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TO: Director, Division of Production
USAEC, Washington 25, D. C.

FROM: J. E. Travis, Manager, Hanford Operations
Office, USAEC, Richland, Washington

SUBJECT: MONTHLY STATUS AND PROGRESS REPORT

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U. S. ATOMIC ENERGY COMMISSION
HANFORD OPERATIONS OFFICE

MONTHLY STATUS AND PROGRESS REPORT

OCTOBER 1959

PART I

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MONTHLY STATUS AND PROGRESS REPORT

HANFORD OPERATIONS OFFICE

OCTOBER 1959

PART I

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HIGHLIGHT STATEMENT - OCTOBER 1959OPERATIONS

CANNED FUEL ELEMENT PRODUCTION TOTALLED 618 TONS, INCLUDING 63 TONS OF SOLID AND 488 TONS OF I&E NORMAL-URANIUM AND 67 TONS OF I&E 94-METAL. THE 618-TON TOTAL IS 106.0% OF FORECAST. YIELDS WERE 84.9% FOR SOLID AND 87.7% FOR I&E NORMAL URANIUM AND 87.6% FOR 94-METAL PIECES. THE CANNING LINE TIME-OPERATED EFFICIENCY WAS 94.5%.

A NEW RECORD WAS ESTABLISHED BY IN-REACTOR PRODUCTION OF 109.2% OF FORECAST. THIS GREATER-THAN-FORECAST PRODUCTION WAS POSSIBLE BECAUSE OF THE HIGHER-THAN-EXPECTED AVERAGE POWER LEVELS AND BECAUSE OF AN OVER-ALL AVERAGE TIME-OPERATED EFFICIENCY OF 84.3% AS COMPARED WITH THE 81% FORECAST. NEW MAXIMUM POWER LEVEL RECORDS WERE ESTABLISHED AT D, F, H, KE, AND KW REACTORS. NEW INDIVIDUAL MONTHLY PRODUCTION RECORDS WERE ACHIEVED AT C AND D REACTORS. DURING THE MONTH, THERE WERE SEVEN FUEL ELEMENT FAILURES, INCLUDING FIVE I&E NORMAL-URANIUM, ONE I&E 94-METAL, AND ONE 7-ROD CLUSTER 160-METAL PIECES.

TOTAL SEPARATIONS PLANT PLUTONIUM PRODUCTION WAS 62.7% OF FORECAST, WITH 79.8% OF THE TOTAL PRODUCED BY PUREX AND 20.2% BY REDOX.

PRODUCTION OF NORMAL UO_3 TOTALLED 503 TONS, 100.6% OF FORECAST; WHILE PRODUCTION OF ENRICHED UO_3 TOTALLED 47.7 TONS, 95.4% OF FORECAST.

PLANT ACQUISITION AND CONSTRUCTION

NEW PRODUCTION REACTOR - DESIGN IS 25% COMPLETE VS. 28% SCHEDULED. DESIGN MANPOWER - GENERAL ELECTRIC COMPANY 139; BURNS AND ROE 105. INSTALLATION OF THE T-C WATER LINE AND CONSTRUCTION OF THE ACCESS HIGHWAY WERE COMPLETED DURING THE MONTH. (SEE PART I, PAGES 9 AND 10.)

CONFINEMENT - DESIGN IS 96% COMPLETE AND CONSTRUCTION IS 14% COMPLETE VS. 14% SCHEDULED. (SEE PART I, PAGE 9.)

PRTR - DESIGN IS COMPLETE AND CONSTRUCTION IS 52% COMPLETE VS. 56% SCHEDULED. (SEE PART I, PAGE 10.)

PFPP - DESIGN IS 94% COMPLETE AND CONSTRUCTION IS 85% COMPLETE VS. 85% SCHEDULED. (SEE PART I, PAGE 10.)

COMMUNITY

MUNICIPAL - THE CITY OF RICHLAND HAS ACCEPTED TRANSFER OF ALL REMAINING MUNICIPAL FACILITIES. (SEE PART II, PAGE 3.)

DISPOSAL - 4,761 OF 4,806 HOUSES HAVE BEEN SOLD AND AN ADDITIONAL 36 GOOD FAITH DEPOSITS PLACED. (SEE PART II, PAGE 4.)

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PLANT OPERATIONS

METAL PREPARATION

CANNING - NET PRODUCTION OF CANNED FUEL ELEMENTS TOTALLED 618 TONS, 106.0% OF FORECAST ^{1/}. THIS TOTAL CONSISTED OF:

NORMAL URANIUM		
SOLID	63 TONS	84.9% YIELD
1&E	488 "	87.7% "
94 METAL - 1&E	67 "	87.6% "

THE 488 TONS OF NORMAL-URANIUM 1&E PIECES PROCESSED INCLUDED APPROXIMATELY 7 TONS OF WATER MIXING ELEMENTS. IN ADDITION, APPROXIMATELY 1,300 ACCEPTABLE BISMUTH TARGET ELEMENTS WERE PRODUCED. THE CANNING LINE TIME-OPERATED EFFICIENCY WAS 94.5%. FOUR CANNING LINES WERE OPERATED ON THE FIRST SHIFT AND FIVE CANNING LINES ON THE SECOND SHIFT, ON A FIVE-DAY-WEEK BASIS THROUGHOUT THE MONTH.

AT MONTH END, THE TOTAL INVENTORY OF CANNED FUEL ELEMENTS WAS APPROXIMATELY 704 TONS AND VARIED BY TYPE FROM APPROXIMATELY 0.7 MONTH'S SUPPLY TO 3.0 MONTHS' SUPPLY. THE INVENTORY OF BARE URANIUM CORES, INCLUDING RECYCLED ELEMENTS IN PROCESS, TOTALLED APPROXIMATELY 835 TONS AND VARIED BY TYPE FROM 1.1 MONTHS' SUPPLY TO 2.4 MONTHS' SUPPLY.

APPROXIMATELY 31,000 PIECES WERE PROCESSED THROUGH THE FUEL ELEMENT RECOVERY OPERATION. IN ADDITION, 13,846 WELD REJECTS WERE REFACED AND REWELDED.

AUTOCRAVE FAILURES - THERE WERE NO AUTOCRAVE FAILURES IN OCTOBER.

SCRAP SHIPMENTS - THREE SCRAP SHIPMENTS WERE MADE TO NATIONAL LEAD COMPANY IN OCTOBER. THESE SHIPMENTS INCLUDED 103.8 TONS OF NORMAL-URANIUM METAL SCRAP, 3.5 TONS OF NORMAL-URANIUM AS C-6 OXIDE, AND 4.4 TONS OF 94 METAL.

