DLCS-2250101

MASTER

DUQUESNE LIGHT COMPANY
SHIPPINGPORT ATOMIC POWER STATION

TEST RESULTS

DL-S-225
T-612118

REACTIVITY LIFETIME

SECTION I

FIRST PERFORMANCE

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TEST RESULTS

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SECTION I

FIRST PERFORMANCE

Purpose

To determine the performance and reliability of the PWR plant and core under normal, steady state conditions at approximately 60 mw net electrical output.

Conclusions

The PWR plant was operated at approximately 60 mw net electrical output for a total of 1011 EFPH from July 1, 1958 to August 14, 1958. During this period there were two safety shutdowns, one planned shutdown and one safety insertion. The plant operated for the first 275 hours without a significant core flux tilt occurring. During the next 460 hours numerous core flux oscillations occurred and six of the oscillations required suppression using the control rods. No significant flux oscillations occurred during the last 275 hours of the test. Other than the above mentioned incidents and except for minor auxiliary system difficulties the PWR plant operated normally and satisfactorily during the test.

Description of Test Equipment and Test Procedure

With a xenon free core, the plant was brought to approximately 53 mw net electrical output. The load was increased in approximately 15 mw steps for DL-S-229, Comparison of FEDAL Monitor Readings with Radiochemical Sample Data. During the test, readings of instruments to define selected plant parameters were taken either once each hour, once each four hours or once each eight hours. The plant load was increased to approximately 60 mw net electrical output at 0945, July 2, 1958. Except for the three shutdown periods the plant operated continuously at approximately 60 mw net electrical output throughout the test.

On July 4, 1958, the Test Procedure was modified to include the method to be used to adjust the nuclear instruments during the test. This method is as follows:

The nuclear instrumentation power range instruments are to be adjusted if the deviation from the original calibration current is greater than ± 3 per cent. The instruments will also be adjusted if the average of the four nuclear instrument power range levels is greater than ± 3 per cent from the calorimetric determination of power level. In both cases the zero adjustment and gain will be checked and adjusted if necessary. Each channel will be adjusted for the calorimetric on a ratio basis.

REACTIVITY LIFETIME, SECTION I, FIRST PERFORMANCE, (cont'd)

The Test Procedure was also modified to include a more specific method for obtaining calorimetric data (see page 6-A of approved Test Procedure) and a valid calorimetric was defined as: secondary calorimetric 7 ± 2 per cent above the primary calorimetric.

The following additions or changes were made to the Test Procedure on July 18, 1958 to include a specific method for removing a flux tilt across flats in the core (adjacent channels high) and to modify the intervals of obtaining certain data:

1. Paragraph VI-C-1-a Change "two" to "three".
2. Paragraph VI-C-1-a-(2 Change first sentence in the last paragraph to read: Corrective action is to reduce the power level in the high quadrant by inserting the sub-group 2 and sub-group 6 rods (2 total) in that quadrant.
3. Paragraph VI-C-1-a Add: "(3 When (as determined by the nuclear instruments) two adjacent quadrants are high in power and the other quadrants low. This condition is defined by the power level in the high quadrant and the highest of its adjacent quadrants independent of the other two quadrants, as follows:
 - a. For four loop operation, the power level in the high quadrant is 7 per cent and either of the adjacent quadrants is 5 or more per cent above the base level defined by VI-B-6."
4. Paragraph VI-C-1-b-(1 Add: "upon reaching plus or minus 5 per cent deviation. Continue to record this data as long as the deviation remains above plus or minus 5 per cent except as noted in (7 below.
5. Paragraph VI-C-1-b-(3 Revise as follows: "(3 If the oscillation is across corners as defined in C-1-a-(1 and (2 above, calculate the total rod movement necessary to correct the deviation to the average of the flat corners. Use one (1) inch of total (both rods) rod movement equals 10 per cent reactor power.
 - a. If the oscillation is across flats as defined in C-1-a-(3 above, calculate the total rod movement necessary to correct the deviation of the high corner to the average core power indicated by the four Nuclear Instrument Channels. Use one (1) inch of total (all four rods) rod movement for each desired 10 per cent correction in indicated reactor power on the high corner.

Corrective action is to reduce the power level in the two high quadrants by inserting sub-group 2 and sub-group 6 rods (four total) in those quadrants. If the power level in the corrected corners tends to move in the opposite direction start rod motion, as outlined under VI-C-1-b-(10 Note, when either of the quadrants reaches $2\frac{1}{2}$ per cent from the average."
6. Paragraph VI-C-1-b-(6 Add: "NOTE: If maximum deviation does not reach 7 per cent rods may be returned to their normal inverters when the deviation in the high quadrant has returned to 5 per cent or less."

