

UNITED STATES NUCLEAR REGULATORY COMMISSION
BEFORE THE COMMISSION

In the Matter of

LONG ISLAND POWER AUTHORITY

(Shoreham Nuclear Power Station,
Unit 1)

Docket No. 50-322

(Decommissioning
Authorization)

AFFIDAVIT OF LESLIE M. HILL

Leslie M. Hill, Resident Manager, Shoreham Nuclear Power Station, being first duly sworn, states as follows:

INTRODUCTION

1.(a). I am the Resident Manager of the Shoreham Nuclear Power Station (Shoreham), employed by the Long Island Power Authority (LIPA). In this capacity I have overall onsite responsibility for the safe and efficient decommissioning of Shoreham. I have the authority to implement all administrative controls in conformance with applicable regulatory requirements regarding the facility and have the responsibility for the coordination of all decommissioning functions through key personnel. I am also responsible for the selection and training of personnel, administrative implementation of plant security, and relations with regulatory authorities, including the Nuclear Regulatory Commission (NRC). I am familiar with and can attest to the significant implications of a delay in NRC approval of LIPA's decommissioning plan beyond May 15, 1992 at Shoreham.

1.(b). The purpose of this affidavit is to support the position of LIPA that circumstances exist warranting prompt Commission action on the NRC Staff's recommendation (in a memorandum of April 17, 1992) that an immediately effective order approving the decommissioning plan for Shoreham be issued as soon as practicable, but in any event, no later than May 15, 1992. Specifically, this affidavit explains how a delay in issuance of such an order beyond May 15, 1992 translates into problems potentially resulting in unnecessary onsite low-level waste storage, decommissioning delays, and avoidable costs that will be borne by the ratepayers of Long Island.

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BACKGROUND

2.(a). On February 26, 1992, the NRC authorized the transfer of ownership of the Shoreham plant from the Long Island Lighting Company to LIPA, an entity of New York State. Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-92-04, slip op. (Feb. 26, 1992).

2.(b). In anticipation of the transfer of ownership to LIPA, by letter dated December 29, 1990, pursuant to 10 C.F.R. Section 50.82, LIPA submitted to the NRC a Decommissioning Plan for Shoreham and a Supplement to the Environmental Report for Shoreham Decommissioning. The Shoreham Decommissioning Plan provides technical background for the effort to decommission Shoreham, including information concerning selection of the immediate dismantlement decommissioning option (DECON), radiological protection programs, residual radioactive contamination release criteria, decommissioning cost estimates, technical and environmental specifications, quality assurance provisions, security program, and a schedule for completion of decommissioning. The Supplement to the Environmental Report provides information which demonstrates that the environmental impacts of decommissioning Shoreham are bounded by the NRC's analysis (NUREG-0586) of the impacts of decommissioning the end-of-life reference BWR.

2.(c). One year later, on December 23, 1991, the NRC Staff noticed in the Federal Register a "Consideration of Issuance of an Order Authorizing Decommissioning [of] a Facility and Opportunity for Hearing." 56 Fed. Reg. 66,459. The notice provided a thirty day comment period with respect to issuance of an order approving the Shoreham Decommissioning Plan and authorizing Shoreham decommissioning. Two petitions to intervene were filed in response to this notice.

2.(d). On April 3, 1992, the Commission denied the NRC Staff's motion to dismiss the petitions to intervene, and forwarded the petitions to an Atomic Safety and Licensing Board "for processing in accordance with the NRC's Rules of Practice." Order, at 3.

2.(e). On April 17, 1992, the NRC Staff recommended that the Commission approve by May 1, 1992 issuance by the Staff of an order approving LIPA's Decommissioning Plan including a no significant hazards consideration determination. The Commission has the Staff's recommendation before it at this time.

IMPLICATIONS OF DELAY IN AUTHORIZING SHOREHAM DECOMMISSIONING

3.(a). Continued delay in obtaining authorization for Shoreham decommissioning will have significant impacts on the complexity and duration of the Shoreham Decommissioning Project and, consequently, on the cost of the project. The magnitude of the additional costs could reach as high as \$320,000 per day.

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3.(b). Shoreham decommissioning costs are driven primarily by personnel costs. Thus, to the extent that the project duration is extended for any reason, additional costs are incurred because of the need to retain personnel at Shoreham for longer periods of time.

3.(c). The Shoreham Reactor Pressure Vessel (RPV) and internals contain approximately 600 curies of radioactive material. Disposal of these materials represents the primary radiological challenge of all Shoreham decommissioning activities that are constrained by issuance of a Decommissioning Order. It is a priority objective of LIPA that these materials be disposed of in a licensed burial facility before the end of 1992, in order to avoid the need for interim storage of these materials at the Shoreham site after the burial facilities close to further disposal of low-level radioactive waste originating outside of their states. All licensed burial facilities are scheduled to be closed to disposal from out-of-state as of December 31, 1992.