REACTOR OPERATION

DURING OCTOBER, REACTOR PRODUCTION RATES IN TERMS OF INDEX ^{2/} WERE:

	B	C	D	DR	F	H	KE	KW	TOTAL
MAXIMUM POWER LEVEL DURING MONTH (INCLUDES ALL PRODUCTION)	77.7	93.5	81.0	80.0	83.0	85.0	170.5	176.3	847.0
AVERAGE LEVEL WHILE OPERATING (INCLUDES ALL PRODUCTION)	72.7	88.0	77.4	74.9	73.0	79.0	157.7	165.1	787.8
TIME-OPERATED EFFICIENCY	79.6	94.4	89.9	80.8	83.5	84.3	78.9 82.8	80.9 78.4	84.3

A NEW RECORD WAS ESTABLISHED BY THE IN-REACTOR PRODUCTION FOR OCTOBER, WHICH WAS 109.2% OF FORECAST ^{1/}. THIS GREATER-THAN-FORECAST PRODUCTION WAS POSSIBLE BECAUSE OF THE HIGHER-THAN-EXPECTED AVERAGE POWER LEVELS AND BECAUSE OF AN OVER-ALL AVERAGE TIME-OPERATED EFFICIENCY OF 84.3% AS COMPARED WITH THE 81% FORECAST. THE HIGHER TIME-OPERATED EFFICIENCY RESULTED FROM THE SMALL AMOUNT OF OUTAGE TIME REQUIRED FOR MAINTENANCE AND CORRECTION OF WATER LEAKS. NEW MAXIMUM POWER LEVEL RECORDS WERE ESTABLISHED AT D, F, H, KE, AND KW REACTORS. NEW INDIVIDUAL REACTOR MONTHLY PRODUCTION RECORDS WERE ESTABLISHED AT C AND D REACTORS. THE OVER-ALL PRODUCTION EFFICIENCY ^{3/} WAS 83.7%. AT THE END OF THE MONTH, ALL EQUILIBRIUM POWER LEVELS WERE LIMITED BY RUPTURE CONTROL CONSIDERATIONS, EXCEPT THAT AT D REACTOR THE BULK OUTLET WATER TEMPERATURE WAS LIMITING.

DURING OCTOBER, THERE WERE SEVEN FUEL ELEMENT FAILURES, INCLUDING FIVE 1&E NORMAL-URANIUM, ONE 1&E 94-METAL, AND ONE 7-ROD CLUSTER 160-METAL PIECES. THE FIVE NORMAL-URANIUM FAILURES OCCURRED ONE EACH AT C, D, DR, H, AND KW REACTORS. THE 94-METAL FAILURE OCCURRED AT DR REACTOR AFTER ONLY 15 DAYS EXPOSURE AND WAS THE RESULT OF MECHANICAL DAMAGE DURING CHARGING.

1/ "SECRET" DOCUMENT HAN-73696, JOHNSON/TRAVIS, DATED OCTOBER 23, 1959, SUBJECT "HAPO PRODUCTION FORECAST."

2/ "SECRET" MEMORANDUM, BLOCH/TRAVIS, DATED JUNE 8, 1959, SUBJECT "REVISION OF INDEX NUMBERS," SYMBOL PRP:EFG.

3/ PRODUCTION EFFICIENCY = $\frac{\text{SUM OF 8 AVERAGE POWER LEVELS FOR THE MONTH}}{\text{SUM OF 8 AVERAGE POWER LEVELS WHILE OPERATING}}$

PLANT OPERATIONS (CONT'D)REACTOR OPERATION (CONT'D)

THE 160-METAL FAILURE WAS A Zr-2-CLAD, 7-ROD CLUSTER IN KER LOOP 2. THIS BRINGS THE CUMULATIVE NUMBER OF NORMAL-URANIUM RUPTURE INCIDENTS TO 1,116, INVOLVING 1,136 PIECES (INCLUDING 61 I&E PIECES). THE CUMULATIVE NUMBER OF 94-METAL RUPTURE INCIDENTS IS 64, INVOLVING 66 PIECES. THE CUMULATIVE NUMBER OF DEPLETED-METAL RUPTURE INCIDENTS REMAINS AT 14, INVOLVING 14 PIECES.

FOLLOWING IS A SUMMARY OF OCTOBER REACTOR OUTAGES:

<u>DATE</u> <u>DOWN</u>	<u>DATE</u> <u>UP</u>	<u>OUTAGE</u> <u>HOURS</u>	<u>REMARKS</u>
<u>B REACTOR:</u>			
10-3	10-3	0.3	MALFUNCTION OF POWER BREAKER.
10-4	10-9	113.7	SCHEDULED CHARGE-DISCHARGE AND TUBE REPLACEMENT.
10-9	10-9	1.3	DISCHARGE OF TUBE 0160 DUE TO ABNORMAL PANELLIT PRESSURE.
10-20	10-20	0.3	PANELLIT TRIP.
10-20	10-22	35.1	PANELLIT TRIP. COMPLETED CHARGE-DISCHARGE.
10-22	10-22	0.4	PANELLIT TRIP DUE TO OSCILLATING GAUGE.
10-22	10-22	0.4	PANELLIT TRIP WHILE REMOVING A JUMPER.
10-22	10-22	0.3	PANELLIT TRIP DUE TO OSCILLATING GAUGE.
<u>C REACTOR:</u>			
10-12	10-14	41.4	REMOVAL OF AN I&E REGULAR-METAL RUPTURE FROM TUBE 2166 AND CHARGE-DISCHARGE.
<u>D REACTOR:</u>			
10-10	10-12	69.8	REMOVAL OF A STUCK I&E REGULAR-METAL RUPTURE FROM TUBE 3678 AND CHARGE-DISCHARGE.
10-13	10-13	5.6	POISON DISCHARGE.
<u>DR REACTOR:</u>			
10-12	10-16	102.2	SCHEDULED CHARGE-DISCHARGE FOLLOWED BY REMOVAL OF AN I&E REGULAR-METAL RUPTURE FROM TUBE 1371. PERFORMED TUBE REPLACEMENT AND MISCELLANEOUS MAINTENANCE.
10-16	10-16	1.7	VENTURI CHANGE IN TUBE 3072.
10-27	10-29	38.4	REMOVAL OF AN I&E 94-METAL RUPTURE FROM TUBE 4080. COMPLETED CHARGE-DISCHARGE.
10-29	10-29	0.8	TRIP-OUT TEST ON WATER FLOW SYSTEM.
<u>F REACTOR:</u>			
10-23	10-28	123.1	PANELLIT TRIP DUE TO A DRILL SLIPPING INTO SENSING LINE DURING INSTALLATION OF Baffle Plate. COMPLETED CHARGE-DISCHARGE AND TUBE REPLACEMENT.
<u>H REACTOR:</u>			
10-2	10-4	48.1	LEAK TESTING AND CHARGE-DISCHARGE.
10-11	10-11	0.2	PANELLIT TRIP.
10-11	10-12	36.5	PANELLIT TRIP. PERFORMED CHARGE-DISCHARGE.
10-18	10-20	32.1	REMOVAL OF AN I&E REGULAR-METAL RUPTURE FROM TUBE 1581. PERFORMED CHARGE-DISCHARGE AND TUBE REPLACEMENT.
<u>KE REACTOR:</u>			
9-30	10-3	68.3	CONCLUDED CHARGE-DISCHARGE, FOLLOWING THE REMOVAL OF AN UNCONFIRMED RUPTURE SUSPECT IN KER LOOP 3.
10-3	10-3	0.3	PANELLIT TRIP.
10-3	10-3	3.9	POISON DISCHARGE.
10-15	10-16	32.2	REMOVAL OF A RUPTURE FROM KER LOOP 2. COMPLETED CHARGE-DISCHARGE.
10-30	10-31	40.8	CROSS-TIE TRIP WHEN A VALVE WAS OPENED. COMPLETED CHARGE-DISCHARGE.

