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S. Klementowicz
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(3)

New York Power Authority

February 7, 1994
IPN-94-016
JPN-94-009

Chief, Rules Review and Directives Branch
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: **Indian Point 3 Nuclear Power Plant**
Docket No. 50-286
James A. FitzPatrick Nuclear Power Plant
Docket No. 50-333
Comments on Draft NRC Generic Letter Providing Model Technical Specifications to Reflect Revisions to 10 CFR Part 20 and 10 CFR 50.36a

Reference: 1. NRC Proposed Generic Communication and Notice of Opportunity for Public Comment, Federal Register Vol. 58, No. 245, pp. 68170 - 68179, dated December 23, 1993, "Guidance for Modification of Technical Specifications to Reflect (A) Revisions to 10 CFR Part 20, 'Standards for Protection Against Radiation' and 10 CFR 50.36a, 'Technical Specifications on Effluents from Nuclear Power Reactors,' (B) Related Current Industry Initiatives, and (C) Miscellaneous Related Editorial Clarifications."

Dear Sir:

The New York Power Authority has reviewed and evaluated the referenced Federal Register notice soliciting public comments on proposed model technical specifications to reflect revisions to 10 CFR Part 20 and 10 CFR 50.36a. The purpose of this letter is to provide the Authority's comments.

The Authority's primary comment regarding the proposed generic letter is that the guidance provided is based on Standard Technical Specifications (STS) while the Indian Point 3 and James A. FitzPatrick Nuclear Power Plants are not STS plants. In some instances, implementation of the model technical specifications provided by the proposed generic letter imposes restrictions and requirements which are not currently applicable to the Indian Point 3 and James A. FitzPatrick Nuclear Power Plants.

The Authority's specific comments are presented in Attachment I. There are no commitments associated with this letter. If you have any questions, please contact Mr. P. Kokolakis or Mr. J. A. Gray, Jr.

Very truly yours,

for Paul J. Bemis

W. A. Josiger
Acting Executive Vice President
Nuclear Generation

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ATTACHMENT I TO IPN-94-016/JPN-94-009

COMMENTS ON DRAFT NRC GENERIC LETTER PROVIDING MODEL TECHNICAL SPECIFICATIONS TO REFLECT REVISIONS TO 10 CFR PART 20 AND 10 CFR 50.36a

NEW YORK POWER AUTHORITY
INDIAN POINT 3 NUCLEAR POWER PLANT
DOCKET NO. 50-286
DPR-64
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
DOCKET NO. 50-333
DPR-59

COMMENTS TO
ENCLOSURE 1 - MODEL STANDARD TECHNICAL SPECIFICATIONS

Proposed Model Technical Specifications:

6.9.1.2.a A tabulation on an annual basis of the number of station, utility, and other personnel (including contractors), for whom monitoring was performed, receiving an annual deep dose equivalent greater than 100 mrem and the associated collective deep dose equivalent (reported in person-rem) according to work and job functions** (e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance [describe maintenance], waste processing, and refueling). The dose assignments to various duty functions may be estimated based on pocket dosimeter, thermoluminescence dosimeter (TLD), or film badge measurements. Small exposures totalling less than 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total deep dose equivalent received from external sources should be assigned to specific major functions;

6.11.1.D(iv) A self-reading dosimeter and,

Comments:

Model Technical Specification 6.9.1.2.a allows the use of 1) pocket dosimeters, 2) TLDs, or 3) film badge measurements for reporting estimated doses by duty function. The use of electronic dosimeter measurements should also be explicitly included.

Additionally, the terms "pocket dosimeter" (reference 6.9.1.2.a) and "self reading dosimeter" (reference 6.11.1.D(iv)) should be standardized.

