



June 14, 1985  
IPN-85-29

Director of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Attention: Mr. Steven A. Varga, Chief  
Operating Reactors Branch No. 1  
Division of Licensing

Subject: Indian Point 3 Nuclear Power Plant  
Docket No. 50-286  
Appendix R Section III.J  
Exemption for Battery Powered Lights in  
the Yard Area

- References:
- (1) J.P. Bayne letter to S.A. Varga, dated August 16, 1984, IPN-84-32.
  - (2) S.A. Varga letter to J.P. Bayne, dated July 22, 1983.
  - (3) J.P. Bayne letter to S.A. Varga, dated June 15, 1984, IPN-84-18.

Dear Sir:

In Reference (1), the New York Power Authority provided to the NRC Staff the results of a reevaluation of IP-3 compliance with Sections III.G and III.L of Appendix R to 10CFR50. This reevaluation was initiated as a result of the Staff's positions documented in the draft Safety Evaluation Report of IP-3 compliance with Appendix R (Reference (2)).

The Authority noted in Reference (1) that the implementation of modifications to achieve compliance with Sections III.G and III.L of Appendix R might necessitate modifications to the emergency lighting system. The Authority is adding additional emergency lighting units to supplement the currently installed units in areas where safe shutdown operations will be performed. The access and egress routes to these areas will also be provided with appropriate emergency lighting coverage. The safe shutdown operations and the plant areas where these actions will take place are discussed in the report submitted with Reference (1).

The safe shutdown scheme discussed in Reference (1) includes the operation of an onsite emergency power supply, alternate to the normal emergency diesel generators. The alternate diesel generator

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is scheduled to be installed during the upcoming refueling outage in accordance with the schedule requirements of 10CFR50.48. The Authority informed the Staff of plans to install the alternate diesel generator, in lieu of protecting one of the normal emergency diesel generators, in Reference (3).

The current design of the alternate diesel generator requires an operator to locally start the unit as well as locally manipulate certain circuit breakers which provide the proper electrical bus alignment. These tasks would be performed at the diesel generator and outdoor switchgear enclosures, respectively. Access to these enclosures is through the yard area between the Containment and Turbine Building (See Figure 1). Emergency light units will be provided in the equipment enclosures as required by Section III.J of Appendix R. Lighting coverage of the yard area along the access route to the alternate diesel generator and switchgear is provided. This lighting, however, does not comply with the requirement of Section III.J of Appendix R specifying an eight hour battery supply.

The yard area lighting for the access and egress route to the alternate diesel and outdoor switchgear is part of the security lighting system. As such, illumination is provided in accordance with the requirements of 10CFR73.55(c)(5). The security lighting is powered by a dedicated propane powered generator which operates in the event of a loss of the normal power supply to the security system. The security generator is located in the security building which is physically separate from the main plant and, in particular, from the Control Building. The alternate diesel generator is proposed to mitigate the consequences of a Control Building fire which damages both the onsite and offsite power supplies or distribution system. As such, a Control Building fire necessitating access to the alternate diesel generator will not impact the security generator. In addition, the distribution system for the yard lighting from the security generator is independent of the Control Building.

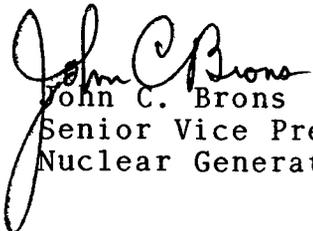
The security generator has sufficient capacity and fuel supply to power the yard lighting for the requisite eight hour time period specified in Section III.J of Appendix R. Furthermore, the operator actions requiring yard access and egress will be one of the initial actions prescribed by the safe shutdown procedure at IP-3 in the event both onsite and offsite power is lost due to a fire. Additional information on the security system lighting and power supplies is documented in the Indian Point 3 Security Plan.

While the Authority recognizes the need for emergency lighting along the access route to the alternate diesel generator, compliance with Section III.J of Appendix R with respect to battery supplied emergency lighting in the yard area is considered unnecessary. The currently installed lighting for the route to the alternate diesel is considered highly reliable. Based on the requirements for the security lighting system as delineated in 10CFR73.55 (c)(5), the Authority considers the illumination levels adequate for the required access through the yard. This will be verified by the Authority. In the Authority's judgement, the installation of battery powered lights in the yard area would not appreciably enhance the safe shutdown capability at IP-3.

