



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

*J. In Grant*

March 24, 1992

MEMORANDUM FOR: Carlton Kammerer, Director  
Office of State Programs

FROM: William F. Kane  
Deputy Regional Administrator

SUBJECT: NEUTRON PRODUCTS

During our meeting with the Maryland staff on January 8, 1992, we agreed to discuss further a three phase approach that would involve NRC providing assistance to the State (at its request) to address its continuing concerns at the NPI facility in Dickerson, Maryland.

The State's immediate safety concern was the recent discovery of microorganisms in the NPI pool water supply which the State believed may affect the integrity of the pool liner and the encapsulated sources in the pool. In Phase I, Region I was requested to provide technical assistance to the State in evaluating the potential for microbial induced corrosion (MIC) in the water supply system. Harold Gray and Jim Medoff of our Division of Reactor Safety accompanied State inspectors to NPI on January 23-24 completing this first phase of our technical assistance. This was a limited inspection that focused exclusively on the MIC problem and did not address any of the other State concerns about the NPI facility. A copy of the staff report is enclosed for your information.

Phase II would provide a forum for discussing the need for a more extensive effort to scope out the other State concerns at NPI. Essentially we would meet with the State to assure that both the State and the NRC had a current understanding of the extent of the problem areas at NPI, and to discuss how best to address these problems from a regulatory standpoint. This discussion would not be limited to the plant problems, but may include the off-site contamination problem, the waste accumulation problem, and decommissioning issues. The goal of this meeting would be to prepare a complete list of concerns (including actions already taken by the State to address them and their effectiveness from the standpoint of licensee response) and brainstorm with the State to arrive at the best approach to understanding and resolving these problem areas. Phase II may include NRC assisting the State in a "scoping" inspection of the NPI facility to more clearly understand the complete scope of problems at NPI. As we discussed at the January 8 meeting with the State, we believe that State Programs is the appropriate office to take the lead in such a meeting.

A/38

Phase III of this project would then be to provide the State any specific technical assistance in any further evaluation of the areas identified during Phase II of the plan and to assist the State in obtaining corrective action from NPI.

Please contact John McGrath of my staff in the near term to discuss our availability to support Phase II activities.

A handwritten signature in cursive script, appearing to read 'William F. Kane'.

William F. Kane  
Deputy Regional Administrator

## NEUTRON PRODUCTS ISSUES

During our meeting with the Maryland staff on January 8, 1992, we agreed to discuss further a three phase approach that would involve NRC providing assistance to the State (at its request) to address its continuing concerns at the NPI facility in Dickerson, Maryland.

Phase II issues/concerns for discussion with NRC and State staff.

- in-plant health physics problems
  - personnel contamination - (issue) (source) (time)
  - cobalt melt issues ← Instrument calibration skill doses
  - security problems
  - plant contamination/housekeeping issues
  - sump clean-up
- off-site contamination problems
  - soil contamination of dry pond area
  - hot-spot contamination of nearby residences
  - reactive sewage (showers water)
  - effluent monitoring adequacy of
- waste accumulation problem
  - courtyard waste area
  - proposal to cover courtyard and store additional waste
- decommissioning issues
  - bankruptcy situation
  - financial assurance requirements
  - ultimate clean-up (cost estimates, clean-up limits, etc.)
- pool water issue
  - changes to the water system

Kammer  
Schwartz  
Greener  
Larant

1. Background
2. Issues
3. Approach

Next review Md.  
May - June  
Time frame

Integration of

① We need to develop a set of issues for review and comment by OSP & NMSS.

## NEUTRON PRODUCTS ISSUES

During our meeting with the Maryland staff on January 8, 1992, we agreed to discuss further a three phase approach that would involve NRC providing assistance to the State (at its request) to address its continuing concerns at the NPI facility in Dickerson, Maryland.

Phase II issues/concerns for discussion with NRC and State staff.

- in-plant health physics problems
  - personnel contamination
  - cobalt melt issues
  - security problems
  - plant contamination/housekeeping issues
  - sump clean-up
- off-site contamination problems
  - soil contamination of dry pond area
  - hot-spot contamination of nearby residences
- waste accumulation problem
  - courtyard waste area
  - proposal to cover courtyard and store additional waste
- decommissioning issues
  - bankruptcy situation
  - financial assurance requirements
  - ultimate clean-up (cost estimates, clean-up limits, etc.)

- Pool water hardware issue  
Pool integrity, clean-up

Status of plan discussed in 2/12/91 letter