Proposed Model Technical Specification:

6.9.1.4 ... The Radioactive Effluent Release Report shall include an annual summary of hourly meteorological data collected over the previous year. This annual summary may be either in the form of an hour-by-hour listing on magnetic tape of wind speed, wind direction, atmospheric stability, and precipitation (if measured), or in the form of joint frequency distributions of wind speed, wind direction, and atmospheric stability.** This same report shall include an assessment of radiation doses due to the radioactive liquid and gaseous effluents released from the unit or station during the previous calendar year. This same report shall also include an assessment of the radiation doses from radioactive liquid and gaseous effluents to Members of the Public due to their activities inside

the Site Boundary (Figure (5.1-3)) during the reporting period. All assumptions used in making these assessments, i.e., specific activity, exposure time, and location, shall be included in these reports. The meteorological conditions concurrent with the time of release of radioactive materials in gaseous effluents, as determined by sampling frequency and measurement, shall be used for determining the gaseous pathway doses. The assessment of radiation doses shall be performed in accordance with the methodology and parameters in the Offsite Dose Calculation Manual (ODCM)....

Comment:

Model Technical Specification 6.9.1.4 states that "[t]he meteorological conditions concurrent with the time of release of radioactive materials in gaseous effluents, as determined by sampling frequency and measurement, shall be used for determining the gaseous pathway doses." Current Indian Point 3 and James A. FitzPatrick Technical Specifications allow the plants to use annual average meteorological data. Specifically, Indian Point 3 Technical Specification 5.3.2.1 contained in Appendix B, Environmental Technical Specification Requirements, qualifies the above requirement with the parenthetical statement "[f]or O[perating]R[eactor]s: approximate and conservative approximate methods are acceptable."

Requiring non-standard technical specification plants to use real time data is an additional requirement which results in no benefit to the public health and safety. Model Technical Specification 6.9.1.4 should be modified to allow the use of annual average meteorological data.

Proposed Model Technical Specification:

6.9.1.4 ... The Radioactive Effluent Release Report shall also include an assessment of radiation doses to the likely most exposed Member of the Public from reactor releases and other nearby uranium fuel cycle sources, including doses from primary effluent pathways and direct radiation, for the previous calendar year to show conformance with 40 CFR part 190, "Environmental Radiation Protection Standards for Nuclear Power Operation." Acceptable methods for calculating the dose contribution from liquid and gaseous effluents are given in Regulatory Guide 1.109, Rev. 1, October 1977 and NUREG-0133....

Comment:

At the present time both the Indian Point 3 and James A. FitzPatrick Nuclear Power Plants are not required to show conformance to 40 CFR 190 through the Radioactive Effluent Release Reports. Both plants are subject to limits, in their respective Technical Specifications, that are lower than the 40 CFR 190 limits. If the Indian Point 3 and James A. FitzPatrick Technical

Specification limits are exceeded, then calculations and pathway analyses are required to show that the 40 CFR 190 limits have not been exceeded. Therefore, requiring the Radioactive Effluent Release Report to now include an assessment of radiation doses to a Member of the Public for showing conformance with 40 CFR 190 regardless of actual releases is an additional requirement which results in no benefit to the public health and safety.

Proposed Model Technical Specification:

6.11.1 High Radiation Areas with Dose Rates not Exceeding 1.0 rem/hour*

*At 30 centimeters from the radiation source or from any surface penetrated by the radiation.

Comment:

The footnote to Model Technical Specification 6.11.1 should include the option of using 12 inches, parenthetically to 30 cm, as a distance at which dose rates are measured. The addition is consistent with the footnote to Model Technical Specification 5.11.1 in Enclosure 3.

Proposed Model Technical Specifications:

6.11.1.D Each individual (whether alone or in a group) entering such an area shall possess:

(i) A radiation monitoring device that continuously displays radiation dose rates in the area ("radiation monitoring and indicating device"); or

(ii) A radiation monitoring device that continuously integrates the radiation dose rates in the area and alarms when the device's dose alarm setpoint is reached ("alarming dosimeter"), with an appropriate alarm setpoint, or

(iii) A radiation monitoring device that continuously transmits dose rate and cumulative dose to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area, or

(iv) A self-reading dosimeter and,

(a) Be under the surveillance, as specified in the RWP or equivalent, while in the area, of an individual at the work site, qualified in radiation protection procedures, equipped with a radiation monitoring and indicating device who is responsible for controlling personnel radiation exposure within the area, or

(b) Be under the surveillance, as specified in the RWP or equivalent, while in the area, by means of closed circuit television, of personnel qualified in radiation protection procedures, responsible for controlling personnel radiation exposure in the area.

