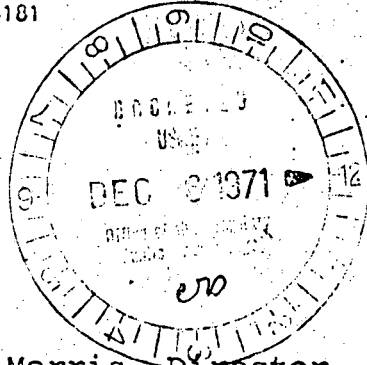


Consolidated Edison Company of New York, Inc.
4 Irving Place, New York, N.Y. 10003
Telephone (212) 469-5181



November 14, 1971

Re: Indian Point Station
Unit No. 2
Docket No. 50-247

Dr. Peter A. Morris, Director
Division of Reactor Licensing
U. S. Atomic Energy Commission
Washington, D. C. 20545

Dear Dr. Morris:

In accordance with specification 6.6 of the facility Technical Specifications, attached as Appendix A to the Indian Point Nuclear Generating Unit No. 2 Facility Operating License, License No. DPR-26, the attached report describing the fire incident which occurred on November 4th is respectfully submitted.

The report is a follow-up of the telephone call the evening of November 4th to a representative of the Compliance Division and the telegram sent November 5, 1971 to the Director of Region I Compliance. It provides a description of the circumstances leading up to, and resulting from the occurrence as well as an evaluation of the safety implications.

The fire was first reported at 7:00 P.M. on November 4, 1971; it appears to have started in a wooden shed temporarily located in the Southeast corner of the Primary Auxiliary Building on the 80 foot elevation. This shed was employed by the construction forces as a combination storeroom and office facility. An investigation as to the cause of the fire is being conducted by law enforcement authorities.

A judgment was reached by responsible operating personnel during the fire as well as after the fire was brought under control that there was no nuclear safety problem with regard to plant personnel nor was the health and safety of the public endangered in any way as a result of the fire. Members of the Nuclear Facilities Safety Committee visited the site

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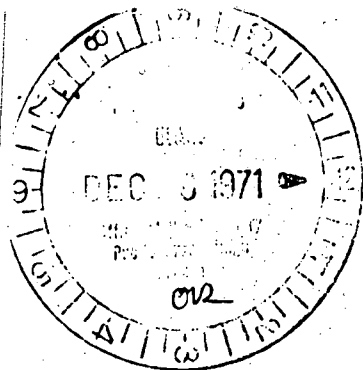
that night and agreed with that judgment. The Nuclear Facilities Safety Committee met the following day to review in detail the events of the fire and agreed with the conclusions reached by the operating personnel. An Ad Hoc Subcommittee of the Nuclear Facilities Safety Committee was constituted on November 5, 1971 to review all aspects of the fire. The results of the Subcommittee's review will be furnished to the Commission when completed.

Additionally, a task force has been formed of responsible engineering personnel to formulate recommendations regarding the methods by which restoration of functions will be accomplished.

As soon as our program has progressed to a point where discussions with your staff would be appropriate, we will be in contact with your office.

Very truly yours

William C. Caldwell



Indian Point Station - Unit No. 2

Primary Auxiliary Building Fire

On November 4, 1971, damage to certain essential auxiliary electrical components was caused by a fire at the southeast end of the Unit No. 2 Primary Auxiliary Building (PAB). The PAB is located about 150' southeast of the Reactor Containment Structure. At the time of the fire, Unit No. 1 was operating at 220 MW (approximately 80% of licensed reactor power) and Unit No. 2 was in the cold shutdown condition. Initial loading of the Unit No. 2 core had been completed on October 31, 1971 and preparatory work associated with installation of the upper core package and reactor vessel head was in progress.

At approximately 7:00 P.M. on November 4, 1971 a fire was reported at the 80 foot elevation of the southeast corner of the PAB by a Unit No. 2 Operating Mechanic to the Central Control Room. The Central Control Room Operator immediately sounded the emergency signal and announced the location of the fire according to established procedure. The Watch Foreman arrived at the site of the fire, approximately one minute after the announcement. He judged the size of the fire to be beyond the fire fighting capabilities of the station forces and instructed the Central Control Room Operator to request assistance from the Verplanck Fire Department.

The station forces as well as the construction fire watch personnel used CO₂ extinguishers and two 1-1/2 inch fire hoses, supplied from nearby hydrants, in an attempt to control the fire, which appeared to have started in a temporary wooden shed located in the 80 foot elevation of the PAB, prior to the arrival of the Verplanck Fire Department.

Shortly after the fire was discovered, as a precautionary measure, power was removed from motor control centers 26A, 26B and 27 and lighting transformers 22 and 23 located on the 98 foot elevation immediately above the fire location. Flames were observed on the 98 foot elevation on the PAB where the aforementioned electrical equipment is located. The removal of the power supplies to Lighting Transformers 22 and 23 also resulted in de-energizing Lighting Transformer 24 located inside containment.