3.(d). In order to meet this deadline, LIPA has ensured that it is prepared to commence the removal, segmentation and disposal of the RPV internals on May 15, 1992, to be followed immediately by removal, segmentation and disposal of the RPV itself. Such preparations include mobilization of specialty contractor personnel and specialty equipment. Failure to commence the aforementioned activities on time will result in such personnel being retained at Shoreham longer, thereby incurring additional staff costs.

3.(e). With the addition of these personnel and other decommissioning staff personnel, the general site worker population at Shoreham will reach approximately 1000 people. A significant fraction of this population is needed to meet the requirements of the Shoreham 10 C.F.R. 50 license. To the extent that the project schedule is extended, license termination would be delayed. Thus, between any delay in decommissioning work and the associated delay in license termination, much or all of the site worker population would need to remain at Shoreham longer. If all of these 1000 workers were retained an extra day, the additional cost incurred would be approximately \$320,000. Should there be an extended delay, LIPA would have the alternative of reducing the site worker population; however, as noted above, much of this population is needed under the station license, and there would still be a significant cost impact through the loss of time and effort invested in personnel acquisition and training.

3.(f). Delays in commencing Shoreham decommissioning would also result in further schedule delays in that certain essential equipment will be less available after the passage of time. For example, the polar crane is to be used for a variety of decommissioning activities, including those noted above, and use of the crane for decommissioning activities is thus on a critical path. Use of the polar crane is also essential for fuel disposition, which is currently anticipated to occur the latter part of this year. This leaves a window for exclusive use of the

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polar crane for other decommissioning activities at this time. A delay in commencement of decommissioning would further extend the decommissioning schedule because these decommissioning activities requiring the use of the polar crane will become constrained when fuel disposition is taking place.

3.(g). Beyond the financial ramifications, there are additional logistical consequences of a delay in authorizing decommissioning. As noted earlier, such a delay would have a significant impact on LIPA's ability to dispose of low-level radioactive waste (LLW) at the Barnwell, South Carolina and Hanford, Washington burial sites. The Barnwell and Hanford sites are scheduled to close to further LLW disposal from outside of their states at the end of 1992. Thus, failure to commence decommissioning activities according to schedule could require the indefinite onsite storage of the bulk of Shoreham decommissioning LLW at Shoreham due to Barnwell and Hanford closure. While contingency plans are being prepared to do so as a matter of prudence, it would be in the best interests of LIPA, the Shoreham community, the ratepayers of Long Island, and the NRC not to be faced with this unnecessary burden.

3.(h). There would be several consequences resulting from indefinite onsite storage of larger quantities of LLW at the Shoreham plant. First, the potential occupational exposure due to onsite storage of LLW will be increased if the LLW must continue to be stored on site. This was a concern raised and emphasized by the NRC Staff in its technical review of the Decommissioning Plan. Second, any future LLW disposal would come at increased costs. These costs will be borne by the ratepayers of Long Island. Finally, although LIPA would naturally ensure that onsite storage of additional amounts of LLW did not jeopardize the public health and safety, avoidance of the need for such storage would obviously remove any concerns that the Shoreham community might have regarding the storage of additional LLW.

3.(i). Delay in authorizing Shoreham decommissioning may also result in a reduction in the availability of qualified personnel. Highly specialized personnel and equipment are required to perform many of the tasks associated with Shoreham decommissioning. Rather than having trained personnel and useful equipment remain idle at Shoreham awaiting initiation of decommissioning activities, contractors may elect to send trained personnel and equipment to other projects, thus reducing the subsequent, immediate availability of those personnel and equipment and further delaying Shoreham decommissioning.

CONCLUSION

The foregoing demonstrates the consequences of delaying issuance of an order authorizing decommissioning of the Shoreham Nuclear Power Station beyond May 15, 1992. In summary, these adverse consequences involve extension of the project schedule and associated cost increases, storage of additional LLW at the Shoreham site involving additional occupational radiation exposure and costs, and potential loss of qualified specialty contractor personnel and equipment availability.

All of these problems would add up to significant and avoidable cost impacts. Accordingly, circumstances exist warranting Commission action as soon as practicable on the NRC Staff's recommendation for an immediately effective order approving LIPA's decommissioning plan, so that the order may be issued no later than May 15, 1992.

I swear that the foregoing is true and accurate to the best of my knowledge.

Executed at Wading River, New York, this 28th day of April, 1992.

Leslie Hill
Leslie M. Hill

Subscribed and sworn to before me
this 28th day of April 1992.

BRUCE W. EAKEN, JR.
NOTARY PUBLIC, State of New York
No. 31-1062830
Qualified in New York County
Commission Expires March 30, 1993

Bruce W. Eaken Jr.