6.11.1.E Entry into such areas shall be made only after dose rates in the area have been determined and entry personnel are knowledgeable of them.

Comments:

The Authority notes that subparts A, B, C, D, and E to Model Technical Specification 6.11.1 are mutually exclusive.

Model Technical Specification 6.11.1.E in conjunction with 6.11.1.D(i) is more restrictive than current Technical Specifications for the Indian Point 3 and James A. FitzPatrick Nuclear Power Plants. Specifically, the Indian Point 3 and James A. FitzPatrick Technical Specifications allow an individual to enter a high radiation area with a radiation monitoring device which continuously indicates the radiation dose rate (i.e., survey meter) in the area without having had a dose rate survey performed prior to entry. Model Technical Specification 6.11.1.E should apply to Model Technical Specification 6.11.1.D, Subparts (ii), (iii), and (iv) only.

Model Technical Specification 6.11.1.D(i) is also more restrictive than current Technical Specifications for the Indian Point 3 and James A. FitzPatrick Nuclear Power Plants because it requires each individual, whether alone or in a group, to possess a survey meter. Specifically, the Indian Point 3 and James A. FitzPatrick Technical Specifications allow "any individual or group of individuals" to enter a high radiation area with a (one) survey meter. The proposed requirement to have each individual possess a survey meter is unnecessary. The proposed requirement does not help reduce exposure or maintain exposure as low as reasonably achievable (ALARA).

Proposed Model Technical Specifications:

6.11.1.D(ii) A radiation monitoring device that continuously integrates the radiation dose rates in the area and alarms when the device's dose alarm setpoint is reached ("alarming dosimeter"), with an appropriate alarm setpoint, or

6.11.2.D(i) An alarming dosimeter with an appropriate alarm setpoint, or

Comment:

The control option of using an alarming dosimeter appears in both Model Technical Specifications 6.11.1.D(ii) and 6.11.2.D(i). The wording in these provisions is different but

mean the same thing. The wording should be consistent to prevent a misinterpretation.

Proposed Model Technical Specifications:

6.11.1.D(iv)(a) Be under the surveillance, as specified in the RWP or equivalent, while in the area, of an individual at the work site, qualified in radiation protection procedures, equipped with a radiation monitoring and indicating device who is responsible for controlling personnel radiation exposure within the area, or

6.11.2.D(iii)(a) Be under the surveillance, as specified in the RWP or equivalent, of an individual qualified in radiation protection procedures, equipped with a radiation monitoring and indicating device who is responsible for controlling personnel exposure within the area, or

Comment:

The control option "... be under the surveillance of... " in Model Technical Specifications 6.11.1.D(iv)(a) and 6.11.2.D(iii)(a) are the same except that in 6.11.1 there is an additional requirement for the attending individual to be "...at the work site." Model Technical Specification 6.11.2 is less restrictive in that there is no requirement for the attending individual to be at the work site. The intent may be to keep exposures to surveillance personnel ALARA. The ALARA principle should be equally applied to Model Technical Specification 6.11.1.

Proposed Model Technical Specifications:

6.11.1.E Entry into such areas shall be made only after dose rates in the area have been determined and entry personnel are knowledgeable of them.

6.11.2.E Entry into such areas shall be made only after dose rates in the area have been determined and entry personnel are knowledgeable of them.

Comment:

Model Technical Specifications 6.11.1.E and 6.11.2.E require that a survey be made before entry. In other words, entry into a high radiation area can not be made until the dose rates have been determined. These Specifications, however, do not allow for an individual to enter to take the survey. The Specifications should be reworded to allow an individual qualified in radiation protection procedures to enter to obtain the dose rates.

Proposed Model Technical Specification:

6.11.2.A(i) All such door and gate keys shall be maintained under the administrative control of the shift foreman or the health physics

supervisor on duty.

Comment:

Current Technical Specifications for the Indian Point 3 and James A. FitzPatrick Nuclear Power Plants allow the Shift Supervisor on duty and/or the plant Radiological and Environmental Services Manager to administratively control keys. Indian Point 3 Technical Specifications also allows a designee for the Radiological and Environmental Services Manager to control keys. Neither plant has a "health physics supervisor on duty." The Model Technical Specification should be reworded to allow flexibility as to whom shall control keys.

