

ORIGINAL

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

| | | |
|------------------------|---|----------------------------------|
| In the Matter of |) | |
| |) | Docket No. 50-286 |
| POWER AUTHORITY OF THE |) | Facility Operating License |
| STATE OF NEW YORK |) | No. DPR-64 |
| |) | (Extension of Interim Operation) |
| (Indian Point Station, |) | |
| Unit No. 3) |) | |

AFFIDAVIT OF PAUL J. EARLY

| | | |
|--------------------|---|-----|
| State of New York |) | |
| |) | ss: |
| County of New York |) | |

PAUL J. EARLY, being first duly sworn, deposes and says:

1. My name is Paul J. Early. I am the Assistant Chief Engineer-Projects of the Power Authority of the State of New York ("the Power Authority"), 10 Columbus Circle, New York, New York 10019. In that capacity, I am familiar with the license requirement that a closed-cycle cooling system be constructed at Indian Point No. 3 and I am responsible for all engineering design, scheduling, and licensing of Indian Point Station, Unit No. 3 ("Indian Point 3"), as well as any related engineering determinations concerning selection of a closed-cycle cooling system for that facility. I make this affidavit in support of the foregoing "Application for an Extension of the Period of Interim Operation Using the Installed Once-Through Cooling System and Motion for Expedited Commission Consideration" ("the Application"), dated August 7, 1978.

| |
|--------------------|
| 811110901 780802 |
| PDR ADDCK 05000286 |
| P PDR |

2. The Application requests amendment of ¶2.E.(1) of Facility Operating License No. DPR-64 ("the License") to extend the period of operation of Indian Point 3 with the existing once-through cooling system, pending a final determination, including any related judicial review, regarding the appropriate cooling system for Indian Point 3 by the Environmental Protection Agency ("EPA") or the appropriate state authority, pursuant to § 402 of the Clean Water Act (33 U.S.C. § 1364 (Supp. V 1975)).

3. Paragraph 2.E.(1) of the License currently requires the Power Authority to cease operation of Indian Point 3 with once-through cooling by September 15, 1982. The purpose of the requested extension is to ensure that the Power Authority will not be forced unnecessarily to take steps to comply with the closed-cycle cooling condition in ¶2.E.(1), or undergo unnecessary down time, in advance of a final effective Clean Water Act determination. That determination, which will be binding on the Commission, may permit operation of Indian Point 3 with the installed once-through cooling system for the duration of the Indian Point 3 License, provide for a different compliance schedule than that contained in ¶2.E.(1), or provide for a different type of closed-cycle cooling system than that to be designated by the Commission. The termination date is also subject to extension owing to the nonreceipt of a necessary governmental approval within the meaning of ¶2.E.(1)(b) of the License.

4. If the requested extension is not granted, and the current September 15, 1982 termination date in ¶2.E.(1) is retained, the Power Authority will be compelled to begin investment in cooling tower procurement and construction activities in the near future in order to meet the termination deadline. Assuming an installation schedule which allows for no construction contingencies whatsoever, the construction program may be expected to consume approximately 40 to 44 months, depending in part upon the severity of the winter weather experienced during the installation period. This period covers the time from the determination to proceed with installation of closed-cycle cooling to the beginning of the outage for effecting the tie-in to a closed-cycle cooling system. The latter date could be as early as September 15, 1982 (as adjusted under ¶2.E.(1)(b)) unless the relief sought in the Application is granted.

5. Under the current anticipated schedule which would be required by the condition in ¶2.E.(1), activity to comply with the condition could be required to begin no later than January 15, 1979, approximately 5 months from the date of this Application. As indicated below, an EPA decision regarding the cooling system required under the Clean Water Act is expected to be issued within the next two years. Under even the most conservative assumptions, therefore, and assuming commencement of installation is required by January 15, 1979 and an initial EPA decision

may be reached by June 1, 1981, the Power Authority would have had to conduct procurement and construction activities for approximately 28-1/2 months.

6. Installation would involve in the first year large expenditures for engineering and design contractor services. Approximately twelve months after commencement of this program, actual site preparation would be required. This would involve clearing and excavation of an area of approximately 7 acres and approximately 1000 feet of forested shoreline on the Hudson River.

