UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

November 15, 1996

MEMORANDUM TO: The Chairman
Commissioner Rogers
Commissioner Dicus
Commissioner Diaz
Commissioner McGaffigan

FROM: James M. Taylor
Executive Director for Operations

SUBJECT: REPORT ON THE STATUS OF THE ENVIRONMENTAL QUALIFICATION TASK ACTION PLAN (WITS ITEM 9300107)

The purpose of this memorandum is to update the Commission on the status of the Environmental Qualification Task Action Plan (EQ-TAP), to communicate insights obtained from the August 1996 public meeting on EQ, to discuss the differences in EQ requirements for older and newer nuclear plants, to describe future staff activities regarding condition monitoring (CM) of EQ equipment, and to provide a schedule of future EQ-TAP activities that reflects the transfer of the EQ function to the Division of Engineering (DE) of the Office of Nuclear Reactor Regulation (NRR). The EQ-TAP was established to evaluate and resolve existing environmental qualification concerns and to identify and resolve any other EQ issues that may exist. In a staff requirements memorandum of June 28, 1993, the Commission directed the staff to treat environmental qualification of electric equipment as a potential safety issue within the existing regulatory process for operating reactors and to periodically inform the Commission of the staff's efforts. The last EQ-TAP update was issued on August 22, 1996.

Attachment 1 is a report on the status of the EQ-TAP. The report discusses completed actions, continuing actions, and schedular changes. The following paragraphs provide a summary of EQ-TAP activities since the last update.

On August 6-7, 1996, the Office of Nuclear Regulatory Research (RES) sponsored a public meeting to discuss the results of NUREG/CR-6384, "Literature Review of Environmental Qualification of Safety-Related Electric Cables," Vols. 1 and 2. During the meeting, industry representatives committed to provide additional data and industry reports that they believe will resolve several of the 19 outstanding technical issues that the staff is currently evaluating as part of the EQ-TAP cable research program. RES is working with industry to obtain the data and reports so that they can be evaluated.

The staff continues to make progress in the cable research program (EQ-TAP Item 7). RES continues to interact with licensees and industry groups to obtain aged and unaged cables that are representative of those in use at nuclear power plants. Baseline testing of the cable samples obtained to date

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began in May 1996. Accelerated aging of the cable samples will begin in November 1996 and will continue for several weeks. Loss-of-coolant accident (LOCA) testing will begin in January 1997. If industry provides additional data and reports as a result of the public meeting discussed above, the scope of the cable test program may be modified. Results from the cable testing program are expected in fiscal years 1997 and 1998.

Attachment 2 is a discussion of the staff's findings regarding the differences in EQ requirements between older and newer plants. While the staff recognizes that the methodology and requirements imposed on licensees differ according to the original licensing requirements of the plant, the staff concluded that actions taken by the Nuclear Regulatory Commission (NRC) and licensees since the implementation of the EQ rule and the margins inherent in the qualification process itself ensure an acceptable level of safety independent of which qualification requirement was implemented. The staff believes, however, that because of uncertainties in predicting age-related degradation, condition monitoring (i.e., an inservice inspection program) provides the simplest and most effective approach to assuring environmental qualification for the license renewal term. For the same reason, the staff believes that it would be prudent to establish some form of condition monitoring in the current licensing term as an alternative to sole reliance on EQ testing. In the interim, based on the results of the EQ-TAP to date, the staff does not believe there is a significant safety concern that requires immediate regulatory action.

On May 12, 1996, an NRR reorganization transferred the equipment qualification function from Plant Systems Branch (SPLB) to the Electrical Engineering Branch (EELB). EELB has worked closely with SPLB staff since May to minimize the impact of the reorganization on EQ issues. However, the responsibility for management of the EQ-TAP and the preparation of this report has remained within SPLB. Over the next several months, SPLB will work to close out certain items in the EQ-TAP and transfer the remaining open items to RES for resolution. RES responsibilities will include continuing the ongoing investigation of promising condition monitoring techniques.

The staff will update the Commission on its progress in completing the EQ-TAP actions, and inform the Commission of any significant findings and of any obstacles to the timely completion of the actions described in the attachments.

Attachments:
1. Status Report on the Environmental Qualification Task Action Plan
2. Differences Between EQ Requirements for Older and Newer Plants

cc: SECY, OGC, OCA, OPA

*See Attached Concurrence Sheets

SPLB:BC*	AD:DE*	D:DSSA*	AADT:NRR*	ADD:NRR	AD:NRR
LBMarsh	GLainas	GHolahan	BSheron	AThadani	FMiraglia
11/04/96	11/04/96	11/04/96	11/05/96	11/8/96	11/8/96

Tech Ed.*	RES*	DEDO	EDO
PKleene	DMorrison	JMilhoan	JTaylor
11/03/96	11/05/96	/ /96	11/ 10/96