

OUTGOING TELECOMMUNICATION MESSAGE

FROM:

H L PRICE DIRECTOR
DIVISION OF LICENSING AND REGULATION
U S ATOMIC ENERGY COMMISSION
WASHINGTON D C

PRIORITY

JANUARY 10 1961

TO:

YANKEE ATOMIC ELECTRIC COMPANY
441 STUART STREET
BOSTON MASSACHUSETTS

ATTN: : MR. ROGER COE, VICE PRESIDENT

WE ARE SURVEYING ALL LICENSED REACTOR FACILITIES FOR INFORMATION GAINED FROM OPERATING EXPERIENCE WHICH INDICATES CONFIRMATION OF OR VARIANCE FROM NUCLEAR CHARACTERISTICS SHOWN IN YOUR LICENSE APPLICATION AT TIME OF LICENSE ISSUANCE. THIS WILL UP-DATE INFORMATION ON YOUR FACILITY WHICH WAS REVIEWED BY US DURING EVALUATION OF YOUR FACILITY LICENSE APPLICATION AND DURING INSPECTIONS. ACCORDINGLY, PURSUANT TO SECTION 50.54(f) OF COMMISSION REGULATIONS, YOU ARE REQUESTED TO SUBMIT WITHIN 20 DAYS OF RECEIPT OF THIS MESSAGE A REPORT CONTAINING THE FOLLOWING INFORMATION CONCERNING EACH REACTOR OR CRITICAL EXPERIMENT FACILITY OPERATED BY YOU UNDER AEC LICENSE:

1. MAXIMUM EXCESS REACTIVITY OF YOUR REACTOR, NOT INCLUDING THE WORTH OF CONTROL RODS OR OTHER CONTROL DEVICES SUCH AS BURNABLE POISON STRIPS OR SOLUBLE POISON, OR ANY EXPERIMENTS, AND VARIATION OF EXCESS REACTIVITY OVER CORE LIFE.
2. TOTAL CONTROL ROD WORTH.
3. MINIMUM SHUT-DOWN MARGIN BOTH AT ROOM TEMPERATURE AND OPERATING TEMPERATURE.
4. MAXIMUM WORTH OF SINGLE CONTROL ROD OF HIGHEST REACTIVITY VALUE.
5. DESCRIPTION AND WORTH OF OTHER METHODS USED FOR CONTROLLING REACTIVITY, SUCH AS BURNABLE POISON STRIPS OR SOLUBLE POISON, AND VARIATION OF THE WORTH OF THESE METHODS OVER CORE LIFE.

DOCKET NO. 50-29

Bcc: L. D. Low (2)
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6. MAXIMUM TOTAL AND INDIVIDUAL WORTH OF ANY FIXED OR MOVEABLE EXPERIMENTS INSERTED IN YOUR REACTOR.

7. WITH RESPECT TO ITEMS 1-6 ABOVE, THE FOLLOWING INFORMATION SHOULD BE INCLUDED: BASIS FOR REACTIVITY VALUES (MEASURED, CALCULATED OR ESTIMATED); CONDITION OF CORE FOR WHICH VALUES ARE APPLICABLE (OPERATING OR SHUT-DOWN, AMOUNT OF BURNUP,); AND DATES ON WHICH REACTIVITY VALUES WERE LAST DETERMINED.

8. THE FOLLOWING INFORMATION WITH RESPECT TO OPERATIONS WHICH COULD INVOLVE CHANGES IN CORE REACTIVITY WHEN THE REACTOR IS SHUT DOWN:

- a. SPECIAL PRECAUTIONS TAKEN TO PREVENT INADVERTENT CRITICALITY.
- b. WHETHER NUCLEAR INSTRUMENTATION IS USED.
- c. METHODS USED TO LIMIT AND CONTROL RATE AND AMOUNT OF REACTIVITY CHANGES.
- d. MINIMUM AMOUNT THAT REACTOR IS SUB-CRITICAL DURING SUCH OPERATIONS AND HOW THE SUB-CRITICAL MARGIN IS ACHIEVED.
- e. WHETHER SUCH OPERATIONS ARE CONDUCTED UNDER DIRECT AND PERSONAL SUPERVISION OF TECHNICALLY QUALIFIED AND DESIGNATED SUPERVISORS.
- f. WHETHER SUCH OPERATIONS ARE CONDUCTED IN ACCORDANCE WITH WRITTEN PROCEDURES.

REPORT SHOULD BE SUBMITTED IN 15 COPIES. END OF MESSAGE.