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PLANT OPERATIONS (CONT'D)REACTOR OPERATION (CONT'D)

<u>DATE DOWN</u>	<u>DATE UP</u>	<u>OUTAGE HOURS</u>	<u>REMARKS</u>
<u>KW REACTOR:</u>			
9-30	10-5	122.4	CONCLUDED THE REPAIR OF NO. 4 RIVER PUMP, FOLLOWING THE COMPLETION OF SCHEDULED WORK AND CHARGE-DISCHARGE.
10-5	10-5	1.9	REMOVAL OF AN I&E REGULAR-METAL RUPTURE FROM TUBE 4078.
10-5	10-6	8.6	POISON DISCHARGE.
10-30	STILL DOWN		SCHEDULED CHARGE-DISCHARGE.

FUEL ELEMENT FAILURES - FOLLOWING IS A SUMMARY OF OCTOBER FUEL ELEMENT FAILURES:

TABULATION OF RUPTURED URANIUM SLUGS							
TUBE NO.	DATE RUPTURED	TUBE POWER ^{1/}	CONCENTRATION (MWD/T)	ASSIGNED LOSS		METAL	TYPE FAILURE
				MWD	DAYS		
(NORMAL)							
4078-KW	10-5	1288	395	287	.09	I&E	UNKNOWN.
3678-D	10-10	1063	736	2359	1.52	I&E	UNCLASSIFIED.
2166-C	10-12	1052	430	2856	1.62	I&E	HOT SPOT.
1371-DR	10-12	995	870	386	.26	I&E	SIDE OTHER.
1581-H	10-18	997	465	939	.59	I&E	SIDE OTHER.
(94 METAL)							
4080-DR	10-27	1066	100	1097	.73	I&E	CHARGING MACHINE DAMAGE.
(1.6% ENRICHED)							
2864-KE KER LOOP 2	10-15	790	2084	1810	.57	7-ROD CLUSTER	JACKET SPLIT.

TUBE REPLACEMENT - THERE WERE 92 TUBES INSTALLED DURING THE MONTH: 38 AT B, 31 AT F, 13 AT DR, 5 AT KW, 4 AT H, AND 1 AT KE. FIVE WATER LEAKS WERE CORRECTED. THESE INCLUDED ONE TUBE LEAK AT EACH DR AND KE AND TWO TUBE LEAKS AND ONE VAN STONE LEAK AT H.

F REACTOR INCIDENT - DURING AN OUTAGE ON OCTOBER 26, A REAR-FACE NOZZLE WAS INADVERTENTLY INSTALLED ON GRAPHITE STRINGER 2662, ALLOWING A LARGE AMOUNT OF WATER TO ENTER THE GRAPHITE. AT MONTH END, APPROXIMATELY 260 GALLONS OF WATER HAD BEEN REMOVED FROM THE REACTOR, AND POWER LEVELS WERE LIMITED TO ABOUT 50% OF NORMAL.

KW PUMP FAILURE - WHILE ATTEMPTING TO RAISE WATER PRESSURE (FOLLOWING THE SCHEDULED OUTAGE AT KW ON OCTOBER 2), THE NUMBER 2 AND 4 RIVER PUMPS FAILED TO FUNCTION. INVESTIGATION REVEALED THAT THE SHAFT COUPLINGS HAD SPLIT, ALLOWING THE IMPELLERS TO DROP AND RUB THE PUMP CASING. THE PUMPS HAVE BEEN REPAIRED AND RETURNED TO SERVICE. THE PUMP MANUFACTURER HAS BEEN ADVISED OF THE APPARENT COUPLING FATIGUE AND REQUESTED TO SUPPLY IMPROVED COUPLINGS.

SEPARATIONS

TOTAL SEPARATIONS PLANT PLUTONIUM PRODUCTION WAS 62.7% OF FORECAST ^{2/}, WITH 79.8% OF THE TOTAL PRODUCED BY PUREX AND 20.2% BY REDOX.

PUREX - THE PLANT PROCESSED 306 TONS OF URANIUM DURING THE MONTH.

THE FIRST PART OF OCTOBER WAS SPENT COMPLETING THE NEPTUNIUM RECOVERY RUN BEGUN IN SEPTEMBER. A TOTAL OF 1,370 GRAMS OF NEPTUNIUM WAS RECOVERED DURING THIS RUN.

1/ AT TIME OF RUPTURE.

2/ "SECRET" DOCUMENT HAN-73696, JOHNSON/TRAVIS, DATED OCTOBER 23, 1959, SUBJECT "HAPO PRODUCTION FORECAST."

PLANT OPERATIONS (CONT'D)SEPARATIONS (CONT'D)PUREX (CONT'D)

AFTER FLUSHING THE FIRST URANIUM DECONTAMINATION CYCLE, PLANT STARTUP WAS ATTEMPTED ON OCTOBER 10 BUT WAS DELAYED UNTIL OCTOBER 12 BECAUSE OF A PLUGGED VALVE JUMPER IN THE HAW STREAM. PLANT OPERATION WAS THEN CONTINUOUS, EXCEPT FOR ONE 12-HOUR OUTAGE, UNTIL OCTOBER 30 WHEN THE PLANT WAS SHUT DOWN TO REPLACE THE HA COLUMN ZEBRA CARTRIDGE. DISINTEGRATION OF THE PLASTIC PLATES IN THE HA COLUMN ZEBRA CARTRIDGE LIMITED THE CAPACITY OF THE COLUMN AND RESULTED IN VALVES AND LINES BECOMING PLUGGED BY PLASTIC PARTICLES. THIS, TOGETHER WITH THE TIME REQUIRED FOR NEPTUNIUM RECOVERY THE FIRST PART OF THE MONTH, WAS THE PRINCIPAL CAUSE OF THE LESS-THAN-FORECAST PRODUCTION.

WASTE LOSSES TOTALED 0.37% FOR PLUTONIUM AND 0.12% FOR URANIUM. THE HIGHER-THAN-USUAL WASTE LOSSES RESULTED FROM DISCARD OF STARTUP WASTES DUE TO LACK OF AVAILABLE WASTE STORAGE SPACE WITHIN THE BUILDING AND FROM EXTENSIVE EQUIPMENT FLUSHES.

