warranted since this training has already been revised extensively to account for facility changes and work activities associated with decommissioning. Furthermore, the periodic review for effectiveness by LIPA management would be of minimal value because the training requirements will continue to evolve as the decommissioning proceeds through different phases. Personnel resources would be put to a better use by continuing to maintain the current Training and Qualification Program. This program will ensure that personnel have qualifications commensurate with the performance requirements of their jobs.

ATTACHMENT 2

TO

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DESCRIPTION OF TRAINING PROVIDED TO PLANT PERSONNEL

Training programs for Shoreham plant personnel were originally developed using the Systematic Approach to Training and were accredited by INPO. The key elements of this SAT methodology are still being maintained.

Most of those training programs were administered to licensee personnel as "permanent" qualifications for the various job categories, which will continue to be staffed by the same licensee personnel. Specific training requirements for the 9 categories of power plant personnel identified in the training rule are itemized at Shoreham in a computerized system of "Position Specifications," identifying the appropriate training qualifications drawn from the INPO-approved pool of training modules. A brief description of the training provided to these categories follows:

(1) Non-licensed Operator
The Certified Fuel Handling Operator Training Program was derived from the licensed RO/SRO training that was originally developed using the Systematic Approach to Training. The program is constantly being revised to reflect the current status of the plant and its equipment. The program consists of classroom training, plant drills and job performance measures (JPM's). The Certified Fuel Handling Operator Training Program is an NRC-approved program. Non-licensed Equipment Operators attend the same classroom training as the Certified Fuel Handling Operators.

(2) Shift Supervisor
Watch Engineers are the LIPA equivalent of Shift Supervisors at Shoreham. They attend the same classroom training as described above for non-licensed operators.

(3) Shift Technical Advisor
The position of STA is not required by Shoreham Defueled Technical Specifications and no personnel are in this category.

(4) Instrument and Control Technician
I&C Technicians were initially trained under the INPO-certified program which included required courses in:

Basic Electronics
Basic Electricity
Certification to ANSI 18.1-1971 standards
Basic Mathematics and Science
Quality Assurance Indoctrination
Print Reading
Administrative Procedure Training

In addition, they attended task- or equipment-specific training as appropriate in areas such as:

Control Circuit Checkout/Troubleshooting
Process Control Instrumentation (Electrical & Pneumatic)
Motor Operated Valves
Security Systems
Closed Circuit TV Systems
Cranes (Polar, Refuel, Turbine)
Vibration Analysis
Surveillance Testing

They continue to receive periodic site-specific requalification under training programs utilizing the systematic approach to training, such as General Employee Training (G.E.T.), respirators, and fire watches. Periodic ANSI 18.1-1971 re-certification to their positions is also conducted.

(5) Electrical Maintenance Personnel
Electricians were initially trained under the INPO-certified program in the same structure as described below for Mechanical Maintenance Personnel, item (6). They continue to receive periodic site-specific requalification under training programs utilizing the systematic approach to training, such as G.E.T., respirators, and fire watches. Periodic ANSI 18.1-1971 recertification to their position is also conducted.

(6) Mechanical Maintenance Personnel
Mechanics were initially trained under the INPO-certified program which included required courses in:

Quality Assurance Indoctrination
Maintenance Section Admin Procedures
Certification to ANSI 18.1 standards

In addition, they attended task- or equipment-specific training as appropriate in areas such as:

Asbestos Handler/Worker Training
Hazardous Waste Handling
Basic Repairman
Operator Training (Crane, Bucket Truck, Drill Press)
Flame Cutting/Brazing
Forklift Operator
Heavy Equipment Operator
Hydrolazer Operations
Rotating Equipment Maintenance
Lathe Operator
Milling Machine Operator
Rigging Operations
Shop Equipment Operator
Sling and Hoist Inspector

Telect Derrick Operator
Class 1 (or 3) Vehicle License

They continue to receive periodic site-specific requalification under training programs utilizing the systematic approach to training, such as G.E.T., respirators, and fire watches. Periodic ANSI 18.1-1971 re-certification to their positions and licenses is also conducted.

(7) Radiological Protection Technician
Licensee HP Technicians were initially trained under the INPO-certified program which included required courses in:

Basic Academics
Health Physics Fundamentals
Certification to ANSI 18.1

In addition, they attended task- or equipment-specific training as appropriate in areas such as:

HP External/Internal Dose (classroom)
HP External/Internal Dose (OJT)
HP Instrumentation (classroom)
HP Instrumentation (OJT)
Radiological Controls (classroom)
Radiological Controls (OJT)
Perform Termination Surveys
HP Radioactive Materials (classroom)
HP Radioactive Materials (OJT)
HP Respiratory Protection (classroom)
HP Respiratory Protection (OJT)
Hazard Communication
Licensed Source User

They continue to receive periodic site-specific requalification under training programs utilizing the systematic approach to training, such as G.E.T., respirators, and HP Continuing Education. Contractor personnel performing decontamination and termination survey functions are trained in their specific duties with lesson plans developed consistent with the systematic approach to training.

(8) Chemistry Technician
Radchem technicians were initially trained under the INPO-certified program which included required courses in:

Quality Assurance
Basic Academics
Radiochemistry Fundamentals
Applied Radiochemistry Fundamentals (classroom)

Certification to ANSI 18.1
Radchem Process Technician (OJT)

In addition, they attended task- or equipment-specific training as appropriate in areas such as:

On the Job Training
In-Line Analysis Equip-Chlorine
In-Line Analysis Equip-Silica
In-Line Analysis Equip-Boron/Ph Analysis
In-Line Analysis Equip-Dissolved Oxygen Analyzer
In-Line Analysis Equip-Conductivity

They continue to receive periodic site-specific requalification under training programs utilizing the systematic approach to training, such as G.E.T. and respirators, as well as Continuing Re-Training on a quarterly cycle. Periodic ANSI 18.1-1971 re-certification to their position is also conducted.

(9) Engineering Support Personnel
Engineering Support Personnel were initially trained under the INPO-certified program which included required courses in:

Quality Assurance Indoctrination
Administrative Procedure Training
Certification to ANSI 18.1

In addition, they attended task- or equipment-specific training as appropriate in areas such as:

Control Circuit Checkout/Troubleshooting
Process Control Instrumentation (Elect. & Pneumatic)
Motor Operated Valves
Security Systems
Fire Detection Systems
Polar Crane
Measuring and Test Equipment (M&TE)
Vibration Analysis
Surveillance Testing

They continue to receive periodic site-specific requalification under training programs utilizing the systematic approach to training, such as G.E.T., respirators, Fitness-For-Duty, and Medic First Aid. Periodic ANSI 18.1-1971 re-certification to their position is also conducted.