

ENCLOSURE 1

IP OVERINSPECTION AND RECORDS VERIFICATION PROGRAMS LESSONS LEARNED

I. Introduction

In reviewing the results of the IP Overinspection Program and the Records Verification Program, there are areas where the experience gained may be of interest to the nuclear industry. These aspects of overall management and control have been the subject of numerous discussions and a significant volume of correspondence between the NRC and IP. This experience is described in the IP Reports entitled "Results of Quality Programs for Construction of Clinton Power Station" and "Update to Results of Quality Programs for Construction of Clinton Power Station" which were provided to the NRC on February 13, 1985, and April 11, 1985, respectively. The effectiveness of the IP Quality Assurance program is affirmed in the NRC (NRR - Division of Licensing) letter "Report on Construction and Operational Quality Assurance and Quality Control Organization for Clinton Power Station, Unit 1" of August 28, 1985.

II. Lessons Learned

- A. The current regulatory system is subject to a significant degree of interpretation. Construction quality regulations are established to meet a "reasonable" basis, whereas the review and challenge to construction quality is likely to be adjudicated on a basis approaching "perfection." The licensee must have the ability to answer any question, although the question may or may not be related to the safe operation of the plant. The lesson is clear: anyone desiring to construct a nuclear facility must be prepared to answer any challenge or question to the quality of construction regardless of the source. The rate payers, utilities and rate regulators must understand that they will be required to pay for this confirming effort which is undefined in regulation.

B. Regulations do not define what course of action is required to establish a standard "acceptable" over-inspection program. Therefore, individual preferences and experience will surface on both sides. The lessons of this are: the utility should attempt to obtain agreement with the NRC on the following items at the outset of a program. This effort should be documented.

1. The overall scope of the program.
2. The termination criteria for the program, based upon hardware acceptability.

NOTE: Statistical sampling methods should be approached with caution since reliance on purely numerical pass/fail criteria (e.g., production line statistics [MIL-STD-105-D]) is inappropriate to apply to the construction industry. An understanding of the type, extent and engineering significance of the noncompliance needs to be factored into a pass/fail criteria.

3. Inspection criteria that are well defined, supported by engineering justification, and understood by inspection personnel.

C. An "overinspection" program could create an environment that causes construction personnel to place reliance on such a program rather than maintaining an objective of "building it right the first time." The Clinton program stressed that the "overinspection" supplemented the normal Quality Assurance Program and was not a substitute for quality. This message must be clearly understood by construction personnel; this is a difficult task and has mixed success unless reemphasized frequently.

D. "Overinspection" programs are sometimes imposed in order to satisfy the need to demonstrate a positive basis for licensing to a higher standard, and not necessarily as a result of construction quality problems. The lesson is: utilities must be prepared to demonstrate the basis for licensing to a higher standard, irrespective of hardware quality.

E. Properly managed "overinspection" programs have the potential to reduce ASLE public hearing delays. Utilities should consider all aspects of the licensing arena prior to proceeding or rejecting a specific course of action within the "overinspection" concept.

III. Summary

In conclusion, the conduct of the Overinspection and Record Verification Programs has been continuously reviewed by IP management. The initiation of these programs and the experiences gained during the implementation have contributed to an enhanced Quality Assurance Program. Further, the lessons learned at CPS can be utilized by both the NRC and other utilities for future "overinspection" programs.