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Jersey Central Power & Light Company Madison Avenue at Punch Bowl Road Morristown, New Jersey 07960 (201) 455-8200

May 17, 1979

Mr. Boyce H. Grier, Director Office of Inspection and Enforcement United States Nuclear Regulatory Commission Region 1 631 Park Avenue King of Prussia, Pennsylvania 19406

Dear Mr. Grier:

Subject: Oyster Creek Nuclear Generating Station

Docket No. 50-219 IE Bulletin No. 79-09

The purpose of this letter is to respond to directives set forth in IE Bulletin No. 79-09 which is concerned with the many reported failures of GE Type AK-2 circuit breaker in safety-related systems. Our responses to the specified action items in the subject bulletin are given below:

item 1

Determine whether or not GE Type AK-2 breakers are used or planned for use in safety-related systems at your facility.

Response

GE Types AK-2A-25 and AK-2A-50 circuit breakers are used for supplying power to equipment in safety-related systems at the Oyster Creek Station.

Item 2

If such circuit breakers are used or planned for use, identify the safety system involved and provide in written form your plans for developing a preventive maintenance program which will assure design performance with the GE Type AK-2 circuit breaker.

Response

The safety-related equipment with which Type AK-2 circuit breakers are used is listed below:

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Bus	Unit No.	Safety-Related Equipment	Type Breaker
1A2	032A	Containment Spray Pump 1-1	AK-2A-50
1A2	Q33A	Containment Spray Pump 1-2	AK-2A-50
1A2	036B	Core Spray Booster Pump NZ03A	AK-2A-50
1A2	036C	Core Spray Booster Pump NZO3D	AK-2A-50
1A2	033C	CRD Feed Pump NCO8A	AK-2A-50
182	040B	Core Spray Booster Pump NZ03B	AK-2A-50
182	040C	Core Spray Booster Pump NZ03C	AK-2A-50
182	043A	Containment Spray Pump 1-3	AK-2A-50
182	C44A	Containment Spray Pump 1-4	AK-2A-50
182	043C	CRD Feed Pump NCO8B	AK-2A-50
1A3	i2A	Service Water Pump 1-1	AK-2A-25
183	50A	Service Water Pump 1-2	AK-2A-25

A documented Preventive Maintenance Program which is intended to assure design performance of General Electric AK breakers has existed at the Oyster Creek Station since 1977. The existing system is based on General Electric Maintenance Manual GEK-7303A, "Low Voltage Power Circuit Breakers."

Item 3

The program shall include as a minimum but not be limited to the following:

a. Establish and adhere to a preventive maintenance schedule regarding the subject circuit breakers.

Response

A preventive maintenance schedule regarding the subject circuit breakers has been in use since 1977.

b. Have the maintenance performed by qualified personnel. The GE power circuit breaker instruction manual should be used as quidance in setting up the maintenance procedures.

Response

The Oyster Creek electrical group is fully qualified to perform the required maintenance. Their training and experience meets or exceeds the requirements of ANSI 18.1. To supplement on the job experience, some of our electricians have attended structured General Electric training courses specifically related to AK breaker maintenance. When personnel return from these courses, the textbooks are made available in the electric shop for use by all personnel. Additionally, the electrical foremen, electricians and the preventive maintenance coordinator have participated in discussions of the course subject matter

including the techniques used as they relate to the existing maintenance procedure. These informal discussions benefited all personnel involved and provided knowledge that the Oyster Creek procedure was in accordance with the recommended General Electric maintenance techniques. As mentioned previously, the General Electric maintenance manual was used to set up the Oyster Creek maintenance procedure for these breakers. The procedure is referenced for use by the preventive maintenance check sheet at each breaker servicing.

c. During the preventive maintenance, perform the recommended corrective actions described in the enclosed GE Service Alert Letter No. 175(CPDD) 9.3, dated April 2, 1979.

Response

As a result of our experience with undervoltage release failures, the procedure for AK breaker preventive maintenance was revised to include cleaning trip bar bearings and relubrication. It had been determined that the hardening of this lubricant was the cause of the reportable occurrences at Oyster Creek. Since the revision, all safety related breakers listed on the attachment have been completely cleaned, relubricated and tested.

The undervoltage devices used on the breakers at Oyster Creek are externally mounted, static time-delay undervoltage devices, using only a solenoid on the breaker and, therefore, the breaker requires no adjustment or setting as noted in the General Electric Service Advice Letter, (recommendation 3). During the presently existing maintenance program, both the breaker trip devices and the undervoltage devices are exercised to determine their proper operability. In addition, our procedure has been revised to include the torque test of the trip latch (Item 4, GE SAL No. 175). This will provide a quantitative measure of free movement vs. the qualitative test now included in the procedure. We feel, therefore, that all pertinent maintenance practices included in the General Electric Service Advise Letter are incorporated in our procedures.

Item 4

For facilities with an operating license, a written report of the above actions, including the date when they will be completed, shall be submitted within 30 days of receipt of this bulletin.

Response

All actions have been completed as of the date of this letter.

Yours very truly,

Ivan R. Finfrock, Jr

Vice President

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cc: United States Nuclear Regulatory Commission Office of Inspection and Enforcement Division of Reactor Operations Inspection Washington, DC 20555