

July 9, 2001

MEMORANDUM TO: John A. Grobe, Director
Division of Reactor Safety
Region III

FROM: Cynthia A. Carpenter, Acting Deputy Director */Elinor Adensam for/*
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

SUBJECT: TASK INTERFACE AGREEMENT 2000-11, DE-WATERING OF A
RIVER SCREENHOUSE INTAKE BAY AT THE BYRON NUCLEAR
POWER PLANT (TAC NOS. MB1185, MB1186)

By memorandum dated February 8, 2001, Region III requested NRR assistance in determining if the licensee should request a change to the plants' technical specifications (TSs) before conducting corrective maintenance on the river screenhouse which included de-watering of the OA intake bay at Byron Station (Byron).

NRR has concluded that since the planned alterations would make the Byron TSs non-conservative, a TS change requiring NRC review would be required. The attachment provides NRR's detailed response to TIA 2000-11.

This completes the response to TIA 2000-11 and closes out TAC Nos. MB1185 and MB1186.

Docket Nos. STN 50-454 and
STN 50-455

Attachment: As stated

cc: B. Platchek, RI
L. Plisco, RII
K. Brockman, RIV

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Docket Nos.	STN 50-454 and STN 50-455	<u>Distribution:</u> Non-Public PD3/2 r/f J. Zwolinski/C. Carpenter	S. Bajwa A. Mendiola G. Dick
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*See previous concurrence

OFFICE	PM:PD3/2	LA:PD3/2	BC:RTSB	BC:RGEB
NAME	GDICK	CROSENBERG	RDENNIG*	WBECKNER*
DATE	07/05/01	07/5/01	05/22/01	05/24/01

OFFICE	SC:IOMB	OGC	SC:PD3/2	D:PDIII	D:DLPM
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DATE	05/24/01	06/6/01	06/27/01	06/20/01	07/5/01

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RESPONSE TO TASK INTERFACE AGREEMENT 2000-11 DE-WATERING OF THE RIVER SCREENHOUSE AT BYRON STATION

1.0 INTRODUCTION

By memorandum dated February 8, 2001, Region III requested assistance from NRR related to a concern with the licensee's plans for de-watering the OA intake bay of the Rock River screenhouse at the Byron Station (Byron) to support corrective maintenance. The licensee's evaluation stated that if the de-watering was to have been permanent, technical specification (TS) limiting condition for operation (LCO) 3.7.9.E would have needed to be changed to require higher river levels and flows. However, the evaluation concluded that since the de-watering was a temporary change, a TS amendment was not needed.

Region III asked NRR to determine if the licensee's actions in evaluating the alternate flow path for de-watering the intake bay of the Rock Creek were acceptable. In addition, Region III requested generic guidance for determining if licensee actions, while conducting online maintenance, could render TSs to be non-conservative.

2.0 DESCRIPTION OF THE ISSUE

On March 30, 2000, the Byron Station Regulatory Assurance organization documented its support of a safety evaluation related to a planned corrective maintenance activity on the river screenhouse (RSH) intake bays. The corrective maintenance activity would involve installation of stop logs in front of one of the two intake bays for several weeks to allow for refurbishment and maintenance on the traveling screens. During this temporary modification, all of the pumps that take their suction from the RSH (2 essential service water (SX) makeup pumps and 3 circulation water (CW) makeup pumps) would be supplied through only one of the two intake bays. One concern related to this de-watering activity was Byron TS LCO 3.7.9, Condition E. Condition E contains a required action to verify adequate Rock River level and intake flow on an immediate and periodic basis if the river level falls ≤ 670.6 ft. mean sea level (MSL). Required Action for Condition E states that the river level and flow be monitored to verify that the level is > 664.7 ft. MSL and that flow is > 700 cubic feet per second (cfs). If the river level or flow were to fall below these values, then Condition F must be followed which is basically an Operability determination for the deep well pumps and required action to verify basin level for each tower every two hours as a temporary measure.

3.0 BACKGROUND

The licensee determined that with the stop logs installed, the acceptance limit for required action E.1 would need to be raised from 664.7 ft. to ~ 665.9 ft. (corresponding to a value of 700 cfs) to maintain SX makeup pump Operability for the pump that is being fed through the cross-connection. With this in mind, the licensee's approach was that they would put administrative limits in place that would be more conservative than the current TS limits which would provide an equivalent margin of safety to the current TS limits. In addition, their determination was that this modification would be a temporary activity to perform corrective

ATTACHMENT

maintenance and that administrative compensatory action limits could be established to maintain an equivalent margin of safety. The licensee concluded this proposed activity could be performed without prior NRC approval. The actual corrective maintenance has been postponed pending staff review of this Task Interface Agreement (TIA).

Specifically, Region III has requested the following:

1. NRR to evaluate the information in the licensee's 50.59 evaluation and determine if prior NRC approval was required for this temporary change.
2. NRR to consider providing generic guidance to the Regional staffs on how to determine if licensee actions while conducting online maintenance activities could render facility Technical Specification requirements as non-conservative.