In addition to this irretrievable expenditure of funds for design services in the first twelve months, the clearing and excavation required thereafter would represent not only a financial loss but in addition an irremediable environmental degradation. In the event that it were later determined under the Clean Water Act that the cooling towers would not be required, this entire expenditure of resources would prove unnecessary.

7. The total direct cost estimated for installation of a natural draft wet cooling tower, the alternative system which has been proposed as the preferred alternative system for closed-cycle cooling at Indian Point 3 in the Regulatory Staff's Draft Environmental Statement (NUREG-0296), prepared in the proceeding to designate a preferred system, is approximately \$107,000,000.

8. However, it is probably unrealistic to assume that the Power Authority would only be required to undertake procurement and construction activities for 28-1/2 months prior

to a final determination of the appropriate cooling system under the Clean Water Act. It must be recognized that EPA's decision may not issue within the three years expected, or that related judicial proceedings may delay a final determination thereafter.

9. In the event that the Power Authority undertook these expenses to commence construction of the closed-cycle cooling system, and it were subsequently determined that a closed-cycle cooling system did not have to be constructed for Indian Point 3, a number of irremediable environmental impacts such as site clearance would have occurred. Dismantlement and reclamation costs would also have to be incurred if work had proceeded to the point of actual construction. Both the investment to install closed-cycle cooling, as well as any dismantlement and reclamation costs, must ultimately be borne by the Power Authority's ratepayers. In addition, there exists the possibility that the Power Authority would encounter delays in the construction schedule, or regulatory delays, and would be unable to complete construction in order to comply with the termination date designated pursuant to ¶2.E.(1). This would result in a forced outage of Indian Point 3. Replacement energy for the Indian Point 3 outage would be required to be purchased from other utilities at a substantial cost.

10. The unscheduled outage would be in addition to the time assumed in any event for the tie-in operation required to begin operation with closed-cycle cooling, a period which is estimated to run approximately seven months. The extra unscheduled forced outage, assuming down time would begin on September 15, 1982, might extend total outage time into the next summer's peak-load period, placing demands on the Power Authority far larger than those that were assumed in ¶2.E.(1).

11. If construction were not delayed and the closed-cycle cooling system could be completed, as planned, by September 15, 1982, at which point the seven-month tie-in would begin, an overlap of down time would arise in connection with the currently scheduled termination date and related tie-in period for installation of closed-cycle cooling at the Consolidated Edison Company of New York's Indian Point 2 facility. The present termination date for operation of Indian Point 2 with once-through cooling is May 1, 1982. Thus, even in the event that the postulated construction period could be complied with by both utilities under each utility's license condition, a potential outage overlap of at least three and one-half months exist.

12. The Power Authority, in order to avoid these economic and environmental costs of installation, might be compelled to defer construction of the cooling tower system

until a decision has been made under the Clean Water Act. This would result in a much longer period of down time than that which was assumed merely for tie-in, or even that which might occur due to unexpected construction delays, and would be accompanied by significant incremental fuel costs to the Power Authority's customers for alternate energy. Consequently, unless the request for an extension is granted the public interest will be jeopardized in either event, i.e., if the Power Authority takes steps in the near future to comply with the condition contained in ¶2.E.(1), or if the Power Authority defers construction.

13. The current status of the discharge permit proceedings before EPA indicates that a final determination should be reached sufficiently soon that the extension requested in the present Application will pose no risk of significant or irreversible injury to the Hudson River aquatic biota in the vicinity of Indian Point 3. On July 11, 1977, the utilities in the consolidated proceeding submitted evidence in their direct case in support of their position that closed-cycle cooling systems should not be required under the Clean Water Act. On December 6, 1977, the hearing process in that proceeding began, and the utilities' witnesses were cross-examined by the EPA and the intervenors.

These hearings recessed at the end of June, 1978. After a summer recess it is expected that cross-examination by the EPA and the intervenors will be completed in October, 1978, that EPA and the intervenors will present their direct case in January, 1979, and that the utilities will cross-examine witnesses of the EPA and intervenors beginning in 1979. This process will probably continue through the winter of 1979, and it is expected to be completed by spring, 1980. At the present time, over 100 exhibits have been submitted in these proceedings, 45 of which have been submitted by the utilities.