As such, pursuant to 10CFR50.12, the Authority hereby requests an exemption from the eight hour battery supply requirement of Section III.J of Appendix R to 10CFR50 for the yard area lighting along the access and egress route to the alternate diesel generator and its associated outdoor switchgear.

We trust you will find this information satisfactory. Should you have any questions regarding this matter, please call Mr. P. Kokolakis of my staff.

Very truly yours,

  
John C. Brons  
Senior Vice President  
Nuclear Generation

cc: Resident Inspector's Office  
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# OVERALL SITE PLAN - EXTERIOR YARD

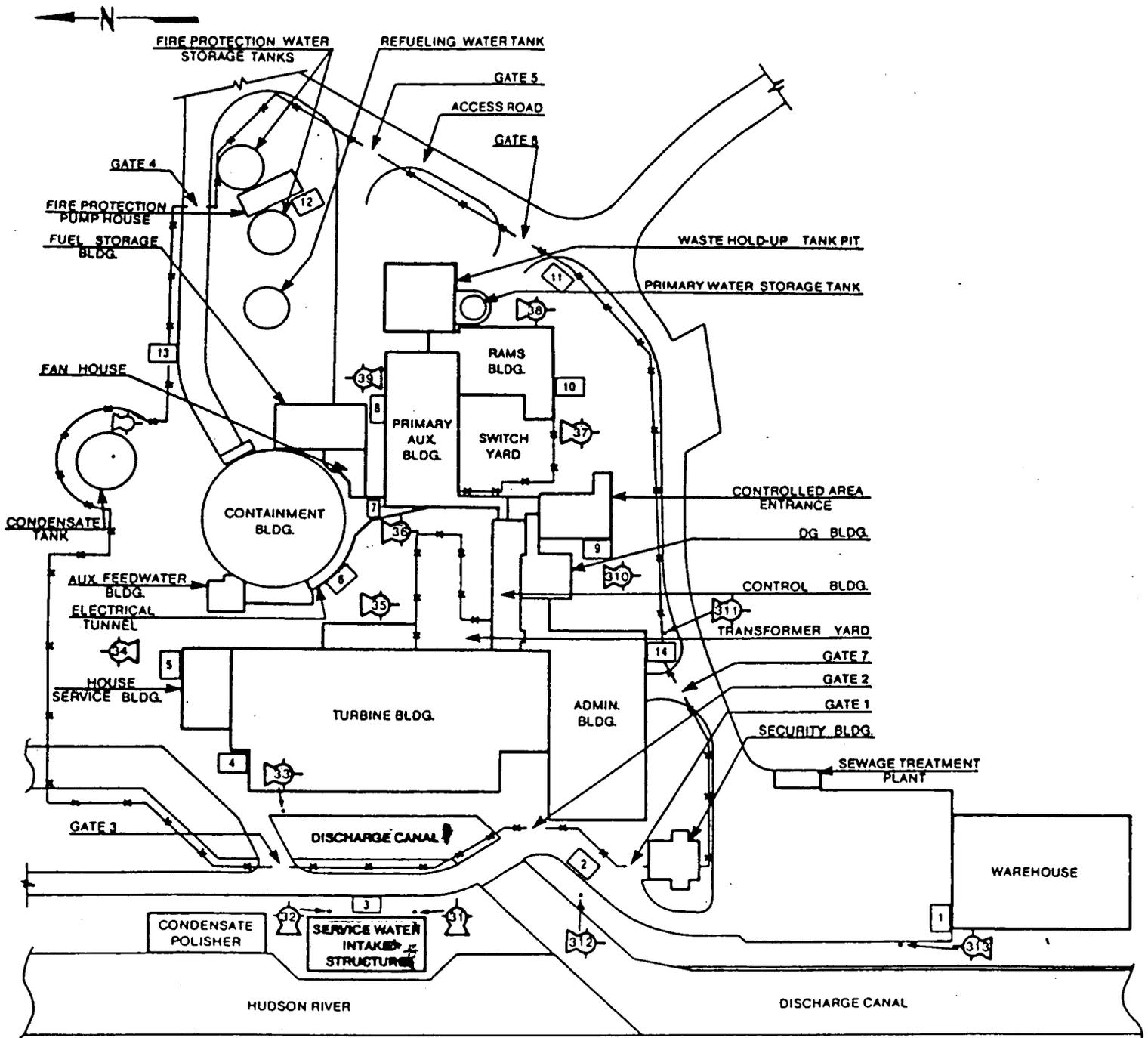


FIGURE 1

## LEGEND

- PROTECTED AREA
- HOSE HOUSES
- HYDRANTS