4.0 EVALUATION OF ISSUE

4.1 Regulatory Conditions Existing at the Time of the Licensee's Safety Evaluation (before Recent Revision to the Maintenance Rule)

The NRR staff evaluated whether the licensee's use of 10 CFR 50.59 was appropriate for this particular situation rather than evaluate the quality of the licensee's 50.59 evaluation.

Administrative Letter (AL) 98-10 "Dispositioning of Technical Specifications that are Insufficient to Assure Plant Safety" states that: "... the discovery of an improper or inadequate TS value or required action is considered a degraded or nonconforming condition as defined in GL 91-18. Imposing administrative controls in response to an improper or inadequate TS is considered an acceptable short-term corrective action. The staff expects that, following the imposition of administrative controls, an amendment to the TS, with appropriate justification and schedule, will be submitted in a timely fashion. Once any amendment correcting the TS is approved, the licensee must update the final safety analysis report" AL 98-10 deals with an "as found" situation, and thus takes a standard approach to allow the licensees time to correct the condition while compensatory action is in place. However, the expectation is that the technical specification will be amended. The NRR staff applies this expectation to the current case when the licensee plans to make the TS non-conservative, and concludes that "compensatory action" is not sufficient. The TS value must be changed prior to the reconfiguration; NRR staff can find no basis for a TS knowingly to be non-conservative even if it is only temporary. Therefore, prior NRC approval would have been required for this change.

4.2 Currently Existing Regulatory Conditions (after Recent Revision to the Maintenance Rule)

This section provides general guidance for assessing this issue in light of the revised maintenance rule.

Section 50.65(a)(4) of Title 10 of the *Code of Federal Regulations* (10 CFR) became effective on November 28, 2000. This rule states, "Before performing maintenance activities (including but not limited to surveillance, post-maintenance testing, and corrective and preventive maintenance), the licensee shall assess and manage the increase in risk that may result from

the proposed maintenance activities. The scope of the assessment may be limited to structures, systems and components that a risk-informed evaluation process has shown to be significant to public health and safety.”

The approved implementation guidance for this requirement is RG 1.182, dated May 2000. This RG endorses revised Section 11, dated February 2, 2000, of NUMARC 93-01 as an acceptable method of satisfying the rule.

The industry guidance notes that the pre-maintenance risk assessment should consider TS requirements, the risk of performing the maintenance during shutdown vs. at power, and other aspects. Further, the guidance states that performance of maintenance may involve alterations to the facility or procedures for the duration of the maintenance activity. Such temporary changes, associated with maintenance, are to be evaluated as part of the risk assessment as required by 50.65(a)(4), but a separate screening or evaluation under 50.59 is not required. Note that this is a change in policy and guidance from the situation that existed before the effective date of the maintenance rule. The guidance further provides that if such temporary alterations are planned to remain for more than 90 days at power, both the 50.65(a)(4) assessment and a 50.59 review would be required. Therefore, should this type of activity arise in the future, the requirements of 50.65(a)(4) would be the applicable requirements to be satisfied (and most likely not 50.59, except in the case of a greater than 90-day activity).

The assessment and management of the risk of the maintenance associated with a maintenance activity (including any associated temporary alterations) may identify the need for compensatory or contingency measures. These measures would be incorporated as part of the risk assessment. For example, administratively limiting the water level in the river screenhouse at a higher value during the maintenance would be factored into the risk assessment so as to minimize the risk increase associated with the activity .

The RG states, in part, that performing the assessment identified in Section 11 of NUMARC 93-01 does not relieve the licensee from compliance with its license (including TSs) and applicable regulations. Thus, if a licensee could not meet its TSs while the maintenance was being performed, it would be necessary to obtain a license amendment.

The maintenance rule guidance does not directly address the circumstance presented in this TIA of a "compensatory measure" taken to maintain the margin as provided by a particular TS without modifying the TS itself. That is, the licensee is in compliance with the TSs as written, but under the particular configuration planned, a greater water level than the minimum value specified is needed to maintain the Operability of the pumps. However, as noted above, the licensee must continue to meet the regulations. In modifying the plant configuration, the TS LCO would no longer be the lowest functional capability or performance level required for safe operation; therefore, the licensee would not be in compliance with 10 CFR 50.36(c)(2) regardless of any administrative controls. A license amendment to revise the TS would be required.

5.0 SUMMARY

The licensee must perform reviews of proposed maintenance activities in accordance with 10 CFR 50.65(a)(4) and 10 CFR 50.59 as applicable. For the particular situation of the de-watering of the Byron river screenhouse, NRR concludes that the licensee could not conduct the maintenance while administratively controlling the TSs. Because operating the plants with the river screenhouse modifications in place would make the TSs non-conservative, a license amendment request requiring staff review would be required. This position is consistent with AL 98-10 and RG 1.182.

The necessity to amend the specification comes from the fact that the specific value, (i.e., 664.7 ft. MSL) is in the technical specification. If the specification were written more generally to address operability of equipment, the licensee could take compensatory action to ensure operability, likely without need for staff review.

Principal contributor: J. Foster

Date: July 9, 2001