IODINE EMISSIONS AVERAGED 0.41 CURIES PER DAY.

REDOX - THE PLANT PROCESSED 64.7 TONS OF URANIUM (94 METAL) DURING THE MONTH. THE DISSOLVERS OPERATED CONTINUOUSLY. PROCESSING OPERATIONS WERE SUSPENDED DURING THE FIRST WEEK OF THE MONTH FOR REPLACEMENT OF THE H-4 OXIDIZER, WHICH DEVELOPED A LEAK IN SEPTEMBER. THROUGHOUT THE REMAINDER OF THE MONTH, THE EXTRACTION COLUMNS WERE OPERATED ON A FIVE-DAY-WEEK BASIS.

BOTH PRODUCTS WERE WITHIN SPECIFICATIONS, ALTHOUGH SIX BATCHES OF UNH REQUIRED OZONIZATION. APPROXIMATELY ONE KG OF PLUTONIUM WAS RECOVERED FROM THE CONCENTRATION FACILITY BY TWO NITRIC ACID FLUSHES.

WASTE LOSSES TOTALED 0.64% FOR PLUTONIUM AND 0.14% FOR URANIUM.

IODINE EMISSIONS AVERAGED 0.2 CURIES PER DAY. DURING REMOVAL OF THE LEAKING H-4 OXIDIZER, A SMALL AMOUNT OF RUTHENIUM OXIDE WAS RELEASED IN THE CANYON AND SETTLED IN THE CANYON AND ON THE CRANE. THE EQUIPMENT WAS DECONTAMINATED WITH LITTLE EFFECT ON PROCESSING. IN ORDER TO REDUCE THE PROBLEM OF RUTHENIUM CONTAMINATION IN THE FUTURE, SODIUM DICHROMATE RATHER THAN PERMANGANATE WAS USED TO OXIDIZE ALL SOLVENT EXTRACTION FEED DURING THE MONTH. ADEQUATE FISSION PRODUCT DECONTAMINATION OF THE URANIUM AND PLUTONIUM PRODUCTS WAS OBTAINED.

UO₃ - PLANT PRODUCTION OF NORMAL UO₃ TOTALLED 503 TONS, 100.6% OF FORECAST; WHILE PLANT PRODUCTION OF ENRICHED UO₃ TOTALLED 47.7 TONS, 95.4% OF FORECAST. ALL SHIPPING SCHEDULES WERE MET.

FOR EACH TON OF URANIUM PROCESSED, 1,051 POUNDS OF NITRIC ACID (99.8% OF THEORETICAL) WAS RECOVERED AT AN AVERAGE CONCENTRATION OF 47%. THIS HIGH RECOVERY EFFICIENCY IS BELIEVED TO BE DUE TO AN INVENTORY ERROR IN SEPTEMBER, WHICH RESULTED IN A RECOVERY EFFICIENCY FIGURE OF ONLY 81.4% FOR SEPTEMBER.

MAINTENANCE DURING THE MONTH INCLUDED REPLACEMENT OF BROKEN AGITATOR SHEAR PINS AT J CALCINER, REPLACEMENT OF THE REDUCING DRIVE PINION BEARING AT K CALCINER, AND INSTALLATION OF THE NEW HAMMERMILL-CONTAINER LOADING SYSTEM AT G CALCINER.

RESEARCH AND DEVELOPMENT

SEPARATIONS PLANT WASTE TREATMENT STUDIES - OPERATION OF THE PILOT-SCALE FLUID-BED WASTE CALCINER PROTOTYPE WAS BEGUN DURING THE MONTH, AND SMOOTH, TROUBLE-FREE OPERATION WAS EXPERIENCED. THE RESULTS OF EARLIER EXPLORATORY STUDIES AT ANL ON SIMULATED PUREX WASTE FEED ARE BEING INCORPORATED INTO THE HLO PROGRAM NOW UNDER WAY.

A COMPETITIVE PROCESS IS USED IN THE RADIANT-HEAT SPRAY CALCINER, AND HANFORD LABORATORY TESTS OF THIS UNIT CONTINUE TO BE ENCOURAGING. OPERATION OF BOTH UNITS WILL BE CONTINUED UNTIL THE ADVANTAGE OF ONE OVER THE OTHER IS EVIDENT.

FISSION PRODUCT RECOVERY STUDIES - SIGNIFICANT PROGRESS WAS MADE IN STUDIES ON THE RECOVERY OF THE STRONTIUM FISSION PRODUCT. A SIMPLE METHOD WAS DISCOVERED FOR PRECIPITATING THE STRONTIUM AND RARE EARTH FISSION PRODUCTS OUT OF PUREX WASTE WITHOUT PRECIPITATING IRON AT THE SAME TIME. THE METHOD INVOLVES VERY CLOSE ADJUSTMENT OF THE PH AND THEN DOUBLE-SULFATE PRECIPITATION OF THE STRONTIUM AND RARE EARTHS. PRECIPITATION OF THE IRON IS PREVENTED BY THE VERY CLOSE ADJUSTMENT OF THE PH, WHILE 80% TO 90% OF THE STRONTIUM IS PRECIPITATED WITH THE RARE EARTHS.

LABORATORY RESEARCH ON THE PEROXIDE-ACETATE PROCESS FOR RECOVERING CERIUM FROM PUREX WASTES HAS BEEN COMPLETED. THE POSSIBILITY OF RECOVERING CERIUM FROM PUREX WASTES BY THIS PROCESS HAS BEEN DEMONSTRATED BY TESTS IN THE PUREX PLANT.

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PLANT OPERATIONS (CONT'D)

RESEARCH AND DEVELOPMENT (CONT'D)

NEPTUNIUM RECOVERY AT REDOX - AT REDOX PLANT, A TEST OF THE RATE OF REOXIDATION OF PENTAVALENT NEPTUNIUM TO HEXAVALENT NEPTUNIUM WAS CONDUCTED DURING THE LAST WEEK OF THE MONTH TO FURTHER CHECK THE FEASIBILITY OF THE PROPOSED INTERNAL RECYCLE SCHEME FOR NEPTUNIUM RECOVERY. TO ACCUMULATE NEPTUNIUM IN THE INTERNAL RECYCLE SYSTEM, THE FIRST EXTRACTION CYCLE (HA COLUMN) IS OPERATED ON AN ACID FLOWSHEET WHILE THE SECOND EXTRACTION CYCLE (IA COLUMN) IS OPERATED ON AN ACID-DEFICIENT FLOWSHEET. HEXAVALENT NEPTUNIUM WILL BE EXTRACTED INTO HEXONE UNDER ACID FLOWSHEET CONDITIONS, AS SHOWN BY LABORATORY WORK AND BY TWO PREVIOUS PLANT TESTS. THE HEXAVALENT FORM, HOWEVER, IS REDUCED TO THE INEXTRACTABLE PENTAVALENT STATE UNDER ACID-DEFICIENT CONDITIONS. THE ACID-DEFICIENT IAW STREAM THUS CONTAINING PENTAVALENT NEPTUNIUM FLOWS TO A CONCENTRATOR AND IS THEN RETURNED TO THE ACIDIC HA COLUMN IN WHICH THE PENTAVALENT NEPTUNIUM MUST BE REOXIDIZED IN ORDER TO BE RE-EXTRACTED WITH THE NEPTUNIUM, URANIUM, AND PLUTONIUM IN THE NEW FEED. PRELIMINARY RESULTS INDICATE THAT THE RATE OF REOXIDATION IS SUFFICIENT TO PERMIT THE USE OF THIS FLOWSHEET TO RETAIN NEPTUNIUM WITHIN THE SYSTEM.

