

POLICY ISSUE INFORMATION

July 22, 2003

SECY-03-0123

FOR: The Commissioners

FROM: William D. Travers
Executive Director for Operations

SUBJECT: USE OF TRADITIONAL ENFORCEMENT FOR THE BROWNS FERRY
NUCLEAR PLANT, UNIT 1 RESTART

PURPOSE:

The purpose of this paper is to inform the Commission of the staff's intent to apply traditional enforcement during the restart process for Browns Ferry Nuclear Plant, Unit 1 (BFN1). The staff does not plan to use the Reactor Oversight Process (ROP) for inspection and oversight of BFN1 during the extended process now underway to return the unit to operation. The ROP generally prescribes staff responses based on increases in public health and safety risk due to core damage accident probability. The unique circumstances involved with the defueled BFN1 make the application of the ROP problematic until the unit returns to power operations. In the interim, the staff proposes to use "traditional enforcement" to determine the significance of violations involving reactor safety, and the resultant enforcement actions, instead of the Significance Determination Process (SDP).

BACKGROUND:

Browns Ferry Units 1, 2, and 3 were voluntarily shut down in March 1985 for management and regulatory issues. The Tennessee Valley Authority (TVA) submitted its Nuclear Performance Plan, Volume 3, in August 1986, outlining the steps needed to obtain the Nuclear Regulatory

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Commission's (NRC) approval to restart each of the Browns Ferry units. The Browns Ferry Units 2 and 3 were restarted in the 1990s prior to the implementation of the ROP. In May of 2002, the licensee commenced a 5-year program to restart BFN1. Due to the extensive modifications and upgrades required for BFN1, the staff developed a new inspection manual chapter to govern the inspection of BFN1 restart activities and its transition to the ROP. The staff has also determined that "traditional enforcement," similar to the enforcement employed during the BF2 and BF3 restarts, would be more appropriate for all violations identified during BFN1's restart, as evidenced by its successful application during these previous restarts.

DISCUSSION:

A. Bases for not Initially Applying the ROP During BFN1's Restart

The ROP, which is governed by Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program," IMC 0608, "Performance Indicator Program," IMC 0609, "Significance Determination Process," IMC 0305, "Operating Reactor Assessment Program," and the Commission's current Enforcement Policy, is not initially appropriate for the staff to use to monitor BFN1 during its restart for the following reasons.

First, the inspection program described in IMC 2515 assumes that a licensed nuclear facility is capable of operating safely within currently required safety margins. That assumption is not valid for BFN1 because it is more comparable to a plant under construction than an operating plant. Since its shutdown in March 1985, the reactor for BFN1 has been defueled, systems have not operated and have generally been maintained in a lay up condition. In addition, outstanding licensing actions and regulatory requirements have not been fully incorporated into the design basis. Since BFN1 is currently not yet in full compliance with the regulations for power operations, IMC 2515 is not currently applicable to BFN1.

Second, the performance indicator (PI) program described in IMC 0608 applies to all operating commercial nuclear power reactors. In preparation for the start of the implementation of the ROP, licensees were requested to submit historical PI data on January 21, 2000. That information was not submitted for BFN1. Since BFN1 has not operated for 18 years and any PI data that old, if it exists, would not be valid for the intended purpose under the ROP, IMC 0608 is not currently applicable to BFN1.

Third, the SDP is used to evaluate inspection findings to determine their safety significance. Each of the cornerstones or key strategic performance areas has one or more SDPs. The SDPs for reactor safety in IMC 0609 are designed to provide a risk-informed framework to estimate an actual increase in core damage frequency (CDF) and/or large early release frequency (LERF) during at-power operations. Currently, BFN1 is defueled and, therefore, inspection findings associated with reactor safety for the initiating events, mitigating systems, and barrier integrity cornerstones cannot represent an increase in these incremental risks. However, the other SDPs (i.e., for emergency preparedness (EP), radiation protection (RP), etc.) may still be applied to findings within their respective cornerstones, when such cornerstones are considered adequately monitorable and appropriate for using ROP baseline inspections and performance indicators.

