

December 12, 1989

Docket No. 50-454

Mr. Thomas J. Kovach  
Nuclear Licensing Manager  
Commonwealth Edison Company  
Post Office Box 767  
Chicago, Illinois 60690

Dear Mr. Kovach:

The Commission has issued the enclosed Amendment No. 35 to Facility Operating License No. NPF-37 for the Byron Station, Unit 1. The amendment consists of changes to the Technical Specifications in response to your application transmitted by letter dated October 13, 1989.

The amendment approved changes to the Technical Specifications to allow a one-time extension of the interval for performance of the visual inspection of inaccessible snubbers.

A copy of the related Safety Evaluation is enclosed. A Notice of Issuance will be included in the Commission's next regular biweekly Federal Register notice.

Sincerely,

*151*

Leonard N. Olshan, Project Manager  
Project Directorate III-2  
Division of Reactor Projects - III,  
IV, V and Special Projects  
Office of Nuclear Reactor Regulation

Enclosures:

- 1. Amendment No. 35 to NPF-37
- 2. Safety Evaluation

cc w/enclosures:  
See next page

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

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Sincerely,

A handwritten signature in cursive script, appearing to read "Leonard N. Olshan".

Leonard N. Olshan, Project Manager  
Project Directorate III-2  
Division of Reactor Projects - III,  
IV, V and Special Projects  
Office of Nuclear Reactor Regulation

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2. Safety Evaluation

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See next page

Mr. Thomas J. Kovach  
Commonwealth Edison Company

Byron Station  
Units 1 and 2

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-454

BYRON STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 35  
License No. NPF-37

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Commonwealth Edison Company (the licensee) dated October 13, 1989 complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-37 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. 35 and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



John W. Craig, Director  
Project Directorate III-2  
Division of Reactor Projects - III,  
IV, V and Special Projects

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: December 12, 1989

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 35. . FACILITY OPERATING LICENSE NO. NPF-37

DOCKET NO. 50-454

Revise Appendix A as follows:

Remove Pages

3/4 7-22

Insert Pages

3/4 7-22

## PLANT SYSTEMS

### 3/4.7.8 SNUBBERS

#### LIMITING CONDITION FOR OPERATION

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3.7.8 All snubbers shall be OPERABLE. Snubbers excluded from this requirement are those installed on nonsafety-related systems and then only if their failure or failure of the system on which they are installed would have no adverse effect on any safety-related system.

APPLICABILITY: MODES 1, 2, 3, and 4. MODES 5 and 6 for snubbers located on systems required OPERABLE in those MODES.

#### ACTION:

With one or more snubbers inoperable, within 72 hours replace or restore the inoperable snubber(s) to OPERABLE status and perform an engineering evaluation per Specification 4.7.8g. on the attached component or declare the attached system inoperable and follow the appropriate ACTION statement for that system.

#### SURVEILLANCE REQUIREMENTS

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4.7.8 Each snubber shall be demonstrated OPERABLE by performance of the following augmented inservice inspection program and the requirements of Specification 4.0.5.

a. Inspection Types

As used in this specification, type of snubber shall mean snubbers of the same design and manufacturer, irrespective of capacity.

b. Visual Inspections

Snubbers are categorized as inaccessible or accessible during reactor operation. Each of these groups (inaccessible and accessible) may be inspected independently according to the schedule below. The first inservice visual inspection of each type of snubber shall be performed after 4 months but within 10 months of commencing POWER OPERATION and shall include all hydraulic and mechanical snubbers. If all snubbers of each type are found OPERABLE during the first inservice visual inspection, the second inservice visual inspection of that type shall be performed at the first refueling outage. Otherwise, subsequent visual inspections of a given type shall be performed in accordance with the following schedule:\*

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\*The visual inspection of the inaccessible snubbers for Unit 1, Cycle 3 must be completed by January 24, 1990.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 35 TO FACILITY OPERATING LICENSE NO. NPF-37

COMMONWEALTH EDISON COMPANY

BYRON STATION, UNIT 1

DOCKET NO. 50-454

1.0 INTRODUCTION

By letter dated October 13, 1989, Commonwealth Edison Company (CECo), the licensee, submitted a proposed revision to Facility Operating License No. NPF-37 for Byron Station, Unit 1. The proposed amendment revises the Technical Specifications to allow a one-time extension of the interval for performance of the visual inspection of inaccessible snubber.

