

Regulatory

File Cy.

50-286



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State of New York  
**ATOMIC ENERGY COUNCIL**  
Department of Commerce  
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Albany, New York 12210

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DEPUTY COMMISSIONER  
DIV. OF INDUSTRIAL SCIENCES  
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December 18, 1973

U. S. Atomic Energy Commission  
Washington, D. C. 20545

Attention: Assistant Director for Pressurized Water  
Reactors, Directorate of Licensing - Regulation

Dear Sir:

The New York State Atomic Energy Council has completed its review of the Safety Evaluation Report issued by the Directorate of Licensing on September 21, 1973 which relates to Consolidated Edison's Application for a Full Term Operating License for the Indian Point Nuclear Power Plant Unit No. 3 (Docket 50-286).

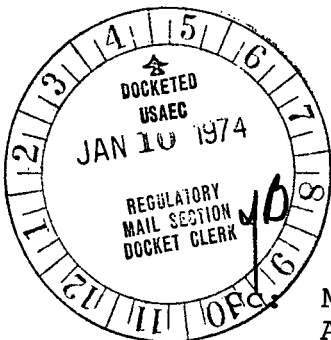
In preparing the attached comments, the views of all State agencies comprising the New York State Atomic Energy Council have been considered. Some of these comments are directed to specific points in the Safety Evaluation Report with the intent of clarifying and/or improving any supplementary documentation which the Commission may issue related to this document.

It is requested that utmost consideration be given to the attached comments and the State's comments relating to the Draft Environmental Statement for the Indian Point Unit No. 3 plant, which were submitted by the New York State Department of Environmental Conservation on December 17, 1973.

Sincerely yours,

William E. Seymour  
Staff Coordinator

Members of the New York State  
Atomic Energy Council  
J. Bruce MacDonald, Esq.  
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NEW YORK STATE COMMENTS RELATING TO THE  
SEPTEMBER 21, 1973 SAFETY EVALUATION  
REPORT FOR THE INDIAN POINT NUCLEAR POWER  
POWER PLANT UNIT NO. 3

1. Section 1.0, Introduction, Page 1-4

The third sentence states that "The steam that is generated in the steam generators will be utilized to drive a four element tandem compound turbine and will be condensed in a radial flow single pass deaerating condenser." This statement is incomplete and incorrect since steam condensers are not described by the method in which steam passes over the tubes, but by the way the cooling water flows through the tubes (i.e., two pass reverse flow, single pass reverse flow, single pass straight through flow, etc.). Thus, it is considered that the sentence should be modified to read: "The steam that is generated in the steam generators will be utilized to drive a four element tandem compound turbine consisting of one high pressure and three low pressure turbines on a single shaft. Each of the low pressure turbines exhausts into a separate single pass, divided waterbox, surface condenser fitted with a deaerating hotwell."

2. Section 1.0, Introduction, page 1-9 and Section 13.0, Conduct of Operations, Page 13-4.

The Atomic Energy Commission has required that Consolidated Edison notify the Penn Central Railroad in the event of an emergency at Indian Point. It is noted that other facilities with large work populations are also required to be notified in the event of a major emergency at Indian Point.

3. Section 2.0, Site Characteristics, Page 2-2.

It is stated that the closest commercial airport is at White Plains, New York, 17 miles south of the station. It should be noted that the Stewart Air Force Base (which is closer, has been decommissioned and is now known as the Stewart Airport) conducts commercial operations.

4. Section 2.0, Site Characteristics, Page 2-21.

It is noted that the Staff has concluded that the Site foundation conditions are acceptable for the facility. Since it is assumed that "the Site foundation conditions" refers to the diomitic limestone bedrock upon which the reactor plant structure foundations are built, the sentence should be expanded to mention this bedrock and the actual loading which the bedrock will support versus the actual load imposed.

5. Section 2.0, Seismic Design, Pages 3-5 through 3-9

This section describes the seismic design criteria and concludes that all Category I structures, components and systems have been acceptably designed. The reference document in which the criteria are presented (Appendix A to 10 CFR Part 100) should also be included in this discussion.

Because of a lack of detailed analyses supported by current data and information which has recently become available concerning the Ramapo Fault, additional attention should be addressed to potential seismic activity and to the design acceleration values used as seismic design criteria for Indian Point nuclear plants.

6. Section 6.0, Engineered Safety Features, Pages 6-24 through 6-31.

This section discusses the reasons for and general effects of fuel densification. It is noted that the Final Report on fuel densification will also review the effects of fuel densification on the loss-of-flow transient and other accidents and transients. There is no Staff conclusion that the fuel densification phenomenon is not expected to pose a significant problem for operation of the Indian Point Nuclear Plant Unit No. 3. Such a conclusion should be included even if only preliminary and based on studies conducted to date.

7. Section 5.0, Reactor Coolant System, page 5-3.

This section states that significant sensitization of all non-stabilized austenitic stainless steel within the reactor coolant pressure boundary will be avoided through materials selection and control of welding and heat treating processes. Precautions noted include using low heat input procedures, limiting interpass temperatures, etc. This section should be expanded to note that the requirements of Regulatory Guide 1.31, "Control of Stainless Steel Welding," or equal, has or will have been met by the Applicant when fabricating and joining austenitic stainless steel components and systems.

8. Section 6.0, Engineered Safety Features, page 6-2.

It is assumed that the evaluation of the Indian Point Unit No. 2 feed water line rupture, when completed, will be appropriately factored into the Indian Point Unit No. 3 design in a supplement to the Safety Evaluation.

9. Section 6.0, Engineered Safety Features, Page 6-17.

The Safety Evaluation refers to a peak cladding temperature of 2300°F. It is assumed that if a more restrictive peak cladding temperature is adopted by the U.S. AEC that the effect of any revised criteria will be appraised in a supplement to the Safety Evaluation.

10. Section 6.0, Engineered Safety Features, page 6-20.

The second paragraph notes that check valves have been installed in the piping that connects the discharge side of the Auxiliary Feed Water Pumps with the normal feedwater system in order to prevent a backflow from the main to the Auxiliary Feedwater System in the event of a break in the auxiliary feedwater line. It is not clear whether swing check valves or disc check valves were installed; if swing check valves were installed did the Staff's accident analysis include consideration for the commonly experienced gross leakage past the disc of a swing check valve as compared to that past a disc check? In addition, these check valves should be labeled on Figure 6.4 since they cannot be identified on this Figure.

11. Section 9.0, Auxiliary Systems, page 9-9

It is stated that "The service water pumps are located in a Category I designed ....., any one of which is capable of supplying the service water emergency requirements." Figure III-2, and Section III-E in the Draft Environmental Statement reflect that there is only one service water pump. This apparent discrepancy should be resolved.

12. Section 11.0, Radioactive Waste Management, Page 11-1.

The last sentence of the second paragraph notes that "As low as practicable" in conformance with the requirements of 10 CFR Part 20. Part 20 should be corrected to read Part 50 - (editorial).

13. Section 11.0, Radioactive Waste Management, Page 11-17.

The reference document for the noted maximum limit of 15 mrem/year (Regulatory Guide 1.42) should be included in the discussion which states that the Staff's calculations show that the radiation dose to a child's thyroid is acceptable, since it will be less than 15 mrem/yr based on the grass-cow-milk pathway.

14. Section 13.0, Conduct of Operations, Page 13-1.

The Applicant's past history of conduct of operation of Units 1 and 2 should be discussed.

15. Section 13.2 - Emergency Planning, Page 13-3.

"The New York State Emergency Plan for Major Radiation Accidents" should be referenced.