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Docket No. 50-286

NOTE FOR: Robert P. Geckler, Project Manager
Environmental Projects Branch 1, DSE

FROM: Robert B. Samworth, Section Leader
Aquatic Resources Section
Environmental Specialists Branch, DSE

SUBJECT: RESPONSES TO COMMENTS ON DES FOR SELECTION OF THE PREFERRED CLOSED-CYCLE COOLING SYSTEM AT IP-UNIT 3

PLANT NAME: Indian Point Station - Unit No. 3
LICENSING STAGE: Post OL
DOCKET NUMBER: 50-286
RESPONSIBLE BRANCH: EP-1
PROJECT MANAGER: R. Geckler
REVIEW STATUS: Aquatic Resources Section Review Complete

Enclosed are the Aquatic Resources Section's responses to comments received on the DES for Selection of the Preferred Closed-Cycle Cooling System at Indian Point Unit No. 3. We have addressed those comments, specific to the Section's responsibilities in matters of noise impact and non-radiological impacts on water quality and aquatic biota. In reference to your memo to R. Ballard, et.al., dated May 26, 1978, we have responded specifically to those comments identified for ESB review numbered 5, 10, 15, 29, 32, 33, 41, 42, 44, 80, 109, 110, 125, 142 and 145. We did not respond to comment No. 77, as requested; however, we did provide responses to comments 14, and 43 which, unlike comment 77, we judged to fall within our area of review responsibility.

This review was conducted by C. Billups and J. Lehr.

Original Signed by Robert B. Samworth

Robert B. Samworth, Section Leader
Aquatic Resources Section
Environmental Specialists Branch
Division of Site Safety and
Environmental Analysis

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DREP-2

Enclosure:
As stated

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DATE	12/21/78	12/22/78	12/22/78			

NRC FORM 318 (9-76) NRCM 0240 ☆ U.S. GOVERNMENT PRINTING OFFICE: 1976 — 626-624

cc: M. Ernst
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DATE ➤						

AQUATIC RESOURCES SECTION (ESB)

RESPONSES TO COMMENTS ON DES FOR

SELECTION OF THE PREFERRED CLOSED-CYCLE

COOLING SYSTEM AT INDIAN POINT - UNIT 3

The following responses are indexed by the numbering system used in the memo from R. Geckler to R. Ballard et al., dated May 26, 1978:

DOE Comment 5 - For completeness this report should have dealt with the alternates such as improved inlet screens and beneficial use of the waste heat - at least in summary fashion. It is realized that extensive earlier treatment was given to this in the Indian Point No. 2 deliberation. However, it would be our view that these various dockets should stand alone.

Response 5(a) - Inlet Screens

We see no necessity to reiterate, in the present action, those assessments made with regard to inlet screening. The present action is selection of a preferred closed-cycle cooling system from alternatives which result in a significant reduction in intake capacity (flow). A concomitant reduction in impact to aquatic biota is expected to result by implementation of closed-cycle cooling. There is presently no intake screening technology which offers a proven alternative to flow capacity reduction in achieving the desired reduction in aquatic impacts.

Response 5(b) - Waste Heat Utilization

The use of waste heat, although of academic interest, is of little consequence to the present action. The selection of a preferred closed-cycle cooling system does not pivot on this issue since a similar quantity of heat would be available for "beneficial uses" from each of the acceptable systems. Therefore, this factor would be approximately of equal value for each

acceptable system and thus inconsequential to the cost/benefit analysis of alternatives. Practical uses of the waste heat have not been identified.

FPC Comment 10 - We suggest that the Nuclear Regulatory Commission's final environmental statement contain a description of actions required and impacts of relocating the pipeline. We suggest that this description include a map showing the existing and proposed locations of the pipeline and the relationship to other features including the power plant and cooling towers.