14. Given the complex nature of the case, a conservative estimate of a little over one year may be considered to be the time required for the Regional Administrator of EPA Region II to reach a decision on the need for closed-cycle cooling for the Hudson River plants. Thus, we believe at this time that an initial determination will probably be obtained by some time around June, 1981.

15. The Commission has participated to a large extent in the proceedings conducted before EPA. For example, one Commission staff attorney, Marsha Mulkey, Esq., has actively participated on behalf of EPA in cross-examining witnesses for the utilities. Stephen H. Lewis, Esq., another Commission staff attorney, is also on the service list and receives materials filed in the proceeding. In addition, a number of the witnesses expected to appear on behalf of EPA in the fall of 1978 are the

same witnesses as have appeared on behalf of the Regulatory Staff in earlier Indian Point Commission proceedings, including Drs. Webster Van Winkle and C. Phillip Goodyear. Some of the parties who have participated previously in Indian Point 3 licensing proceedings are also participants in the EPA proceeding, including the Attorney General of the State of New York and the Hudson River Fisherman's Association.

16. Even if the ultimate decision made under the Clean Water Act is to require a closed-cycle cooling system at Indian Point 3, the schedule of compliance established is expected to run from the time of the date of a final determination under the Clean Water Act, and would allow the appropriate lead time in order to complete construction of the required closed-cycle cooling system in time to be in compliance with any requirement under the Clean Water Act. Hence, even if one were to assume that closed-cycle cooling will ultimately be required under the Clean Water Act, this extension is still warranted to prevent the necessity for the Power Authority to commence construction at a time significantly in advance of that required under the Clean Water Act.

17. A second reason warranting the extension arises from the possibility that EPA or the State, if it did in fact require cooling towers, might designate a design significantly different from that on which work had commenced pursuant to ¶2.E.(1), thereby leading to many of the same problems of dismantlement and reclamation as would be involved if no closed-cycle cooling

whatsoever were required. At the very least, substantial modifications might be required to comply with any requirement under the Clean Water Act.

18. The Power Authority believes that no party to previous Indian Point 3 proceedings will be materially prejudiced by the extension requested in this application. As noted above, some of those parties to this proceeding are currently participating in the discharge permit proceedings before the EPA. In addition, the interests of other parties to previous Indian Point 3 proceedings also will be represented by the Commission and its technical experts, who are also participating in the EPA proceedings. In short, all interests that should be represented are being actively advocated in the EPA discharge permit proceeding.

19. The Power Authority believes that no detriment to the public interest will occur by reason of the requested extension. The Commission has held in the June 17, 1977 Atomic Safety and Licensing Board decision extending interim operation of Indian Point 2 with once-through cooling until May 1, 1982 (5 NRC 1452), that the incremental impacts resulting from a two-year extension of operation with once-through cooling would not constitute a serious or irreversible impact on the aquatic biota. (5 NRC at 1464). Indian Point 3 shares a discharge structure with the Indian Point 2 plant. The two facilities have separate intake systems that are located within 668 feet of one another, and are substantially identical in design. It is clear, therefore, that the impacts of an extension of operation with once-through cooling at Indian Point 3 will be

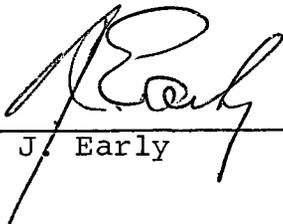
similar to those found to result from an extension for Indian Point 2, and will be insignificant.

20. The Power Authority believes that the evidence which has been gathered on the impact of Indian Point 3 on the Hudson River biota also indicates that any extension granted under the present application would be environmentally insignificant. This fact is demonstrated by the evidence submitted in the EPA discharge permit proceedings, as well as in the Indian Point 2 docket (No. 50-247), including Con Edison's March 15, 1977 application to vacate the Indian Point 2 license condition requiring termination of operation with once-through cooling.

21. The Power Authority believes that the extension requested in this application would present no adverse environmental impact. Instead, an extension will preclude the requirement for commitment of resources by the Power Authority, which may prove to be unnecessary in the event that EPA or the state determines that closed-cycle cooling will not be required at Indian Point 3. Such commitments of resources would also be largely unnecessary, if compliance with a closed-cycle cooling requirement under the Clean Water Act would be significantly different from the compliance required by §2.E.(1) and the Commission's decision on the preferred alternative closed-cycle cooling system for Indian Point 3.