TEST RESULTS DL-S-225

T-612118

REACTIVITY LIFETIME, SECTION I, FIRST PERFORMANCE (cont'd)

7. Paragraph VI-C-1-b-(7) Add: "after the last rod motion."
8. Effective at 1075 EFPH discontinue part VII-G-4 of the approved Test Procedure. The Test Procedure was changed to take into account the effect of the 1A and 1B boiler feed pump recirculation line flow control valve leakage. On July 23, 1958, the 1A boiler feed pump recirculation line flow control valve was found to be leaking. The 1B boiler feed pump recirculation line flow control valve was checked and also found to be leaking. On July 24, 1958, a special test was performed to determine the amount of recirculation. The results of this test were inconclusive. An analysis of the data obtained thus far in DL-S-225, Reactivity Lifetime, indicate that the actual feedwater flow is 15,000 to 30,000 lb/hr less than the total feedwater flowmeter had been indicating. This difference is due to the water being continuously recirculated from the boiler feed pumps discharge back to the condenser. In order to protect the boiler feed pumps from excessive heating at low or no load conditions, the 1A and 1B boiler feed pump recirculation lines stop valves will be left open. The definition of a valid calorimetric in Part VI-B-10-c of the Test Procedure was between the secondary calorimetric and primary calorimetric is 4.5 per cent plus or minus 2 per cent (secondary greater than primary calorimetric." Since July 25, 1958, the secondary calorimetric has been based on the total of the 1A, 1B and 1D boiler feedwater flows rather than the total feedwater flowmeter reading. This eliminates the measurement of the recirculated water.

Results

The test was begun July 1, 1958 and was completed August 14, 1958. The PWR plant was operated at approximately 60 mw net electrical output for 1010.9 EFPH. The generator was synchronized a total of 1050.0 hours and the plant was at approximately 60 mw net for 1031.7 hours. The test required a total of 1061.8 hours.

During the test two safety shutdowns, one planned shutdown and one safety insertion occurred. Details on these are presented below. The plant operated for the first 275 hours without a significant core flux tilt occurring. The control rod groups 2 and 6 (rods 21, 22, 23, 24, 61, 62, 63 and 64) moved from 15 inches to 33.5 inches during that period. Equilibrium xenon was attained during that period. The control rod groups were at 29.6 inches where equilibrium xenon was attained. During the next 460 hours numerous core flux oscillations occurred and six of the oscillations required suppression using the control rods. The control rod groups 2 and 6 moved from 33.5 inches to 39.5 inches in that period. No significant flux oscillations occurred during the last 275 hours of the test. The control rod groups 2 and 6 moved from 39.5 inches to 43.8 inches during that period.

During the test the major plant systems operated satisfactorily. Minor difficulties were encountered. Channel B and C intermediate range nuclear instrumentation had considerable noise which effected the Power and Temperature Control System and caused excessive control rod motion. There were numerous alarms from the Operational Radiation Monitoring System which proved to be erroneous. When 138 kv line 228 OCB was opened there was a voltage disturbance in the Power and Temperature Control

TEST RESULTS DL-S-225

T-612118

REACTIVITY LIFETIME, SECTION I, FIRST PERFORMANCE (cont'd)

System. A study of this problem is being made. The boiler feed pump recirculation valves leaked which caused erroneous calorimetric determinations of the power level. These valves will be repaired during the plant shutdown following this test.

Other than the above the PWR plant operated normally and satisfactorily during the 1050 hours. The nuclear instrumentation drift was not significant during this test indicating a stable system. Table V presents the data on the current necessary to produce various power indications. Table VI presents a log of events showing nuclear instrument calibrations.

Reference water conditions were maintained during the test for the reactor plant and turbine plant systems except for three low hydrogen concentrations. The lowest hydrogen concentration was 19cc per Kg H₂O. Indications of failed blanket fuel elements in the core were obtained during start-ups after the station shutdowns. A sample of reactor coolant was obtained one hour after the reactor reached 100 per cent power following the start-up on July 13, 1958. The results showed that the Iodine 131 concentration had increased by a factor of about 100 over its concentration for the period prior to the shutdown. The Iodine 131 concentration increased to 14×10^3 dpm per ml from approximately 150 dpm per ml. The reactor coolant was sampled during the start-up on July 31, 1958 after a safety shutdown had occurred. The Iodine 131 concentration was 3.2×10^3 dpm per ml at 0815 on July 31, 1958. At 0318 on August 1, 1958 the concentration had decreased to 203 dpm per ml. Curve IV shows the Iodine 131 concentration plotted against time. The Iodine 133 concentration was 9.45×10^3 dpm per ml at 0815 on July 31, 1958 and decreased to 1610 dpm per ml at 0318 on August 1, 1958. Such changes in Iodine concentration are indicative of failed blanket fuel elements in the core.