Response

Figure 3-1 shows the proposed route for the pipeline if relocation is necessitated by siting of a natural draft wet cooling tower, i.e., the preferred closed-cycle cooling system. PASNY has indicated that no permit is required according to information received from the FPC in 1976. No impacts on aquatic resources are expected to result from pipeline relocation. [Note to EPM: Also refer to response of the Terrestrial Resources Section in memo from J. Kline to R. Ballard, dated June 13, 1978].

HUD Comment 14 - Reclamation of waste heat for some useful local purpose should be considered as a possible feature, now or in the future, of a CCC system.

Response

We cannot prophesy as to whether the use of waste heat may become a practical feature in the future at this site. Presently, waste heat utilization is impracticable. Also see response to DOE comment 5(b).

HUD Comment 15 - A cooling system that more equitably shares the impact of disposing of waste heat on both the river and the land-atmosphere might be considered.

Response

In consideration of aquatic biological impacts, the major causal relationship of concern is the intake capacity (flow) associated with once-through cooling. The impact of waste heat disposal on aquatic biota is important but still of secondary concern. The requirement for implementation of a closed-cycle cooling system is predicated on the expected reduction in aquatic impacts by intake flow reduction. Seasonal operation in the once-through mode is not precluded with the addition of a cooling tower of the preferred design. How this capability might be utilized is conjectural at the present time since no application has been made to the NRC for mixed mode or seasonal mode operation after installation of the closed-cycle system.

DOI Comments 29, 32, and 33

The DOI comments included, for information, their previous comments on the DES for IP-2 preferred closed-cycle cooling system. The staff has responded to those comments in the FES for the IP-2 licensing action; however, we find some of these comments pertinent to the IP-3 action and provide additional responses here:

DOI Comment 29 - Construction of the proposed cooling system would require excavation of approximately 700,00 [sic.] cubic yards of rock and unconsolidated material (page 3-4, paragraph 3.3). The only information on disposal of the excavated material is the statement that "the beach of Lent's Cove could also be used for delivery and disposal of material" (page 3-9, paragraph 1). However, no information is provided on the ultimate disposal site proposed for the excavated material, or on related environmental impacts. The present use of the beach at Lent's Cove is not discussed. The final statement should adequately address these matters.

Response

By letter dated October 1, 1976, Con Ed provided additional information on their planned disposal of excavated material from tower construction at IP-2. The plan was to discharge the material along the east shoreline of the Hudson

River upstream of the IP station. The fill material would ultimately serve as a foundation base for a paved access road to the station. Applications for required permits to discharge the excavated material were submitted to the Corps of Engineers and to New York State on September 9, 1976.* PASNY has indicated that plans for disposal of excavated material from IP-3 tower construction have not been finalized. However, depending on the final plans, similar permits may be required. (Also see response to NYDEC comment 44).

DOI Comment 32 - Section 3.4.3, page 3-10: Asbestos fibers have been found to be carcinogenic to fish and humans. In view of recent adjudicatory hearings which have highlighted the potential hazards of Hudson River polychlorinated biphenyls (PCB's) to human health, we recommend that NRC require the use of wooden or plastic components (rather than asbestos-cement) in cooling towers at Indian Point.

Response:

Asbestos would only be used in the construction of the cooling tower in the standard form of asbestos boards, which is a common construction material in use throughout the United States. The NRC has sponsored research to quantify the likely magnitude of asbestos discharges from cooling towers and to determine the implication of these discharges for environmental impact assessment.[1] Using mathematical modelling for airborne emissions and on site sampling data from operating towers for waterborne emissions, the study concluded the follow-

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* The status of these permits should be determined by the EPM.

[1] Lewis, Barbara-Ann G., Asbestos in Cooling Tower Waters, Argonne National Laboratory, Argonne, Ill., ANL/ES-63; prepared for the US Nuclear Regulatory Commission under Contract W-31-109-Eng-38; December 1977.

