



DEPARTMENT OF THE ARMY  
CONSTRUCTION ENGINEERING RESEARCH LABORATORY  
P. O. BOX 4005  
CHAMPAIGN, ILLINOIS 61820

CERL-ML

15 September 1970

SUBJECT: Final Report, "An Examination and Evaluation of Concrete Taken From the Containment Dome of the Florida Power and Light, Turkey Point 3, Reactor"

U. S. Atomic Energy Commission  
Division of Compliance  
Washington, D. C. 20545

1. References:

- a. Work Order Number WA-5526-71;
- b. Conversation between Mr. Beratan, AEC, and Dr. Birkimer, CERL, on 10 September 1970, and agreed upon distribution (Incl 1).

2. Transmitted herewith are the twenty-five copies of the final report, "An Examination and Evaluation of Concrete Taken From the Containment Dome of the Florida Power and Light, Turkey Point 3, Reactor", completing the work under the referenced work order. Five copies contain an appendix of referenced standards as agreed in the referenced conversation. Twenty-five copies have also been furnished to the U. S. Atomic Energy Commission, ATTN: Mr. Seidle, Atlanta, Georgia.

3. Based on this physical examination of the concrete as furnished and construction data, it is recommended that the following areas be examined with regard to the behavior of the dome cap:


- a. Structural design, details and procedures including the actual path of the tendon grease flow through the concrete.
- b. The presence of ferrous oxide film on the top steel reinforcement.
- c. The presence of concrete honeycombing around the top steel reinforcement especially in the region of buckled reinforcement.

4. It has been a pleasure conducting this evaluation for the Division of Compliance, and we look forward to being of further assistance to you.

FOR THE DIRECTOR:

2 Incls  
As stated (25 cys)

13/LLB 10/26/70

  
E. A. LOTZ  
Chief, Materials Laboratory

02170

8305190327 710319  
PDR ADOCK 05000250  
A PDR

DISTRIBUTION LIST FOR ANNEXED COPIES

Mr. L. Kornblith, Jr.  
Assistant Director for Technical Programs 2 copies

Mr. H. R. Denton  
Chief, Technical Support Branch 1 copy

Mr. Leon Beratan  
Senior Structural Engineer 1 copy

Mr. R. H. Engelken  
Assistant Director for Inspection and Enforcement 1 copy