

TERA



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

JUN 4 1980

Docket No. 50-309

MEMORANDUM FOR: Robert E. Clark, Chief
Operating Reactors Branch #3, DL

FROM: C. C. Nelson, Project Manager
Operating Reactors Branch #3, DL

SUBJECT: FORTHCOMING MEETING WITH MAINE YANKEE ATOMIC
POWER COMPANY ON FUEL ASSEMBLY CRUD BUILDUP

Date and Time: Tuesday, June 10, 1980
1:00 PM

Location: Room P-110
Phillips Building
Bethesda, Maryland

Purpose: To discuss (1) the effects of fuel assembly crud
buildup on reactor parameters and (2) chemical
treatments for removing the crud.

Participants: NRC Central Maine Power
 G. Requa H. F. Conrad J. Randazza
 C. C. Nelson D. B. Fieno E. Wood
 P. Matthews F. J. Witt C. Frizzle
 V. Benaroya R. A. Clark J. Stevens

Yankee Atomic Combustion Engineering
 R. Goube C. McCracken
 W. Metevia
 R. Gross

C. C. Nelson, Project Manager
Operating Reactors Branch #3
Division of Licensing

Enclosure: Agenda

cc w/enclosure: See back of page

AGENDA
FOR
MAINE YANKEE FUEL ASSEMBLY CRUD BUILDUP MEETING

1. History of crud buildup problem.
2. a. History of chemical additions to remove crud (e.g., hydrazine, hydrogen peroxide, ammonia, etc.)
b. Chemical addition procedure.
3. a. Reactor problems associated with crud buildup (e.g., increased core pressure drop, reduced flow, reactivity changes, core uplift, increased fuel failures, increased clad temperatures, etc.)
b. Details on 10 CFR 50.59 safety review, justification of determination of no unreviewed safety question.
4. Periodic surveillance testing or administrative controls that indicated core pressure drop problem.
5. Discuss comparison of Maine Yankee Tech Specs with Standard Tech Specs as related to primary coolant chemistry control and reactor parameters, core ΔP , flux and power distribution, channel peaking factors, iodine levels, pH, conductivity, total gas, etc.
6. Operational procedures used or planned to remove or control crud (e.g., pump speed changes, coolant chemistry controls, boric acid concentration (pH), special primary coolant sampling, radwater system).
7. a. Core history, fuel failures, etc.
b. Status report on examination of fuel failures from last core discharge (types, number of failures crud deposits: roughness, nature of deposit, crud distribution along length of core, crud inventory).
8. Licensee/NSSS discussion on fundamental causes of increased crud buildup.
9. Effect of chemical treatment on shutdown dose rate. Impact on ALARA program for occupational manrem exposure, manrem history for maintenance operations.
10. Licensee/NSSS recommendations on crud control/redex methods - consideration of EPRI report on other PWRs.