The Verplanck Fire Department arrived at the scene at approximately 7:15 p.m. and commenced to bring the fire under control. Several neighboring fire companies also responded to render assistance.

All doorways leading to the PAB were secured to prevent wind drafts from further spreading the fire.

The overhead 138 KV supply feeder to the Station Auxiliary Transformer was de-energized and grounded at 8:10 P.M. because of its proximity to the fire location and as a safety precaution for the fireman. The two alternate power supplies remaining available throughout the fire were diesel power and the 13.8 KV feeder via Gas Turbine No 1 auto transformer.

By 7:50 P.M. both the Unit No. 2 as well as the Unit No. 1 Control Room contained smoke to the extent that breathing apparatus was deemed advisable. The Unit No. 2 Control Room Operators "A" and "B," the Unit No. 1 Control Room Operators "A" and "B" and the General Watch Foreman donned breathing apparatus. Spare breathing units were provided in the Unit No. 1 Control Room for other personnel as required. In addition portable fans were installed to clear the air. By 8:40 P.M. the level had decreased to the point where breathing apparatus was no longer necessary. During this entire period of time and continuing after the fire, Unit No. 1 remained operational and encountered no difficulties. The fire was extinguished by approximately 9:00 P.M.

At 10:45 P.M. power was brought into Unit No. 2 via the 13.8 KV feeder and the Gas Turbine No. 1 Auto Transformer. By midnight, all power was restored to Unit No. 2 except for those motor control centers and lighting transformers previously mentioned.

By 6:05 A.M. on November 5th, power was once again being supplied by the overhead 138 KV feeder. No difficulties were met in transferring back to this feeder.

At the time the fire was discovered, the watch crew was monitoring facility operations and performing minor maintenance tasks. A special maintenance crew was working in containment in preparation for the installation of the upper internals in the reactor. When the fire started, the watch crew was mustered to fight the fire and the maintenance crew continued their work in containment. When the electrical feeds to the lighting transformers were de-energized, and the lighting in containment was interrupted, the maintenance crew ceased their work and left containment. At this time, two men with spotlights were assigned to monitor the water level in the reactor vessel. In addition, dip sampling of the reactor coolant for boron concentration was instituted at a frequency of every two (2) hours. For the duration of the fire and during all subsequent operations there was no significant change in either reactor vessel water level or reactor coolant boron concentration.

Once the fire had been extinguished and the PAB was accessible, the Boron Storage Tanks in the PAB were isolated and those lines which contained concentrated boric acid (12% by weight) were drained and flushed where possible. This action was necessitated by the loss of power to the heat tracing circuits and the fact that the boric acid in solution would start to precipitate if the temperature of the solution dropped to 140° F. The heat tracing circuits are supplied from motor control centers 26A and 26B which had been de-energized.

During all draining and flushing operations, appropriate valves were closed to assure that unborated water could not flow into the Reactory Coolant System. Since the Boron Storage Tanks are large, well insulated and contained volumes of hot boric acid, crystallization of the solution was not an immediate problem. Temporary power was supplied to the Boron Storage Tank heaters, normally supplied from motor control center 27, at approximately 3:00 A.M. on November 5th. Both Boron Storage Tanks were later drained due to the expected length of time required for the restoration of normal conditions. During the fire and thereafter, two alternate paths for boron injection existed; namely, gravity feed from the Refueling Water storage tank and the four Safety Injection Accumulators. The accumulators were and are pressurized to approximately 500 psig.

After the fire, the power and control cables of the three Component Cooling Pumps and both Residual Heat Removal Pumps were meggered (500 volt) to determine if any faults existed. None was found. At 1:12 P.M. on November 5th, No. 21 Component Cooling Pump was placed in service and at 2:32 P.M. no. 21 Residual Heat Removal Pump was placed in service. Both pumps have remained in service since then and the Reactor Coolant System boron concentration sampling frequency had been reduced to once every four (4) hours.

In order to assure personnel and equipment safety, the construction trades have been and still are providing temporary power supplies for vital services and equipment. Included in the list of temporary supplies are ones for plant communications, lighting, heating, heat tracing for freeze protection, diesel generator crankcase exhausters and other pertinent equipment.

A judgment was reached by responsible operating personnel during the fire as well as after the fire was brought under control that there was no nuclear safety problem with regard to plant personnel nor was the health and safety of the public endangered in any way as a result of the fire. Members of the Nuclear Facilities Safety Committee visited the site that night and agreed with that judgment.

The Nuclear Facilities Safety Committee met the following day to review in detail the causes of the fire and agreed with the conclusions reached by the fire investigation. An Ad Hoc Subcommittee of the Nuclear Facilities Safety Committee was constituted on November 5, 1971 to review all aspects of the fire. The results of the Subcommittee's review will be furnished to the Commission when completed.

Additionally, a task force has been formed of responsible engineering personnel to formulate recommendations regarding the methods by which restoration of functions will be accomplished.