ing: (1) "...that asbestos concentrations in air near ground due to drift from natural draft and state-of-the-art mechanical draft cooling towers [i.e., MDCT's with drifts rates of 0.001% or less] will also be several orders of magnitude lower than either the current Occupational Safety and Health Administration (OSHA) standard of 2 fibers/cm^3 of air, or the proposed ambient air quality standard of 30 mg/m^3, for distances of 0.25 km or beyond"; (2) that after mixing of cooling tower blowdown with the receiving water, asbestos concentrations would typically be reduced substantially. Using the values found in the study, concentrations after mixing would probably be difficult to detect using current state-of-the-art techniques; and (3) that the study observations, "taken in relation to current information regarding the health effects of ingested asbestos, imply that there is little health risk posed by cooling tower discharges containing quantities of asbestos similar to those found in the study." The report goes on to say that "this conclusion may need to be revised if future epidemiological studies so indicate." Such studies and findings by an appropriate governmental body that use of asbestos in cooling towers is hazardous and should be discontinued have not been made. A prohibition on the use of this material by the NRC is judged to be highly discriminatory and unwarranted at this time.

DOI Comment 33 - Section 3.5.1, page 3-13: We support the staff's recommendation that the applicant use amertap balls, rather than chlorine, to clean the tubes in the condenser. This would greatly reduce the adverse effects of residual chlorine discharges on Hudson River biota, especially egg, larval, and juvenile fishes.

Response

The Amertap System would be used in addition to the chlorination system, not as a replacement system for condenser tube cleaning.

NYDEC Comment 41 - The FES for IP-2 cooling towers (in response to our comment #19) discounted aquaculture as a beneficial use of waste heat because of nearby shipping channels. However, Lents Cove is only about 400 m to the northeast of the proposed cooling tower location. Since this bay is removed from the shipping channel and its dimensions are about 500 m by 300 m, it would appear to be a feasible location for a controlled impoundment section to be used in addition to cooling towers. This should be considered for IP-3 as well as IP-2.

Response

(See response to DOE Comment 5(b))

NYDEC Comment 42 - P. 2-3 (section 2.3): Mention is made (third paragraph from the bottom) of the use of chemicals in the water circulated through the cooling towers to prevent freezing which would also be discharged in the blowdown. We are not aware of the use of such additions in evaporative cooling towers and would object to the introduction of sufficient chemicals to have a significant effect upon the freezing point of the circulating water as being unnecessary and a possible hazard to aquatic life in the receiving waters. Protection of cooling tower systems from freezing depends upon the waste heat being dissipated, reduction of air flow through the tower, and dewatering of pipes not conveying heated water.

Response

PASNY has indicated that there is no planned use of chemical additions to prevent freezing. We conclude that the example given in the DES is in error. The referenced discussion in the IP-2 FES makes no mention of chemical usage for this purpose. This example of chemical usage was given in the FES, IP-3 (p. XI-13) and, likewise, is erroneous.

NYDEC Comment 43 - P. 3-11 (section 3.4.1): While dual mode operation is not generally economically feasible, the addition of cooling towers to an existing once-through system makes the incremental cost of retaining the once-through capability economically attractive and will also conserve some energy provided the Power Authority is authorized to use the once-through system when its use will have minimal effect upon the Hudson River aquatic resources. We therefore feel that it is very desirable that this dual capability be retained. It would appear, however, that a basis for the utilization of the once-through system should be established so that the

operating and energy savings which may be obtainable could be determined. If it is not possible to set dates between which the once-through system could be used, then an aquatic life monitoring program upon which such operations could be based should be set forth.

Use of once-through cooling whenever it would not have a serious adverse effect upon aquatic life would reduce the effect of salt drift still further and keep that terrestrial impact of the plant as low as possible.

Response

(See response to HUD Comment 15)

NYDEC Comment 44 - P. 3-4 (section 3.3): This section states that extensive excavation will be required. The effects of excavation section (5.2.1) omits the effect of spoil disposal. Spoil disposal is not discussed in the site preparation section (3.3) either. The volumes to be removed range from three to thirteen acre-feet. Depending on how and where this material is transferred, major or minor impacts could accrue. Therefore, this aspect of excavation and site preparation deserves considered mention in the EIS.