NEPTUNIUM FABRICATION - FOUR DOUBLE-STRENGTH (75 GRAMS NEPTUNIUM EACH) ELEMENTS WERE SHIPPED ON OCTOBER 2. THE NEPTUNIUM WAS HELD OVER FROM THE PREVIOUS CAMPAIGN (VI) AND RESULTED IN ELEMENT SURFACE READINGS OF 300 MR/HR. THIS IS TO BE COMPARED TO ELEMENTS FABRICATED FROM RECENTLY SEPARATED HANFORD NEPTUNIUM WHICH GIVES READINGS OF 80 MR/HR.

SUFFICIENT NEPTUNIUM OXIDE WAS PREPARED TO MAKE 52 REGULAR-STRENGTH ELEMENTS (37.5 GRAMS NEPTUNIUM EACH).

PLANT ACQUISITION AND CONSTRUCTION

PROJECT AND DESIGN STUDIES

CG-734, RMC BUTTON LINE - 234-5 BUILDING - REVISION 2 TO THE PROPOSAL REQUESTING ADDITIONAL SHIELDING, CONSISTING OF LEAD GLASS FOR THE EQUIPMENT HOODS, WAS APPROVED EARLY IN THE MONTH. DESIGN IS NEARLY COMPLETE.

CG-789, ADDITIONAL FIRE PROTECTION - 234-5 BUILDING - DETAILED DESIGN IS 96% COMPLETE. THE BID PACKAGE FOR THE DESIGN AND CONSTRUCTION OF THE SPRINKLER SYSTEM WAS COMPLETED AND ADVERTISED. AND THE AWARD HAS BEEN MADE.

CGI-791, CONFINEMENT OF RADIOACTIVE PARTICULATE MATTER IN 105 BUILDING EXHAUST AIR - DETAILED DESIGN IS 96% COMPLETE, WITH PHASE I (FOG SPRAY) 90% COMPLETE, PHASE II (FILTRATION BUILDING) 100% COMPLETE, AND PHASE III (FILTER BUILDING TIE-INS AND BUILDING VENTILATION) 91% COMPLETE. COMPLETION OF DESIGN IS BEING RESCHEDULED TO EARLY 1960 TO PERMIT FURTHER SCOPING OF PHASE III DESIGN. UNDER PHASE III, THE NEED FOR REVISION TO VENTILATION AIR INTAKES IS BEING STUDIED. APPARENTLY AS NOW LOCATED, THE INTAKES PICK UP SUFFICIENT DUST TO QUICKLY CLOG THE PROPOSED HIGH EFFICIENCY FILTERS ON THE EXHAUST LINES. AT PRESENT, IT APPEARS THAT AIR INTAKES WILL NEED TO BE RAISED, ADDITIONAL HEATING COILS AT THE INTAKES WILL NEED TO BE ADDED FOR BETTER TEMPERATURE CONTROLS, AND ADDITIONAL AND REPLACEMENT DOORS WILL NEED TO BE PLACED AT ENTRIES TO VENTILATION ZONES. IT IS NOT EXPECTED THAT OVER-ALL COMPLETION OF THE PROJECT WILL BE AFFECTED.

THE A. D. LITTLE COMPANY HAS COMPLETED CHECKING OUT HALOGEN TESTING EQUIPMENT AND HAS INITIATED TESTING.

A FILTER ASSEMBLY FOR TESTING ACTUAL EXHAUST STREAM CONDITIONS HAS BEEN INSTALLED IN THE 100-D AREA. A SIMILAR INSTALLATION IS TO BE MADE IN 100-F.

CONTRACT AT(45-1)-687, PHASE II-A, J. A. JONES CONSTRUCTION COMPANY. WORK IN ALL AREAS EXCEPT KE AND KW IS ESSENTIALLY COMPLETE. THE CONCRETE IN THE INVERT FOR THE DUCTS IN KE AND KW HAS BEEN PLACED IN ADDITION TO A PORTION OF THE WALLS IN KE.

PHASE II-B. BIDS WERE OPENED ON THIS PHASE OF THE WORK ON OCTOBER 28, 1959. THE APPARENT LOW BIDDER WAS R. B. MILES WITH A BID OF \$1,698,866.

CGC-811, ADDITIONAL PLUTONIUM FABRICATION FACILITIES - 234-5 BUILDING - THE TOTAL PROJECT WAS AUTHORIZED EARLY IN THE MONTH, AND BY MONTH END DETAILED DESIGN WAS 69% COMPLETE. THE LUMP-SUM BID PACKAGE HAS BEEN COMPLETED, AND BIDS ARE TO BE SOLICITED EARLY IN NOVEMBER.

CAI-816, NEW PRODUCTION REACTOR - DESIGN: AT MONTH END, DESIGN WAS 25% COMPLETE VERSUS 28% SCHEDULED, WITH THE GENERAL ELECTRIC COMPANY 24.6% COMPLETE VS. 24% SCHEDULED, AND BURNS AND ROE, INC., 26% COMPLETE VS. 33% SCHEDULED. BURNS AND ROE, INC., HAS PREPARED A NEW DESIGN SCHEDULE. THIS REVISION DOES NOT CHANGE THE END DATE BUT DOES PROVIDE FOR LOWER COMPLETION OF DESIGN AT INTERMEDIATE POINTS. THIS REVISED BURNS & ROE SCHEDULE IS BEING INCORPORATED IN AN OVER-ALL SCHEDULE REVISION TO BE SUBMITTED IN MID-NOVEMBER. THE ABOVE QUOTED PROGRESS FIGURES ARE ON THE BASIS OF THE OLD SCHEDULE.

AVERAGE ENGINEERING EMPLOYMENT DURING THE MONTH WAS: THE GENERAL ELECTRIC COMPANY PORTION 139, AND THE BURNS AND ROE PORTION 105.

DURING THE MONTH THE FOLLOWING DESIGN CRITERIA WERE COMPLETED:

1. FUEL RUPTURE MONITOR SYSTEM.
2. PILE GAS SYSTEM, REVISION 1.
3. PROCESS TUBE INJECTION SYSTEM.

IN ADDITION, SCOPE MATERIAL WAS APPROVED FOR THE RIVER PUMP HOUSE AND FOR THE STANDBY POWER PLANT.