Fourth, the purpose of IMC 0305 is to enable the NRC to annually assess a licensee's safety performance based on information collected from baseline inspections and PIs. The Action Matrix in this manual chapter is then used to determine a graded regulatory response based upon safety significance. Given that PI and SDP inputs would not be available for all the cornerstones, IMC 0305 cannot be used to determine a licensee's overall performance. Since complete information on the licensee's performance would not be available for all the cornerstones, the Action Matrix would provide inconclusive results. Therefore, the requisite regulatory response would have to be based on staff review/evaluation and not the Action Matrix. Under the ROP there is no other recourse than the Action Matrix for initiating the appropriate regulatory response without taking a deviation. The latter would not be an efficient means of dealing with inspection findings since each staff response to a significant finding would require a deviation from the ROP.

B. Bases for Departure from the Commission's Current Enforcement Policy for Browns Ferry 1

The General Statement of Policy and Procedure for NRC Enforcement Actions, NUREG-1600 (The Enforcement Policy), specifies that for certain types of violations at commercial nuclear power plants, the NRC relies on information from the SDP. The only violation types whose full significance cannot be evaluated via the SDP (the SDP exceptions) are those involving willfulness (including discrimination), those impacting the NRC's ability for oversight of licensed activities, and those involving actual radiological consequences. Absent its unique situation the significance of violations identified at BFN1 would be expected to be evaluated via the SDP because BFN1 has maintained an operating license and is, therefore, classified as a commercial nuclear power plant.

Nonetheless, at present there is no reactor-safety SDP available to determine the significance of violations that occur during an extended defueled shutdown or during the construction or extensive modification of a nuclear plant. The ROP is specifically intended and designed for application at operating plants because of the readily apparent risks associated with nuclear plant operation. All the ROP provisions associated with reactor safety, including data gathering, collection, and assessment, are focused on the performance of a plant during operation. Because of the present need for a means to categorize the significance of violations identified during the restart of BFN1, the staff concludes that a customized revision to the ROP, including the development of such an SDP, would be neither timely nor a prudent action to take.

Therefore, until the staff determines that BFN1 is totally monitorable under the ROP, an alternative approach is needed to assess the significance of violations and determine appropriate enforcement actions and appropriate regulatory response. "Traditional enforcement" is the best candidate for an alternative approach since it is currently available and in use by the staff for a variety of other licensees, and has been routinely utilized at commercial nuclear power plants for the SDP exceptions, noted above. Further, Supplement II to the Enforcement Policy, Part 50 Facility Construction, has been retained and may be appropriate for determining the significance of some violations at BFN1 due to the nature of the activities planned during preparations for restart, i.e., major upgrades and modifications more comparable to "construction" than to routine operations.

SUMMARY:

The staff intends to make a temporary departure from the current Enforcement Policy in the case of BFN1. This departure will entail not initially using the SDP for the determination of the significance of violations at BFN1 during the restart process but, rather, using the "traditional enforcement" provisions of the Enforcement Policy, including the appropriate Supplements (e.g., Supplement II). Since it is the intent of the new manual chapter for the BFN1 inspection program that ROP baseline inspections, SDP, and review of PI data be applied on a cornerstone-by-cornerstone basis as specific cornerstones become monitorable by the ROP, traditional enforcement will only be utilized for a given cornerstone until such time that the staff places that cornerstone under the ROP baseline inspection, SDP, and PIs. Once all cornerstones are monitorable by the ROP, BFN1 will transition to the full oversight of the ROP and the Action Matrix will govern agency response to licensee performance at Unit 1.

RESOURCES:

Resources have been budgeted for FY 2003 in the Office of Nuclear Reactor Regulation (NRR) to support this task. Resources have also been included in the budget requests for FY 2004 through FY 2006 to support the task for those years. No additional resources are required.

COORDINATION:

The Office of the Chief Financial Officer has reviewed this paper and concurs.

The Office of the General Counsel has reviewed this paper and has no legal objection.

/RA by Ellis W. Merschoff Acting For/

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