Response

The NYDEC has misinterpreted the units of excavation volumes (DES, p. 3-4) to be cubic feet rather than cubic yards. PASNY has updated the estimate of the total volume to be 280,000 cubic yards (~ 173 acre-feet). Plans have not been finalized for the disposal of excavation spoil for the IP-3 cooling tower construction. Con Ed has applied for permits from the U.S. Army Corps of Engineers and from the State of New York in regard to spoil disposal plans for IP-2 tower excavation. Depending on how and where the IP-3 tower excavation spoil might be disposed, similar Federal and State permits may be required. If it is determined that no other permits are required pursuant to the FWPCA, then the NRC will require that the disposal plans be submitted for review and approval by the staff before initiation of excavation for the IP-3 tower.

HRFA & SOS Comment 80 - Finally, we believe that the DES should make clear that the installation of the natural draft cooling tower will have the benefit of saving an extremely valuable fishery. To this end, we suggest that in the socio-economic section, the overall importance and value of saving the natural resource should be explained whether by cross-reference to the FES on operation of Indian Point 3 or other means.

Response

The cost/benefit analysis which supports the required implementation of closed-cycle cooling needs no reiteration in the present action. The present action is predicated on the need for a closed-cycle system to protect aquatic resources. For prior assessments of the benefits to aquatic biota from installation of CCC, the reader is referred to:

1. FES related to operation of Indian Point Unit 2
2. FES related to operation of Indian Point Unit 3
3. FES on selection of the preferred closed-cycle cooling system at Indian Point Unit 2.
4. FES for Facility License Amendment for Extension of Operation with Once-through cooling for Indian Point Unit 2

PASNY Comment 109 - Section 5.4.4. There are no fixed screens at Indian Point 3.

Response

The discussion in the DES was in error and has been revised accordingly.

PASNY Comment 110 - The Power Authority disagrees with the implication in the last sentence of this section that present entrainment and impingement levels are unacceptable, and objects to the entire sentence on the ground that it is irrelevant to the present proceeding. In the first paragraph of this section, the reference should be to Indian Point 3 rather than Indian Point 2.

Response

The staff agrees that the discussion of unacceptable impingement and entrainment levels are irrelevant to the present action. The action is predicated on the need for implementation of closed-cycle cooling and reiteration of the staff's previous assessments and conclusions is unnecessary. The correction to indicate Indian Point 3 rather than Indian Point 2 has been made in the text.

PASNY Comment 125 - Section 7.4, paragraph 2. Based on noise evaluations the ranking of the three alternatives considered viable by the staff appears to be inconsistent with the relative noise evaluation found in paragraph 2 of section 5.2.5.3. This should be clarified or corrected.

Response

Section 7 of the EIS has been revised.

Village of Buchanan Comment 142 (re: noise impact) - Our further understanding is that these plumes would soar at times and at other times would remain fairly stable in the areas over the Village of Buchanan and the City of Peekskill and, of course, by the construction of additional towers at Indian Point No. 3, there would be a consequent increase of plumes and more noise than the inhabitants and residents of the Village of Buchanan are enduring under the present system and under any other cooling systems which are to be constructed by virtue of the order of the Nuclear Regulatory Commission with respect to Indian Point No. 2.

Response

Offsite sound levels due to the construction and operation of a closed cycle cooling system for IP-3 are predicted to increase compared to the predicted operational acoustic environment for IP-2 alone. The area predicted to undergo the greatest change in offsite acoustic environment

due to the addition of a closed cycle cooling system for IP-3 (i.e., the "designed industrial district M-D" immediately south of the site boundary) is not predicted to experience sound levels during operation in the range that is normally associated with outdoor activity interference. See Section 5.2.5.5.

Village of Buchanan Comment 145 - The Village feels that the harm that will come to the fish life and damage to the fish life in the waters of the Hudson River surrounding the Village of Buchanan under the present once-through cooling system would be minimal compared to the cost for the construction of these towers and their upkeep, which costs would be superimposed upon the residents in the immediate area and also throughout the County of Westchester.

Response

The present action is not to reiterate the cost/benefit balance to support the need for closed-cycle cooling. This need has already been established by separate assessment and ASLB order.