AT MONTH END, OF A TOTAL OF 42 REACTOR DESIGN CRITERIA SCHEDULED, 34 HAVE BEEN APPROVED.

DURING THE MONTH, THE INDIVIDUAL GRAPHITE BLOCK SIZE WAS ESTABLISHED FOLLOWING TUBE RUPTURE TESTS ON A MOCK-UP OF A CORNER OF THE GRAPHITE PILE.

FEDERAL POWER COMMISSION - POWER CONVERSION STUDY: THE FEDERAL POWER COMMISSION HAS FURNISHED HANFORD WITH STATEMENTS OF PROCEDURES TO BE FOLLOWED IN EVALUATING THE CONVERTED FACILITY, INCLUDING METHODS OF ESTABLISHING VALUES OF NPR OUTPUT, COMPARISON WITH HYDROPOWER AND ALTERNATIVE FOSSIL FUEL STEAM, AND THE USEFULNESS OF NPR ON AN INTEGRATED BASIS.

PROJECT AND DESIGN STUDIES (CONT'D)CAI-816, NEW PRODUCTION REACTOR (CONT'D)

THE BONNEVILLE POWER ADMINISTRATION HAS COMPLETED AND FORWARDED TO THE FEDERAL POWER COMMISSION STUDY REPORTS OF RESERVE POWER REQUIREMENTS FOR VARIOUS SIZES OF NPR POWER GENERATION AS WELL AS EVALUATIONS OF TRANSMISSION COSTS AND OF STABILITY PROBLEMS ASSOCIATED WITH THE CONVERTED FACILITY.

BURNS AND ROE, INC. HAS COMPLETED CONSTRUCTION COST ESTIMATES ON 13 ALTERNATE CASES FOR ADDING POWER GENERATION FACILITIES TO THE NPR, 9 ADDITIONAL MARGINAL CASES AND 2 MISCELLANEOUS CASES. THE INFORMATION HAS BEEN PROVIDED TO THE FEDERAL POWER COMMISSION AND THE ATOMIC ENERGY COMMISSION.

CONTRACT AT(45-1)-1455, KAISER ENGINEERS:

SUBCONTRACT SC-2, F.P. - THE INSTALLATION OF T-C WATER LINES WAS COMPLETED BY J. P. HEAD.

SUBCONTRACT SC-5, F.P. - REHABILITATION OF THE CONCRETE PLANT WAS STARTED ON OCTOBER 20, 1959, BY FRANK H. LOHSE.

SUBCONTRACT SC-6, F.P. - AN AWARD WAS MADE TO THE OWENS-CORNING ENGINEERS AND SUPPLY DIVISION FOR THE INSULATION OF HEAT AND VENTILATION UNITS, 2101 BUILDING.

SUBCONTRACT SC-7, F.P. - AN AWARD WAS MADE ON OCTOBER 30, 1959, TO THE GEORGE LEWIS CONSTRUCTION COMPANY FOR SITE GRADING AROUND T-C CONSTRUCTION FACILITIES, NPR SITE.

SUBCONTRACT SC-3, PROJECT CA-856, F.P. - THE CONSTRUCTION OF THE ACCESS HIGHWAY WAS COMPLETED ON OCTOBER 9, 1959, BY L. W. VAIL.

SUBCONTRACT SC-8, PROJECT CA-852, F.P. - AWARDED TO TULLAR POWER CONSTRUCTION, INC., FOR THE INSTALLATION OF 12,000 FEET OF DIRECT BURIAL TELEPHONE CABLE.

CGR-825, REMOTE CONTROL OF THE 251 PRIMARY SUBSTATION - ALL BIDS FOR EQUIPMENT HAVE BEEN REJECTED AND THE INVITATION REWRITTEN TO IMPROVE THE WORDING. REWRITTEN SPECIFICATIONS WERE RECEIVED LATE IN OCTOBER FOR INITIATION OF NEW PROCUREMENT ACTION.

CGC-830, PLANT MODIFICATION FOR REPROCESSING NONPRODUCTION REACTOR FUELS - DEFINITIVE SCOPE IS 35% COMPLETE. A PROJECT PROPOSAL FOR THE TOTAL PROJECT (\$6,200,000) IS EXPECTED EARLY IN NOVEMBER.

CGH-864, SHIELDED ANIMAL MONITORING STATION - 100-F AREA - DESIGN CRITERIA WERE COMPLETED OCTOBER 13. THE ARCHITECT-ENGINEER INITIATED DETAILED DESIGN ON OCTOBER 22. STEEL FOR THE MONITORING CELL IS TO BE PROVIDED BY THE GOVERNMENT FROM PREWAR ARMOR PLATE SURPLUS TO THE NAVY.

CGC-873, FISSION PRODUCT LOADOUT FACILITY - PUREX - THE TOTAL PROJECT WAS AUTHORIZED ON OCTOBER 30. DESIGN IS 70% COMPLETE WITH ENOUGH FINISHED TO INITIATE CONSTRUCTION.

AEC-175, NEW CENTRAL INDUSTRIAL FIRE STATION - DETAILED DESIGN IS 98% COMPLETE. ARCHITECTURAL AND STRUCTURAL DRAWINGS AND SPECIFICATIONS ARE COMPLETE. LIKE WORK FOR MECHANICAL AND ELECTRICAL IS TO BE COMPLETED EARLY IN NOVEMBER.

PLANT CONSTRUCTION

MAJOR CONSTRUCTION - THE STATUS OF MAJOR CONSTRUCTION IS INDICATED BELOW:

PROJECT	PROJECT PROPOSAL NUMBER	MAJOR PROJECTS				DESIGN % ACTUAL COMPL.	PRESENT WORKING ESTIMATE (THOUSANDS)
		CONSTRUCTION		COMPLETION			
		ACTUAL	SCHED.				
		STARTING	COMPL.	%	%		
		DATE	DATE	SCHED.	ACTUAL		
PRTR	AEC-167	3-6-58	8-30-60	56	52	100	\$12,750
PUREX WASTE FACILITY	CG-719	8-27-58	10-15-59	99	100	100	1,068
RMC BUTTON LINE, 234-5	CG-734	2-18-58	7-15-60	97	97	100	1,845
PU. FAB. PILOT PLANT	CA-747	3-6-58	11-1-60	85	85	94	4,230
HIGH LEVEL RADIOCHEM. FACILITY	CA-749	8-14-58	1-1-60	93	99	100	960
MET. DEV. FAC., 306 BLG. ADDITION	CA-744	3-20-59	9-1-60	22	22	100	2,685

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DOCUMENT NO. HAN-73854

PLANT CONSTRUCTION (CONT'D)

MAJOR CONSTRUCTION (CONT'D)

