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Orin Lehman, Commissioner

January 11, 1978

Dr. Robert P. Geckler
NRC Project Manager
Division of State Safety and
Environmental Analysis
Office of Nuclear Reactor
Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Dr. Geckler:

This letter contains comments from our Office regarding the "Draft Environmental Statement for selection of the preferred closed cycle cooling system at Indian Point No.3, docket No. 50-247."

Since the comment period for the DES may have expired, inclusion, within the FES, of staff responses to the following may not be possible. We respectfully request, however, a reply by staff at their convenience.

General Comment - Aesthetics

Our Office confirms previous statements and testimony provided by representatives from the Palisades Interstate Park Commission that the combined visual impact of cooling towers proposed to service IP-2 and 3 power facilities represents an environmental insult of considerable magnitude to the natural beauty of the Hudson River Valley. This applies also to parks, scenic roads and trailways on the eastern side of the Hudson River, particularly the views from Hudson Highland State Park (Taconic State Park Commission). Among the factors contributing to the value of large tracts of open space associated with trails and scenic overlooks is relative freedom from features significantly disruptive to the natural and the scenic setting of a region. The design and specifications of the natural draft cooling towers proposed for use at Indian Point are indicative of such disruptive features.

Section 5.1.2 Ground Level Fogging and Icing

1. The staff states that since the height of the proposed NDCT's is apparently greater than that of the verticle extent of nocturnal inversions, the drift from NDCT's will not contribute significantly to ground fog. Depending on the surrounding topography as well as magnitude of current meterological conditions, the height of nocturnal inversions can vary significantly. A range estimate of nocturnal inversion height would be useful in evaluating the height differential between the NDCT's and the inversion ceiling.

2. In Section 5.1.2.1 Natural Draft Cooling Tower (NDCT). Staff provides several examples of plumes from NDCTs that do not contribute significantly to ground fog. Staff should indicate how many of these towers are situated in a topographical setting similar to that surrounding Indian Point.

3. Staff should discuss how persistent periods of meterological stagnation might affect plume dispersal. The frequency of subsidence inversions as well as stagnation periods resulting from movement of warm frontal air masses over the Indian Point site should be determined.

Section 5.2.2.2 Applicant's Estimates of Damage Threshold

Staff should contrast the pH of the salinity aerosol used to determine the salt tolerance of selected species of plants with the probable pH of saline drift from the NDCTs. Staff should also discuss whether a significant relationship exists between pH and the damage potential of saline mists.

Section 5.2.2.3 Estimate of Botanical Inquiry from a NDCT.

Staff should provide additional discussion of injury during more persistent inversions (e.g., subsidence inversion of 5 days duration).

Section 5.2.2.6a Effects of Drift Aerosols on Human Populations

Staff should also discuss impact relative to persistent stagnation of meterological conditions.

Section 5.2.2.7(4) Summary of Drift Effects of Cooling Towers

Depending on the probability of persistent stagnation, staff should include inversions.

Our thanks for your time and consideration.

Sincerely,

IVAN P. VAMOS
Deputy Commissioner
Planning and Operations

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cc: Nash Castro, Palisades Interstate Park Commission
Dr. Peter J. R. Buttner, Environmental Management Bureau, OPR
Terrence Curran, Department of Environmental Conservation