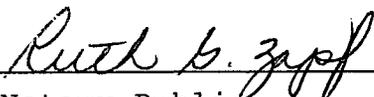
22. For the reasons I have indicated above, the extension of the period of operation of Indian Point 3 with once-through cooling requested as relief in this Application should be granted.

In addition, due to the fact that the Power Authority may be compelled to commence procurement and construction activities under ¶2.E.(1), in the near future, expedited Commission review is appropriate.



Paul J. Early

Subscribed and sworn to me this
/ day of August, 1978



Notary Public
RUTH G. ZAPP
Notary Public, State of New York
No. 30-4663428
Qualified in Nassau County
Commission Expires March 30, 1980

August 2, 1978

Because this Application seeks essentially a legal determination in light of §511(c)(2) of the Clean Water Act, no fee is required. In the alternative, the Power Authority is entitled to an exemption from the Commission's fee schedule under 10 CFR §170.11(b)(1) (1977), and requests that the Commission so determine. Subject to the Commission's decision in this respect, however, and in the interest of avoiding any delay in the processing of this Application, the Authority is enclosing a check in the amount of \$1,200 to cover the fee prescribed for a Class II amendment of an operating license, pursuant to §§170.12(c) and 170.22. In this regard, the Power Authority notes that the Application is based on a question of law which requires action by the Commission on a "pro forma" basis within the meaning of the fee schedule. An agency may not charge a regulated entity a fee for a determination of that agency's jurisdiction, which is the subject matter of this Application. In addition, the proposed action involves no matters of safety, and no matters of environmental significance that have not previously been fully reviewed.

A certificate of service is enclosed,

Very truly yours,

POWER AUTHORITY OF THE STATE
OF NEW YORK

By 

Encs.

cc: Mr. Samuel J. Chilk
Samuel W. Jensch, Esq.
Mr. R. Beecher Briggs
Dr. Franklin C. Daiber
Atomic Safety and Licensing Appeal Panel
Hon. George V. Begany
Sarah Chasis, Esq.
Jeffrey Cohen, Esq.
Steven H. Lewis, Esq.
Howard L. Shapar, Esq.
Paul S. Shemin, Esq.
Hendrick Hudson Free Library

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

| | | |
|------------------------|---|----------------------------|
| In the Matter of |) | |
| |) | |
| POWER AUTHORITY OF THE |) | Docket No. 50-286 |
| STATE OF NEW YORK |) | Facility Operating License |
| |) | No. DPR-64 |
| (Indian Point Station, |) | (Extension of Interim |
| Unit No. 3) |) | Operation) |

CERTIFICATE OF SERVICE

I certify that I have this 9th day of August, 1978, served the foregoing letter from Paul J. Early to Mr. Harold R. Denton, dated August 2, 1978; and the documents entitled "Application for an Extension of the Period of Interim Operation Using the Installed Once-Through Cooling System and Motion for Expedited Commission Consideration", dated August 7, 1978, and "Affidavit of Paul J. Early", dated August 1, 1978, by mailing copies thereof first class mail, postage prepaid and properly addressed to the following persons:

Mr. Samuel J. Chilk
Secretary of the Commission
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555
Attn: Docketing and
Service Section

Samuel W. Jensch, Esq.
Atomic Safety and Licensing
Board
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Mr. R. Beecher Briggs
110 Evans Lane
Oak Ridge, Tennessee 37830

Dr. Franklin C. Daiber
College of Marine Studies
University of Delaware
Newark, Delaware 19711

Howard K. Shapar, Esq.
Executive Legal Director
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Steven H. Lewis, Esq.
Office of the Executive
Legal Director
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Atomic Safety and Licensing
Appeal Panel
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Sarah Chasis, Esq.
Natural Resources Defense
Council, Inc.
122 East 42nd Street
New York, New York 10017

Hon. George Begany
Mayor, Village of Buchanan
Municipal Building
Buchanan, New York 10511

Jeffrey Cohen, Esq.
Deputy Commissioner
New York State Energy
Office
Empire State Plaza
Albany, New York 12223

Paul S. Shemin, Esq.
Assistant Attorney General
for the State of New York
Two World Trade Center
New York, New York 10047

Hendrick Hudson Free Library
31 Albany Post Road
Montrose, New York 10548



M. Reamy Ancarrow