2.0 DISCUSSION AND EVALUATION

Technical Specification 4.7.8b requires inaccessible snubbers to be visually inspected in accordance with a schedule based on the number of inoperable snubbers per inspection period. During the last inspection period for Byron Unit 1, one snubber in the inaccessible group failed the visual inspection. As a result of this failure, the next visual inspection would be required within 12 months ( $\pm 25\%$ ) from the last inspection period. Because this group of snubbers is classified as inaccessible, the unit must be shut down for the surveillance to be performed. The surveillance must be completed by December 13, 1989 (12 months + 25%). Unit 1 is currently scheduled to begin a refueling outage on January 5, 1990. Since the unit has been operating continuously for the past 254 days, the inaccessible snubbers have been unavailable for inspection. Therefore, by letter dated October 13, 1989, the licensee requested a one-time extension for the inaccessible snubber visual inspection. The surveillance will be performed during the Unit 1 third refueling outage.

There are currently 291 snubbers installed on Byron Unit 1 of which 274 are classified as inaccessible. The snubbers function is to ensure that the structural integrity of the reactor coolant system (RCS) and all other safety-related systems is maintained during and following a seismic or other event initiating dynamic loads. Snubber inaccessibility is determined based upon the existing radiation levels and the expected time to perform a visual inspection in each snubber location, as well as other factors associated with accessibility during plant operations (e.g., temperature, atmosphere, location, etc.) and the recommendations of Regulatory Guides 8.8 and 8.10. This Technical Specification amendment requests an extension until January 24, 1990 to complete the visual inspection of the inaccessible snubbers on Unit 1. This extension of approximately 6 weeks will allow sufficient time to shut down Unit 1, establish containment access, and complete the surveillance in a safe and organized fashion.

2. During the last visual inspection interval of inaccessible snubbers, one snubber on the reactor coolant system failed and was determined to be frozen. The cause of the failure resulted from boric acid and rust which coated the snubber barrel. If the failed snubber had been frozen for the entire cycle, acting as a rigid strut, the piping system would still be acceptable with the additional thermal movement load imposed by the failed snubber. The failed snubber was replaced. However, as a result of this failure, the visual inspection interval for inaccessible snubbers was decreased from 18 months ( $\pm 25\%$ ) to 12 months ( $\pm 25\%$ ). One snubber failure out of 680 inaccessible snubbers (installed as of the last inspection) has decreased the allowed inspection interval by about one-third. This failure is not an indication of a generic concern. Since the snubber was replaced, it should be operable when it is next inspected.

All the inaccessible snubbers on Unit 1 are designed to function for the life of the plant, approximately 40 years. Since Unit 1 has operated for about 5 years, it is still early in the plant design life. Therefore, it is early in the design life of its snubbers, providing additional assurance that the snubbers will operate as required.

Functional testing is routinely performed on snubbers in accordance with Technical Specification requirements. All 680 inaccessible snubbers installed as of the last inspection were functionally tested during the last outage. Defective snubbers found as a result of this functional testing were replaced. The 100% functional testing of inaccessible snubbers during the last outage provides a higher than normal level of assurance that the snubbers will perform their safety function as required. There have been no known events (seismic or transients) that could have impaired the operability of any snubbers demonstrated operable after the last refueling outage.

The surveillance extension requested is for a short period of time, approximately 6 weeks. As the unit shuts down to begin the refueling outage, the plant will enter modes where certain systems are not required to be operable. As such, the snubbers on those systems will not be required to be operable for approximately 2 weeks out of the requested 6-week extension. This reduces the actual extension period for these snubbers to approximately 4 weeks. As a result, the impact of the extension is further reduced because the number of snubbers affected by the extension is decreased. In addition, the probability of a seismic or transient event occurring during this short extension that requires the snubber to perform its design function is negligible.

For these reasons, the staff finds the proposed amendment acceptable.

### 3.0 ENVIRONMENTAL CONSIDERATION

The amendment involves change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 or changes a surveillance requirement. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that

there is no significant increase in individual or cumulative occupational radiation exposures. The commission has previously issued a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Section 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

#### 4.0 CONCLUSION

The staff has further concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner; and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of this amendment will not be inimical to the common defense and security or the health and safety of the public.

Principal Contributor: Leonard N. Olshan

Dated: December 12, 1989