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Secretary
U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Att: Docketing and Service Branch

Dear Mr. Secretary:

Subject: Three Mile Island Nuclear Station Unit 1 (TMI-1)
DPR-50/Docket 50-289
Oyster Creek Nuclear Generating Station (OC)
DPR-16/Docket 50-219

Comments on Proposed Rulemaking 10 CFR 50.67

These comments are being provided by GPU Nuclear in response to the request for comment on the proposed rule, "Shutdown and Low Power Operations for Nuclear Power Reactors," as noticed in the Federal Register, dated October 19, 1994 (Ref. 59 Fed. Reg. 52707).

Both GPU Nuclear plants, Oyster Creek and TMI-1, have developed and utilized comprehensive criteria to define an adequate safety margin in a series of plant conditions that may exist during plant outages. Each plant condition has a start point and an end point which are related to an outage milestone or major evolution. The criteria include definitions of the critical safety functions and appropriate levels of protection. These criteria are used as guidelines for personnel engaged in planning and scheduling outage activities. The guidelines provided in NUMARC 91-06, "Guidelines for Industry Actions to Assess Shutdown Management" were incorporated in the development of GPU Nuclear's criteria. GPU Nuclear's efforts have been acknowledged by the NRC staff. At TMI-1, Inspection Report 93-22 noted,

> "the licensee's use of the Outage Fuel Protection Criteria (OFPC) was positive and provided a net safety benefit."

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It was anticipated that future enhancements would result from incorporation of lessons learned. During the Fall 1994 outage at Oyster Creek the shutdown risk management plan was reviewed. Inspection Report 94-18 contained the following evaluations:

1. "The plan incorporated 'defense-in-depth' principles to ensure the availability of key safety functions and contingencies."

2. The inspectors also concluded "The licensee's outage planning and risk assessment initiatives were proactive and focused on safety."

GPU Nuclear's program was developed as part of the industry initiative led by NEI. Many other utilities created similar programs based on 91-06. The NRC staff recognizes the improvements achieved by these programs in the October 19, 1994 Federal Register notice. The next statement in the notice, however, is that the staff wishes to put a regulatory "footprint" on improvements. GPU Nuclear has two concerns with this approach. First, it will tend to dampen utilities' interest in industry sponsored self-improvement efforts for fear that changes they make may not coincide with or meet subsequent regulatory requirements. Secondly, along with NEI, GPU Nuclear believes that the public health and safety will not be significantly improved by establishment of this rule. Therefore, proceeding with this rulemaking runs counter to the trend of minimizing or eliminating regulations that are marginal to safety. GPU Nuclear believes that the potential economic impact of the proposed rule far exceeds any possible additional benefit.

GPU Nuclear has several other concerns with the proposed rule. Paragraph (c)(2) requires that "containment integrity is maintained or can be reestablished in a timely manner." This requirement makes no distinction between Pressurized Water Reactors (PWRs) and Boiling Water Reactors (BWRs). For a BWR, it is impossible to maintain primary containment during refueling outages. Furthermore, the plant design precludes reestablishment of primary containment in a timely manner. During refueling outages, the drywell head and reactor vessel head are removed to provide access to the reactor internals. These activities are labor intensive and require approximately seven (7) days to complete.

Obviously, it is not the intent of the NRC to revise the basic design of BWRs, and in previous correspondence on this subject the NRC acknowledged that it is difficult, if not impossible, for BWRs to reestablish primary containment in a timely manner. NUREG 1449 recognized that BWR Mark I and Mark II secondary containments are the primary boundary during refueling outages. Since the reactor coolant temperature is less than 212°F and the reactor is maintained in a subcritical condition, the probability of a significant accident under these conditions is low. In addition, the BWR Owners' Grou[illegible]ook exception to

the NRC's position on this issue and provided numerous comments concerning the calculation of Core Damage Frequency and the postulated benefits of requiring primary containment being maintained at all times. GPU Nuclear believes that, if adopted, the rule should explicitly exclude BWRs from the requirements of paragraph (c)(2) or, indicate that secondary containment integrity is an acceptable alternative for BWR Mark I and Mark II.

GPU Nuclear also has a concern with section (c)(4) of the proposed rule which deals with fire protection. As indicated in the NEI comments on the proposed rule, the NRC's rationale for this section is not supported by statistics published previously by the NRC staff. Furthermore, compliance with Licensing Conditions at GPU Nuclear already requires fire program reviews that evaluate the ability to achieve, maintain and monitor cold/safe shutdown in the event of a fire. The NRC Generic Letter (GL) 86-10 "Implementation of Fire Protection Requirements" which addressed removal of fire protection features from plant technical specifications, proposed these licensing conditions. In addition, 10 CFR 50 Appendix R, section III. G. currently requires design features to achieve and maintain cold shutdown and individual plant fire protection programs address a plant's requirement to maintain cold shutdown. GPU Nuclear believes that Appendix R and existing license conditions adequately address the issue and that the appropriate vehicle for reconsidering fire protection requirements for shutdown and low power conditions is the evaluation of the revision to Appendix R currently being conducted. Therefore, GPU Nuclear believes that, if the proposed rule is adopted, section (c)(4) should be deleted.

Section (d), Requirements for Licensees of PWRs, is also of concern to GPU Nuclear. This requires diverse RCS level indication for PWRs that may only be applicable for mid-loop operations. TMI and other PWRs have taken action in response to GL 88-17 "Loss of Decay Heat Removal" to improve RCS level indication. Furthermore, the TMI Outage Fuel Protection Criteria have enhanced the planning and control of mid-loop and other modes of operation. GPU Nuclear believes that design features and actions documented in our responses to GL 88-17 demonstrate compliance with the intent of the proposed rule. If some utilities have not adequately complied with the recommendations of GL 88-17, the NRC should deal directly with those utilities to resolve any deficiencies.

In summary, GPU Nuclear does not believe the proposed rule is warranted for the following reasons: any improvement in the public health and safety would be small and the cost of implementing the proposed rule would be significant. Imposing a regulatory "footprint" on improvements made by industry initiative is a bad precedent and counter to the trend away from marginal to safety regulation. The proposed rule, as written, does not distinguish between PWRs and BWRs despite the basic design differences that would fundamentally affect compliance. Finally, the proposed rule contains several provisions (i.e. fir protection and RCS level indication) which can, in GPUN's opinion, be more appropriately addressed by other means.

We appreciate the opportunity to provide our comments on this important issue.

Sincerely,

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Director

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