

Proj. 93
Docket 50-70

SEP 18 1962

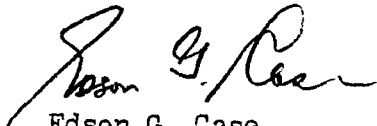
Dr. F. A. Gifford, Jr.
Chairman, Advisory Committee
on Reactor Safeguards
U. S. Atomic Energy Commission
Washington 25, D. C.

Dear Dr. Gifford:

Transmitted herewith for the use of the Committee are **eighteen** copies of the following:

Incoming TWX received from field inspector concerning operation of the GETR, dated Sept. 17, 1962.

Sincerely yours,



Edson G. Case
Assistant Director
Facilities Licensing
Division of Licensing
and Regulation

Enclosures:

Cy. TWX, Engelken to
Morris, dtd 9/17/62
GETR - 18 cys.

A-5

OFFICE ▶	TPRSB:DL&R					
SURNAME ▶	SLevine; JW					
DATE ▶	9/18/62					

TWX NBR 5765

62 SEPTEMBER 201600Z

1962 September 17

1:00 PM

FM R H ENGELKEN REACTOR INSPECTOR DIV OF COMPLIANCE USAEC BERKELEY

CALIF

TO P A MORRIS ASSISTANT DIRECTOR FOR REACTORS DIV OF COMPLIANCE USAEC

GERMANTOWN MD

THE FOLLOWING SUMMARIZES INFORMATION OBTAINED FROM G E CONCERNING THE GETR SINCE OUR PREVIOUS TWX OF SEPT 6.

PARA. IN ATTEMPTING TO INSTALL POISON SECTION P-8 IN THE NUMBER THREE CONTROL ROD GUIDE TUBE ON SEPTEMBER 7, THE GRAPPLE TOOL CAME APART AND THE CONTROL ROD AND LOWER HALF OF THE TOOL DROPPED APPROXIMATELY THREE FEET.

THE MOMENTUM OF THE BROKEN TOOL SHEARED THE P-8 CAM PINS AND MADE IT NECESSARY TO SEND THE UNIT TO THE HOT CELLS FOR INSTALLATION OF NEW PINS. IN ADDITION THREE OF THE INTERMITTEN FUSION WELDS WHICH JOIN THE SIDE PLATES WERE SPOT WELDED TO PREVENT CRACKING OF THREE SUSPECT WELDS.

PARA. THE ROD WAS THEN SUCCESSFULLY INSTALLED IN THE REACTOR AND DROP TESTED ON SEPT. 11 UNDER NO FLOW CONDITION FROM 18, 30 AND 36 INCHES OF WITHDRAWAL. RESULTS OF THESE TEST WERE SATISFACTORY AND COMPARED FAVORABLY WITH PREVIOUS NO FLOW ROD DROP TEST RESULTS. MAXIMUM TIME FOR A FULL OUT DROP WAS 951 MILLISECONDS WHICH WAS WELL WITHIN THE SPECIFIED RANGE OF 900 TO 1050 MILLISECONDS.

PARA. FULL FLOW DROP TEST FROM 18, 30 AND 32.9 INCHES WERE ALSO COMPLETED AND THE RESULTS JUDGED TO BE SATISFACTORY. MAXIMUM DROP TIME FROM 32.9 INCHES WAS 402 MILLI-SECONDS. THIS COMPARES VERY FAVORABLY WITH PREVIOUS RESULTS. HOWEVER, CAREFUL OBSERVATION OF THE CORE DURING CONTROL ROD TESTS AND FURTHER ANALYSIS OF THE SLOWER THAN AVERAGE PERFORMANCE OF ROD NUMBER THREE WHEN POISON SECTION P-4 WAS INSTALLED IN THIS POSITION NOW MAKE IT APPEAR THAT EXCESSIVE WEAR ON THE LIFTING EARS ON THE NUMBER THREE GUIDE TUBE MIGHT HAVE CONTRIBUTED TO THE PREVIOUS SLOWER THAN AVERAGE PERFORMANCE OF THIS ROD WHEN DROPPED FROM A FULL OUT POSITION.

END OF PAGE ONE

C 10TH LINE FROM END READS FULL FLOW DROP TESTS FROM

PAGE TWO

THE LIFTING EARS ARE USED TO POSITION THE GUIDE TUBE SUPPORT BRACKET AND EXCESSIVE WEAR OF THE EARS MIGHT RESULT IN INTERFERENCE BETWEEN THE GUIDE TUBE SUPPORT BRACKET AND THE ROD WHEN IT IS FULLY WITHDRAWN. FOR THIS REASON THE NUMBER THREE ROD WILL BE LIMITED TO 32.9 INCHES OF WITHDRAWAL UNTIL A NEW GUIDE TUBE CAN BE INSTALLED. PARTS HAVE BEEN ORDERED AND G E PLANS TO INSTALL NEW GUIDE TUBES AND GUIDE TUBE SUPPORT BRACKETS WHEN THEY ARE AVAILABLE. IT IS BELIEVED THAT AT LEAST SOME PARTS WILL BE AVAILABLE FOR INSTALLATION DURING THE NEXT CYCLIC SHUTDOWN. POISON SECTION P-8 WILL BE INSPECTED DURING EACH CYCLIC SHUTDOWN.

PARA. INSTALLATION AND HOOK UP OF CAPSULE EXPERIMENTS, ERRATIC BEHAVIOR OF THE PERIOD SYSTEM, AND ROUTINE INSTRUMENT PROBLEMS DELAYED THE REACTOR STARTUP UNTIL THE MORNING OF SEPT 14. ERRATIC BEHAVIOR OF THE PERIOD SYSTEM WAS TRACED TO THE SLIGHT MOVEMENT OF A BERYLLIUM FILLER PIECE UNDER FULL FLOW CONDITIONS. SUBSTITUTION OF AN ALUMINUM FILLER FOR THE BERYLLIUM SMOOTHED OUT THE PERIOD SYSTEM FLUCTUATIONS. REACTOR POWER AT 0619 ON SEPT 14 HAD REACHED 20 MW AND OPERATIONS WERE REPORTED TO BE ROUTINE. THE PRESSURIZED WATER LOOP IS FUELED WITH A ONE POINT TWO MILLION BTU EURATOM ELEMENT AND THE LOOP IS BEING COOLED BY THE MAIN LOOP COOLANT PUMP. NO LOOP INDUCED REACTOR INSTABILITY HAD BEEN OBSERVED THUS FAR. REF CO-V-RHE-5765

END

C FIR LINE READS THE LIFTING EARS

END OF SIXTH LINE READS AND GUIDE TUBE SUPPORT BRACKETS WHEN THEY ARE AVAILABLE.

20/1710Z END TNX MM PLS ACK

RECD ONE CLR TU OUT LHG

TWX INCOMING