UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
631 PARK AVENUE
KING OF PRUSSIA, PENNSYLVANIA 19406

March 13, 1980

Docket Nos. 50-03
50-247

Consolidated Edison Company of
New York, Inc.
ATTN: Mr. W. J. Cahill, Jr.
Vice President
4 Irving Place
New York, New York 10003

Gentlemen:

The enclosed IE Bulletin No. 80-06, "Engineered Safety Feature (ESF) Reset Controls," is forwarded to you for action. A written response is required. If you desire additional information regarding this matter, please contact this office.

Sincerely,

Robert W. Carlson
for Boyce H. Grier
Director

Enclosures:
1. IE Bulletin No. 80-06
2. List of Recently Issued IE Bulletins

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ENCLOSURE 1

SSINS: 6820
Accession No.:
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT
WASHINGTON, D.C. 20555

DUPLICATE

IE Bulletin No. 80-06
Date: March 13, 1980

ENGINEERED SAFETY FEATURE (ESF) RESET CONTROLS

Description of Circumstances:

On November 7, 1979, Virginia Electric and Power Company (VEPCO) reported that following initiation of Safety Injection (SI) at North Anna Power Station Unit 1, the use of the SI Reset pushbuttons alone resulted in certain ventilation dampers changing position from their safety or emergency mode to their normal mode. Further investigation by VEPCO and the architect-engineer resulted in discovery of circuitry which similarly affected components actuated by a Containment Depressurization Actuation (CDA, activated on Hi-Hi Containment Pressure). The circuits in question are listed below:

Component/System	Problem
Outside/Inside Recirculation Spray Pump Motors	Pump motors will not start after actuation if CDA Reset is depressed prior to starting timer running out (approx. 3 minutes)
Pressurized Control Room Ventilation Isolation Dampers	Dampers will open on SI Reset
Safeguards Area Filter Dampers	Dampers reposition to bypass filters when CDA Reset is depressed
Containment Recirculation Cooler Fans	Fans will restart when CDA Reset is depressed
Service Water Supply and Discharge Valves to Containment	If service water is being used as the cooling medium prior to CDA actuation, valves will reopen upon depressing CDA reset
Service Water Radiation Monitoring Sample Pumps	Pumps will not start after actuation if CDA reset is depressed prior to motor starting timers running out

Main Condenser Air Ejector Exhaust Isolation Valves to the Containment	After receiving a high radiation monitor alarm on the air ejector exhaust, SI actuation would shut these valves and depressing SI Reset would reopen them

Review of circuitry for ventilation dampers, motors, and valves reported by VEPCO resulted in discovery of similar designs in ESF-actuated components at Surry Unit 1 and Beaver Valley; where it has been found that certain equipment would return to its normal mode following the reset of an ESF signal; thus, protective actions of the affected systems could be compromised once the associated actuation signal is reset. These two plants had Stone and Webster Engineering Corporation for the architect-engineer as did the North Anna Units.

The Stone and Webster Engineering Corporation and VEPCO are preparing design changes to preclude safety-related equipment from moving out of its emergency mode upon reset of an Engineered Safety Features Actuation Signal (ESFAS). This corrective action has been found acceptable by the NRC, in that, upon reset of ESFAS, all affected equipment remains in its emergency mode.

The NRC has performed reviews of selected areas of ESFAS reset action on PWR facilities and, in some cases, this review was limited to examination of logic diagrams and procedures. It has been determined that logic diagrams may not adequately reflect as-built conditions; therefore, the requested review of drawings must be done at the schematic/elementary diagram level.

There have been several communications to licensees from the NRC on ESF reset actions. For example, some of these communications have been in the form of Generic Letters issued in November, 1978 and October, 1979 on containment venting and purging during normal operation. Inspection and Enforcement Bulletins Nos. 79-05, 05A, 05B, 06A, 06B and 08 that addressed the events at TMI-2 and NUREG-0578, TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations. However, each of these communications has addressed only a limited area of the ESF's. We are requesting that the reviews undertaken for this Bulletin address all of the ESF's.

Actions To Be Taken By Licensees:

For all PWR and BWR facilities with operating licenses:

1. Review the drawings for all systems serving safety-related functions at the schematic level to determine whether or not upon the reset of an ESF actuation signal, all associated safety-related equipment remains in its emergency mode.

2. Verify the actual installed instrumentation and controls at the facility are consistent with the schematics reviewed in Item 1 above by conducting a test to demonstrate that all equipment remains in its emergency mode upon removal of the actuating signal and/or manual resetting of the various isolating or actuation signals. Provide a schedule for the performance of the testing in your response to this Bulletin.

3. If any safety-related equipment does not remain in its emergency mode upon reset of an ESF signal at your facility, describe proposed system modification, design change, or other corrective action planned to resolve the problem.

4. Report in writing within 90 days, the results of your review and include a list of all devices which respond as discussed in item 3 above, actions taken or planned to assure adequate equipment control, and a schedule for implementation of corrective action. This information is requested under the provisions of 10 CFR 50.54(f). Accordingly, you are requested to provide within the time period specified above, written statements of the above information, signed under oath or affirmation. Reports shall be submitted to the Director of the appropriate NRC Regional Office and a copy shall be forwarded to the NRC Office of Inspection and Enforcement, Division of Reactor Operations Inspection, Washington, D.C. 20555.

For all power reactor facilities with a construction permit, this Bulletin is for information only and no written response is required.

Approved by GAO, B180225 (R0072); clearance expires 7-31-80. Approval was given under a blanket clearance specifically for identified generic problems.

ENCLOSURE 2

RECENTLY ISSUED IE BULLETINS

Bulletin No.	Subject	Date Issued	Issued To
79-27	Loss of Non-Class-1-E Instrumentation and Control Power System Bus During Operation	11/30/79	All Power Reactor Facilities with an Operating License (OL) and those nearing Licensing (for Action) All Power Reactor Facilities with a Construction Permit (CP) (for Information).
79-28	Possible Malfunction of NAMCO Model EA180 Limit Switches at Elevated Temperatures	12/7/79	All Power Reactor Facilities with an OL or CP
79-01B	Environmental Qualification of Class IE Equipment	1/14/80	All Power Reactors with an OL except SEP Plants
80-01	Operability of ADS Valve Pneumatic Supply	1/14/80	All BWRs with an OL
80-02	Inadequate Quality Assurance for Nuclear Supplied Equipment	1/21/80	All BWRs with an OL or CP
80-03	Loss of Charcoal From Standard Type II, 2 Inch, Tray Adsorber Cells	2/6/80	All Power Reactor Facilities with an OL or CP
80-04	Analysis of a PWR Main Steam Line Break with Continued Feedwater Addition	2/8/80	All Power Reactor Facilities with an (OL) or (CP)
79-01B	Environmental Qualification of Class IE Equipment	2/29/80	All Power Reactors with an OL except SEP Plants
80-05	Vacuum Conditions Resulting in Damage to Chemical Volume Control System (CVCS) Holdup Tanks	3/10/80	All PWR Power Reactor Facilities with an OL or CP