MAJOR PROJECTS (CONT'D)							
PROJECT	PROJECT PROPOSAL NUMBER	CONSTRUCTION				DESIGN	PRESENT
		ACTUAL STARTING DATE	SCHED. COMPL. DATE	COMPLETION		%	WORKING
				% SCHED.	% ACTUAL	ACTUAL COMPL.	ESTIMATE (THOUSANDS)
REACTOR CONFINEMENT	CG-791	3-31-59	3-15-61	14	14	96	\$ 4,200
306 BLDG. PILOT PLANT	CGF-810	1-29-59	4-1-60	14	14	100	755
CRITICAL MASS LAB.	CG-731	6-4-59	6-30-60	24	31	100	1,000
ADD'L PU. FAB. FAC., 234-5 BLDG.	CGC-811	8-24-59	7-1-61	0	1	69	3,500
NEW PROD. REACTOR	CAI-816	5-1-59	10-1-62	0.1	0.1	25	145,000

THE STEEL STRIKE IS DELAYING WORK ON THE FOLLOWING PROJECTS OR CONTRACTS:

CONTRACT AT(45-1)-1410, PROJECT AEC-167, PRTR, HELIUM STORAGE TANK AND WATER CONDITIONING SYSTEM.

CONTRACT AT(45-1)-1474, PROJECT CAF-847, FUEL CLADDING FACILITY, BUILDING NO. 333, METAL SIDING.

PROJECT CAI-816, NEW PRODUCTION REACTOR. THE PILOT PRODUCTION ORDER FOR ZIRCONIUM TUBES IS DELAYED.

PROJECT CGH-834, MODIFICATION AND ADDITION TO HEAT TRANSFER APPARATUS, 189-D BUILDING. WE ARE UNABLE TO GET STEEL FOR PREHEATERS.

CG-558, PILE MODIFICATION FACILITIES FOR INCREASED PRODUCTION - THE PUMP ROTATING ELEMENT (ROTOR) REPLACEMENT PROGRAM WAS REACTIVATED OCTOBER 5, 1959. A FIELD ENGINEER FROM DELAVAL IS SUPERVISING A CHANGE OUT OF NEW ROTATING ELEMENTS, AND MAKING THE NECESSARY MODIFICATION TO THE PUMP CASES. THIS WORK IS SUPPOSED TO PROCEED WITHOUT DELAY UNTIL NEW ROTATING ELEMENT HAS BEEN INSTALLED IN THE 40 PUMPS. THE IMPELLER ON NO. 8 PUMP IN 190-H ANNEX WAS EXAMINED AFTER APPROXIMATELY SIX MONTHS OF OPERATION. THE MINOR AMOUNT OF EROSION ON THE FIRST STAGE IMPELLER WAS NOT SUFFICIENT TO CAUSE CONCERN.

CONTRACT AT(45-1)-1433, PROJECT CA-747, PLUTONIUM FABRICATION PILOT PLANT, GEORGE A. GRANT, INC. - THE DEGREASE-DECONTAMINATION HOOD, CANNING HOOD, AND ASSEMBLY HOOD IN ROOM 113 WERE COMPLETED ON OCTOBER 21, 1959.

CONTRACT AT(45-1)-1452, PROJECTS CG-558 AND CG-600, PUMP TEST STAND FACILITY, 100-F AREA, LEWIS HOPKINS COMPANY - THE CONTRACTOR COMPLETED WORK ON THIS CONTRACT ON OCTOBER 21, 1959.

CONTRACT AT(45-1)-1477, PROJECT AEC-167, PLUTONIUM RECYCLE TEST REACTOR, PHASE II, CUSTODIS CONSTRUCTION COMPANY, INC. - WORK WAS STARTED ON ERECTION OF THE EXHAUST STACK ON OCTOBER 13, 1959.

CONTRACT AT(45-1)-1410, PROJECT AEC-167, PHASE III, SHAW AND ESTES, INC. - THE HEAVY AGGREGATE PROCESS EQUIPMENT HAS BEEN ERECTED AND TESTS ON HIGH DENSITY CONCRETE HAVE BEEN MADE. THE BIOLOGICAL SHIELD FORMS ARE 90% COMPLETE; THE SHIELDING WALL FOR THE PRIMARY HEAT EXCHANGER WAS PLACED. THE PRIMARY HEAT EXCHANGER IS LOCATED IN ITS PERMANENT LOCATION.

CONTRACTS

FIVE CONSTRUCTION AND A-E CONTRACTS WERE AWARDED DURING THE MONTH, VARYING IN AMOUNTS FROM \$13,060 TO \$68,538.

PROCUREMENT

THE GENERAL ELECTRIC COMPANY PLACED 25 AWARDS FOR \$527,621.59, WHICH WERE APPROVED BY THE AEC.

THE ATOMIC ENERGY COMMISSION PLACED 317 PURCHASE ORDERS IN THE AMOUNT OF \$1,282,562.20, WHICH INCLUDES A \$740,000 ORDER WITH LEHIGH PORTLAND CEMENT COMPANY FOR CEMENT.

THE FOLLOWING ORDERS PLACED BY OTHER CONTRACTORS, BUT WHICH WERE APPROVED BY THE AEC ARE:

J. A. JONES (TWO ORDERS), TOTAL VALUE \$ 46,490.00
KAISER ENGINEERS (TWO ORDERS) " " 128,238.00

PROCUREMENT (CONT'D)

NEGOTIATIONS WERE CONCLUDED WITH THE TUBE REDUCING CORPORATION, WELLINGTON, NEW JERSEY, FOR THE PURCHASE OF 30 PRTR ZIRCALOY TUBES UNDER A FIXED-PRICE CONTRACT IN THE AMOUNT OF \$154,325.

TRAFFIC

BOTH THE UNION PACIFIC AND THE NORTHERN PACIFIC HAVE AGREED TO TAKE OVER CERTAIN INDUSTRIAL TRACKS IN RICHLAND SERVING COMMERCIAL CONCERNS FOR SWITCHING AND MAINTENANCE. THE SAME AGREEMENT PROVIDES FOR SWITCHING OF GOVERNMENT TRAFFIC IN THE 700 AREA.

PROPERTY

THE TRANSFER OF EQUIPMENT OF ALL GENERAL ELECTRIC COMPANY COMMUNITY DEPARTMENTS TO THE CITY OF RICHLAND WAS COMPLETED ON OCTOBER 31, 1959. THE FOLLOWING EQUIPMENT WAS INCLUDED IN THE TRANSFER:

- 2 - AMBULANCES
- 6 - DUMP TRUCKS
- 9 - FIRE TRUCKS
- 5 - FLAT BED TRUCKS
- 6 - GARBAGE TRUCKS
- 2 - JEEPS
- 1 - LINE TRUCK
- 57 - MISC. ITEMS OF CONSTRUCTION EQUIPMENT
- 8 - PANELS AND CARRYALLS
- 24 - PICKUPS
- 3 - POWER WAGONS
- 16 - SEDANS
- 1 - TANK TRUCK

NPR REFERENCE ROOM

THE NPR REFERENCE ROOM WAS OPENED IN THE 703 BUILDING AT RICHLAND BY HOO ON OCTOBER 5, 1959. THE FIRST MATERIAL MADE AVAILABLE FOR STUDY CONSISTS OF BOTH CLASSIFIED AND UNCLASSIFIED DOCUMENTS, DRAWINGS AND COMPONENTS.