On July 12, 1958, at approximately 1900 hours a flux tilt between nuclear instrumentation Channels B and D became evident. The tilt was allowed to run its natural course until it peaked at 106 per cent for Channel B and 95 per cent for Channel D at approximately 2200 hours on July 12, 1958. Nothing was done to try to correct the tilt since a plant shutdown was scheduled for the next day. The upper limits for the nuclear instruments were exceeded slightly during the flux tilt.

The station had to shutdown on July 13, 1958 to remove the 1C coolant loop from service. The 1C coolant loop had to be removed from service when undesirable chemical conditions became evident during the test. The conductivity of the boiler water at a distance 12 inches from the tubesheet was a factor of 10 to 12 greater than that at the tubesheet itself. This indicated that a steam bubble had probably formed at the top of the heat exchanger near the tube sheet. The 1D coolant loop was placed in service.

On July 12, 1957 at 0647 hours a safety insertion occurred due to a high flux level on nuclear instrumentation Channel B. This was caused by opening a breaker on one of the 138 kv lines (Z28) which in turn caused the nuclear instrumentation signal feeding to the Power and Temperature Control System to vary over 1 F. The reactor was placed in "MANUAL" control and control of the plant regained. The precaution of placing the reactor in "MANUAL" will be used during the 138 kv breaker operations until this situation can be corrected.

TEST RESULTS DL-S-225

T-612118

REACTIVITY LIFETIME, SECTION I, FIRST PERFORMANCE (cont'd)

After the station was brought up to power on July 14, 1958, it was observed that the flux tilt with Channel B high at 105 per cent and Channel D at 91.5 per cent was still present. Rods 22 and 61 were inserted a total of 1 inch to decrease Channel B to 98 per cent. These two rods were moved as required to suppress the flux tilt. After this oscillation the plant operated normally with the deviation between Channels B and D gradually building up. Channels A and C also began separating widely. Channel A started peaking at almost the same time as Channel D. This indicated that one half the core had a high flux and one half a low flux. On July 19, 1958, the flux tilt had to be suppressed by using control rods 21, 22, 61 and 64 in the half of the core that was high. The flux tilt was essentially removed by movement of the control rods.

A flux oscillation occurred on July 21, 1958 with Channels A and D high at 107.3 and 105.0 per cent respectively. Channels B and C were normal at 101.5 and 102.3 per cent. This oscillation was corrected by control rods 23, 24, 62 and 63 being inserted 0.3 inch and control rods 21, 22, 61 and 64 being withdrawn 0.2 inch. The generator output was reduced 0.5 mw.

A safety shutdown occurred on July 31, 1958 at 0245. Control rod No. 61 dropped to the bottom while this rod was being transferred to spare bus No. 2 in anticipation of a flux oscillation correction. At 0250 CB-14 was opened to shutdown the reactor. During the five minutes from the time rod No. 61 dropped until CB-14 was opened the net station output decreased from 59.7 mw to 51 mw. Nuclear Instrumentation Channel A decreased from 105 per cent to 27 per cent. The pressurizer pressure decreased from 1970 psig to 1750 psig. It is interesting to note that the pressure did not decrease sufficiently to cause a low pressure safety shutdown. The low pressure protection is set at 1600 psig. The pressurizer level decreased from 86 inches to 49.5 inches. The loop T_c 's decreased from an average of 510 F to 491 F and the T_h 's decreased from an average of 538 F to 516 F. Curve I shows the transients of various plant parameters just prior to and after rod No. 61 dropped. The plant was returned to power as soon as a precritical check-out was made.

A safety shutdown occurred on August 2, 1958 at 1205. The Test Engineer taking test data on Channel C of the nuclear instrumentation grounded the microammeter test leads causing Channel C power level recorder to increase to 116%. The shutdown resulted from the firing of the excessive neutron flux mag amp (set at 138%). The plant was returned to power as soon as a precritical checkout was made.

Data were obtained during the start-ups after the safety shutdowns. These data were plotted in Curves II and III and show the power level and controlling rod group position variations during the xenon burnout. In both cases the indicated power levels increased during the xenon burnout. This indicates the effect of the changing axial flux pattern on the nuclear instrumentation. As the control rods are inserted, the axial flux pattern peaks at a lower position in the core. The conclusion is that the nuclear instrumentation should be adjusted only with a xenon free or an equilibrium xenon condition.

TEST RESULTS DL-S-225

T-612118

REACTIVITY LIFETIME, SECTION I, FIRST PERFORMANCE (cont'd)

A flux oscillation occurred on July 29, 1958 with Channel D high at 106.5 per cent and Channel B low at 99.0 per cent. Channels A and C were normal at 103 per cent. This oscillation was corrected by inserting rods No. 24 and 63.

Another flux oscillation occurred on July 31, 1958 when the plant was returned to service after the safety shutdown. The plant load had not been increased to 100 per cent power. Channel A was high at 97.2 per cent, Channel B, C and D were at 92.5, 85 and 87 per cent, respectively. The oscillation was suppressed by the use of rod Nos. 23 and 62.

