Indian Point 3
Nuclear Power Plant
P.O. Box 215
Buchanan, New York 10511
914 739.8200

NewYorkPower Authority

March 14, 1990
IP3-90-011
RAL-90-022B

License No. 50-286
Docket No. DPR-64

Charles E. Rossi, Director
Division of Operational Events Assessment
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Station P1-137
Washington, D.C. 20555

Subject: **Indian Point 3 Nuclear Power Plant**
NRC Bulletin No. 89-02, "Stress Corrosion Cracking of High-Hardness Type 410 Stainless Steel Internal Preloaded Bolting In Anchor Darling Model S350W Swing Check Valves or Valves of Similar Design

References:
1. NRC Bulletin No. 89-02: "Stress Corrosion Cracking of High-Hardness Type 410 Stainless Steel Internal Preloaded Bolting In Anchor Darling Model S350W Swing Check Valves or Valves of Similar Design", dated July 19, 1989.
2. NRC Information Notice 88-85, "Broken Retaining Block Studs on Anchor Darling Check Valves, dated October 14, 1988.

Dear Mr. Rossi:

Reference (1) required that all addressees identify, disassemble and inspect certain type swing check valves which may contain Type 410 stainless steel (SS) bolting material. This letter and Attachment I provide the Authority's interim response to the requested actions and the Authority's schedule for completion of all actions associated with Reference (1).

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Should you or your staff have any questions regarding this matter, please contact Mr. M. Peckham of my staff.

Sincerely,

Joseph E. Russell
Resident Manager
Indian Point Unit 3
Nuclear Power Plant

JER:RAL/rl

State of New York
County of Westchester
Subscribed and sworn to before me this
14th day of March 1990

LORRIE A. HAFNER
Notary Public, State of New York
No. 4928710, Dutchess County
Term Expires May 2, 1990

cc: Mr. William T. Russell
Regional Administrator
U.S. Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406

Resident Inspector's Office
Indian Point Unit 3
U.S. Nuclear Regulatory Commission
P.O. Box 337
Buchanan, NY 10511

Joseph D. Neighbors, Sr. Proj. Mgr.
Project Directorate I-1
Division of Reactor Projects I/II
U.S. Nuclear Regulatory Commission
Main Stop 14B2
Washington, D.C. 20555

ATTACHMENT I
INTERIM RESPONSE TO ACTIONS OF
NRC BULLETIN 89-02

NRC ACTION:

All licensees of operating reactors are requested to disassemble and inspect all safety-related Anchor Darling Model S350W swing check valves supplied with internal retaining block studs of ASTM specification A193 Grade B6 Type 410 SS. Licensees should review the design of other safety-related check valves to determine if similar designs and material selection to the Anchor Darling Model S350W are used. If so, such valves should be similarly inspected. The inspection by disassembly should be performed as follows:

1. If any of the internal bolting is to be reused, it should be inspected for cracks using surface inspection techniques (penetrant or magnetic particle). Cracked bolting should be replaced and a failure analysis performed including chemical analysis to confirm material type.

2. If all suspect bolting is to be replaced with bolting of material and hardness specified in I.A.3, surface inspection and failure analysis of the old bolting may not be needed unless an unexpected failure mechanism is evident.

3. Reused and new bolting should be hardness tested for a maximum Rockwell hardness value of Rc26. Any internal preloaded bolting that does not meet the hardness requirements should be replaced by bolts of the same material with a maximum Rockwell hardness of Rc26 or by an alternate material approved by the valve manufacturer.

B. Inspections of Anchor Darling Model S350W swing check valves are requested to be performed at the next refueling outage or scheduled outage of sufficient duration (four weeks or longer) that begins 90 days after receipt of this bulletin. Documentation review to identify similar swing check valves with internal preloaded Type 410 SS bolting in the facility and the inspections are requested to be performed at the next refueling outage that begins 180 days after receipt of this bulletin.

ATTACHMENT I
INTERIM RESPONSE TO ACTIONS OF
NRC BULLETIN 89-02

AUTHORITY RESPONSE:

All Anchor Darling Model S350W swing check valves installed at IP3 have been modified in accordance with Anchor Darling recommendations. These valves are located in the Safety Injection(SI) system and are identified as valves SI-895 A thru D and SI-897 A thru D. The valves are 10 inch Anchor Darling Model #S350WSC swing check valves.

The clapper arm retaining block studs and nuts were replaced on those eight valves with Anchor Darling provided ASTM A564-630-1100 stainless steel block studs and ASTM A-194 Grade 8 nuts. The actions were completed during the Cycle 6/7 Refueling Outage early in 1989.

The Authority's actions were prompted by NRC Information Notice No. 88-85 and information from Anchor Darling before Bulletin 89-02 was issued.

After Bulletin 89-02 was issued in July 1989, the Authority began a documentation review to identify similarly designed swing check valves. To date, this review has not identified additional swing check valves requiring inspection.

The Authority plans to complete this review and perform any required disassembly and inspection no later than the completion of the cycle 7/8 Refueling Outage currently scheduled for September of 1990.

The Authority will complete all reporting actions within 60 days of the completion of any disassembly and inspection.