CONSIDERABLE INTEREST WAS SHOWN BY PACIFIC NORTHWEST INDUSTRIAL GROUPS AFTER PUBLIC ANNOUNCEMENTS HAD BEEN MADE THAT THE ROOM WAS OPEN TO VISITORS. ABOUT 12 PERSONS MADE PERSONAL VISITS TO THE ROOM DURING THE MONTH AND A NUMBER OF OTHERS INQUIRED ABOUT FUTURE VISITS.

DISPLAY SPACE WILL BE GREATLY ENLARGED BY EARLY IN 1960 WHEN MORE MATERIAL OF VARIOUS KINDS WILL BE ADDED. AN NPR MODEL, NOW BEING MADE, WILL BE SET UP IN THE ENLARGED QUARTERS.

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NOV 10 1959

[REDACTED]

TO: Director, Division of Production
USAEC, Washington 25, D. C.

FROM: J. E. Travis, Manager, Hanford Operations
Office, USAEC, Richland, Washington

SUBJECT: MONTHLY STATUS AND PROGRESS REPORT

SYMBOL: B:HRE

Enclosed herewith is Part II ("Official Use Only" portion)
of subject report for the month of OCT , 1959.
The "Secret" portion, Part I, is forwarded as a separate
report.

Enclosure:
Monthly Status and Progress Report, Part II

DISTRIBUTION:

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1 Copy - Construction Engineering & Supply Division
1 Copy - Process Engineering & Manufacturing Division
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1 Copy - Classified Files (Reading File)
→ 1 Copy - Budget Division

DEFERRED
[REDACTED]

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U. S. ATOMIC ENERGY COMMISSION
HANFORD OPERATIONS OFFICE

MONTHLY STATUS AND PROGRESS REPORT

OCTOBER 1959

PART II

[REDACTED]

MONTHLY STATUS AND PROGRESS REPORT

HANFORD OPERATIONS OFFICE

OCTOBER 1959

PART II

C O N T E N T S

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<u>PERSONNEL (ON-SITE)</u>	5

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COMMUNITY OPERATIONS

Government Housing:

The following are housing statistics for October 1959:

	<u>October 1</u>	<u>October 31</u>
A. Total houses available for occupancy	117	82
1. Total houses occupied	68	46
2. Total houses unoccupied	49	36
(A total of 3,780 houses and 981 duplexes sold - 5,742 units)		
B. Total apartments available for occupancy	134	134
1. Total apartments occupied	132	128
2. Total apartments unoccupied	2	6

C. Three dormitories are now in operation by a commercial operator.

Private Housing Units (Wherry Act):

	<u>Columbia Heights</u>		<u>Spokane Housing</u>		<u>Total Units</u>
	<u>Houses</u>	<u>Apts.</u>	<u>Houses</u>	<u>Apts.</u>	
Total Units	280	220	400	100	1,000
Rented	138	142	400	90	770
Vacant	142	78	0	10	230

Word was received that the Federal Court of Appeals had upheld the lower court in the Ozerhoff eviction case. The lower court had ruled in favor of the AEC in its efforts to evict Miss Ozerhoff from a government-owned house.

Disposal - A deed to most of the land classified for transfer to the municipality was delivered to the City Manager on October 1, 1959. The City at that time took over all remaining municipal functions except electrical, which was taken over at 12:01 A.M. on November 1, 1959.

HHFA opened bids on about 160 vacant residential, commercial and industrial properties on October 26; received 54 bids, several of which overlapped. 48 properties will be awarded.

The HHFA offered 12 commercial properties for sale on October 19.

Dorms W-3 and W-7 will be advertised for removal as surplus in the near future. Removal of several other dormitories is awaiting word as to whether Kaiser Engineers will be able to get a building from Camp Hanford to use for office space at NPR. If not, Kaiser may have to take one or more dormitories.

[REDACTED]

COMMUNITY OPERATIONS (Cont'd)

Disposal (Cont'd)

The Post Office property was surplused to the General Services Administration.

The report of sales for the month, ending October 31, 1959, is as follows:

	<u>Total Inventory</u>	<u>Sales Closed Past Month</u>	<u>Total</u>	<u>Unsold</u>	<u>Good Faith Deposits</u>
<u>Priority Properties</u>					
Single Houses	3,788	7	3,780	8	7
Duplex Houses	1,018	14	981	37	29
Commercials	128	3	21	109	23
Churches	6	0	6	0	0
Non-profit	7	0	1	6	2
Residential Lots	97	0	97	0	0
Dormitory Sites	2	0	0	2	0
Wherry Sites	5	0	0	5	0
<u>Bid Properties</u>					
Apartments	17	0	0	17	0
Residential Lots	108	0	48	60	0
Residential Tracts	86	0	45	41	4
Commercials	24	3	4	20	0
Industrials	37	5	8	29	1
Flood Plain	39	1	15	24	6
Total	<u>5,362</u>	<u>33</u>	<u>5,006</u>	<u>358</u>	<u>72</u>

Municipal - The City Council gave first reading on a \$3,839,430 CY-1960 budget ordinance on October 7; passed the ordinance on October 13. The budget, as drawn, calls for a maximum of \$563,596 in assistance payments from AEC.

The City of Richland was sent a check for \$6,631 for October expenses.

Commercials - On October 5, 1959, the HOO Manager signed the Bauer-Day Real Estate Transfer Document, and the General Electric Company executed the Lease Surrender and Cancellation.

We were advised that Charlie Wells filed notice of appeal on September 26, 1959 in the case where Judge Powell ruled that AEC cannot be compelled to regard the signing of a lease as being a tenant improvement.

Real Estate - On October 19, 1959 the General Services Administration advised HOO that the warehouse area of the Pasco Engineer Depot will be conveyed to the Port of Pasco as of November 16, 1959.

[REDACTED]

COMMUNITY OPERATIONS (Cont'd)

Real Estate (Cont'd)

The Department of Justice, at Yakima, advised HOO that Judge Powell will appoint a Wahluke Slope value commissioner to replace Evan Hall on November 24, 1959.

The second generator, of a total of ten, at Priest Rapids Dam was put on the line for test runs the week of October 26, 1959.

PERSONNEL (ON-SITE)

	<u>October 1</u>	<u>October 31</u>
Atomic Energy Commission	276	279
General Electric Company	7,912	7,864
Total Construction Personnel	<u>790</u>	<u>792</u>
Total Project Personnel	<u>8,978</u>	<u>8,935</u>

Key Personnel Changes: None.

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[REDACTED]

END

**DATE
FILMED
9/01/92**