12 OCTOBER 1978

Docket No.: 50-286

LICENSEE: Power Authority of the State of New York

FACILITY: Indian Point Nuclear Generating Unit No. 3

SUBJECT: SUMMARY OF MEETING HELD ON OCTOBER 4, 1978 TO DISCUSS ENVIRONMENTAL TECHNICAL SPECIFICATIONS ON CONTINUOUS MONITORING OF LIQUID EFFLUENT RELEASES FOR RADIOACTIVE CONTENT

A meeting was held on October 4, 1978 in Bethesda, Maryland between representatives of PASNY and the NRC. A list of attendees is attached. PASNY requested the meeting to discuss its interpretation of Appendix B Environmental Technical Specification (ETS) 2.4.1.a. The meeting was requested following receipt by the licensee of an IE Notice of Violation dated August 16, 1978 which stated that the alarm setpoint of the effluent control monitor was set too high.

PASNY reiterated its position taken in a PASNY September 6, 1978 letter to IE Region I (J. P. Bayne to Hilbert W. Crocker) that 10 CFR 20.106(a) applies to ETS 2.4.1.a and, therefore, it is permissible to "average over a period not greater than one year" to meet the stated limits. We said that ETS 2.4.1.a specifically invokes the limits published in 10 CFR 20, Appendix B, Table II, Column 2 and that discharges must be monitored continuously as provided in ETS 3.4.1.d to assure that the limits are not exceeded at any time during discharge. We did not agree that averaging over a period of time is allowed, or was intended to be allowed, by the ETS. PASNY said that based on its understanding of the history of the ETS for Indian Point No. 3 it did not agree. PASNY will probably pursue the matter further in a letter stating its legal position. PASNY emphasized that by laboratory analysis of a grab sample and by controlled batch releases it has been meeting the NRC intent of ETS 2.4.1.a. However, the design of the on-line monitor is such that demonstrating conformance to ETS 2.4.1.a continuously during each release as required by ETS 3.4.1.d has not been accomplished. PASNY indicated that, with additional procedures including high level dilution, the existing monitor could probably be shown to conform.

Since the existing alternatives from present practice would involve the expenditure of several hundred thousand dollars for a more sophisticated monitor, or the imposition of special procedures that might decrease the plant's operational flexibility, PASNY will probably request a change to ETS 2.4.1.a to permit averaging per 10 CFR 20.106(a). PASNY

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will try to demonstrate that the potential reduction in dose to be realized from modifying the system to assure that the limits specified in ETS 2.4.1.a are both monitored and met continuously is not worth the cost.

However, unless, or until, PASNY requests and obtains NRC approval of an ETS change to permit averaging of instantaneous releases we noted that PASNY may wish to propose interim measures as alternative to continuous monitoring to demonstrate compliance with ETS 2.4.1.a. We dindicated that one interim measure that could probably be justified would be to remove the 72 hour time limit on ETS 3.4.1.d pending resolution (on either a technical or legal basis) of the issue of whether averaging of instantaneous releases is acceptable. ETS 3.4.1.d as presently written permits reliance upon an additional, independently analyzed sample to demonstrate compliance with ETS 2.4.1.a prior to any liquid radwaste release for periods of up to 72 hours when the continuous monitor is not operational. PASNY indicated such an approach would probably require an additional person each shift since, with limited holdup tank capacity (5000 gallons), several discharge per day have been required during certain plant evaluations. No discharges have been made since June 1978.

L. Olshan, Project Manager
Operating Reactors Branch #1
Division of Operating Reactors

Attachment:
List of Participants

cc: w/attachment
See next page

OFFICE ➤	DOR:ORB#1/PM					
SURNAME ➤	LOlshan:pab					
DATE ➤	10/12/78					

LIST OF ATTENDEES

PASNY
R. Gramatges
J. Kelly
J. Kilduff
A. Martin
R. Shropshire

NRC
L. Barrett*
J. Donohew
S. Lewis*
L. Olshan
A. Schwencer*

*Part-time attendance

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Docket File - 50-286
NRC PDR
Local PDR
ORB1 Reading
NRR Reading
H. Denton
E. Case
V. Stello
D. Eisenhut
B. Grimes
D. Davis
D. Ziemann
P. Check
G. Lainas
A. Schwencer
R. Reid
T. Ippolito
V. Noonan
J. McGough
Project Manager
OELD
OI&E(3)
ACRS (16)
C. Parrish
NRC Participants
TERA
J. R. Buchanan
Licensee