

50-3

NOTE FOR HAROLD L. PRICE

February 7, 1968

RE: CONSOLIDATED EDISON COMPANY, UNIT NO. 1 - THERMAL EFFECTS

The following supplementary information on thermal effects has been obtained by our Region I Office (New York) and through a telephone conversation between Compliance Headquarters and Mr. J. A. Prestele, General Superintendent of the Indian Point plant:

1. The original cooling water installation at the Indian Point site provided a 300 ft. separation between the cooling water discharge and the cooling water inlet. This installation resulted in a measured 5° F. temperature difference between the average river temperature and the inlet cooling water temperature.
2. The cooling water installation was modified in 1966. The new installation provided a 540 ft. separation between the cooling water discharge and the cooling water inlet. This installation resulted in a measured 1° F. temperature difference between the average river temperature and the inlet cooling water temperature.
3. At the present time, the actual installation is essentially as described in paragraph 1. above. This change is temporary and is caused by construction activities for Unit No. 3. The maximum difference between average river water temperature and inlet cooling water temperature has been measured to be 5° F., as it was originally. However, due to other changes in equipment, this increase in inlet temperature has resulted in no apparent increase in fish at the inlet screens.
4. The proposed final design is to have a common discharge for Units 1, 2, and 3; however, each Unit will have its own cooling water inlet. The shortest distance between the combined discharge and a cooling water inlet (Unit No. 3) will be 800 ft.
5. Changes in equipment and in the physical arrangement of the inlet system have resulted in a very substantial improvement in the fish problem. These changes include modifications to the steel pilings, the addition of buffer screens, changes to the ice barrier and modification of the traveling screen cleaning system. In general, these changes have resulted in providing easier egress for the fish from the confines of the inlet system, a deliberate diminution in the sanctuary characteristics of the inlet system and a means of returning captive fish from the inlet screen to the river. Although "several" fish are routinely observed to be on the traveling screen each time it is cleaned (every 4 to 8 hours), the problem is vastly reduced in magnitude from what it had been prior to the modifications. There is absolutely no evidence that any fish have ever been killed by thermal effects.

Original signed by:

L. D. Low

Lawrence D. Low

cc: M. M. Mann, REG  
C. K. Beck, REG  
P. A. Morris, DRL

bcc: Reg Central File