Tables IA, IB, IC, II and III present the data taken once per hour, once every four hours and once every eight hours, respectively.

Table IV presents the core instrumentation data. Table V shows the currents necessary to produce the various power level indication on each nuclear instrument channel. Table VI is a log of events.

SUBJECT DL-S-225SHEET NO. 1

DL

COMPANY

REACTIVITY LIFETIME

PS

DEPARTMENT

SHIPPINGPORT

DATE

DATE

TABLE IA

FORM 888-7.17

DATE	TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600
ION CURRENTS - CHA	μA	81.6	81.75	82.5	83.1	79.8	79.5	79.5	80.7	80.7	81.3	81	81.75	81.6	81.9	82.2	82.5	85.5	88.5	87.0	88.8	89.1	88.8	90	90
CHB	μA	97.2	102.6	103.8	104.7	100.5	102.5	100.5	72	101.7	103.2	102.9	103.2	102.9	102.6	103.5	103.5	106.5	112.5	110.4	111.9	112.8	112.5	113.4	117.6
CHC	μA	104.4	105	106.5	105.6	102.2	102.6	102.6	104.1	103.5	105.3	105.9	105.6	109.2	105.3	106.5	106.5	106.5	114.9	112.5	114.6	115.2	114.6	115.5	118.3
CHD	μA	89.1	90	91.5	90	88.5	87.9	87.6	88.5	74.4	88.4	90	89.4	91.8	90	90	90	91.2	96.9	95.1	97.2	97.5	96.9	97.5	99

DATE	TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600
ION CURRENTS - CHA	μA	89.1	87.9	89.7	87.3	88.5	90	91.2	90.3	87.0	88.2	88.5	88.5	89.1	90	88.2	88.2	87.3	87.3	86.4	87.6	89.1	89.4	88.8	89.1
CHB	μA	112.2	109.8	111.3	110.1	111.3	112.5	112.5	112.5	109.8	110.1	111.6	111.6	111.6	112.8	110.7	110.4	109.8	109.8	109.2	110.1	111.6	112.8	112.2	111.9
CHC	μA	114.6	112.2	112.8	112.2	113.4	114.0	113.7	113.7	111.9	112.8	113.1	113.1	114.0	115.2	113.4	112.8	112.2	112.2	111.3	112.5	114.0	114.9	114.3	114.0
CHD	μA	97.5	94.8	93.6	94.8	96.3	97.2	96.6	96.6	98.1	95.4	96.3	96.3	96.6	97.5	96.3	95.4	94.8	94.5	100	101	102.5	102.5	102	101

DATE	7/3												7/4													
TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600		
ION CURRENTS - CHA	MA	88.2	91.8	92.3	92.1	92.7	91.5	90.3	91.5	90.9	91.2	91.2	90.6	91.5	91.2	91.8	91.8	91.8	92.7	92.7	92.7	92.1	90.9	92.7	92.4	
CHB	MA	111.0	115.5	115.5	116.0	116.1	115.2	113.4	115.2	114.3	114	114.9	114.3	115.2	114	115.2	115.5	115.2	116.4	116.4	116.4	115.2	113.4	115.8	115.5	
CHC	MA	113.4	117.3	117	118	117.9	117	115.5	117	116.4	116.4	117.3	116.4	117.3	116.7	117.6	117.6	117.6	118.5	118.5	118.5	117.3	115.8	117.9	117.9	
CHD	MA	96.3	99.6	99	100.2	99.9	98.7	98.1	99	98.7	99	99	98.7	99.6	98.7	99.9	99.9	99.9	99.9	100.5	102.5	100.5	99.7	97.5	102.2	99.9

DATE	TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600
ION CURRENTS - CHA	μA	93	90	90	90	90	91.2	90.9	90.6	89.1	92.25	92.4	90.9	90.9	90	90.6	91.5	91.5	92.7	92.1	91.8	91.5	90.6	90.3	91.2
CHB	μA	116.7	111.9	112.5	112.8	112.8	114.0	114	113.7	111.6	115.8	116.1	114.0	114	112.8	114	114.6	114.9	116.1	115.5	115.5	114.3	113.7	113.1	114
CHC	μA	118.8	114.6	114.6	114.6	114.9	115.8	115.8	115.8	113.7	117.2	117.8	116.4	116.4	115.5	116.4	117	117.3	118.8	117.9	117.6	115.8	115.5	114.9	115.8
CHD	μA	100.5	97.2	98.1	97.2	97.2	98.1	98.25	97.8	96.3	100.2	100.5	98.4	98.4	97.5	98.4	99	99.3	100.5	97.3	99.6	97.1	97.5	97.5	98.4

DATE	TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600
ION CURRENT - CHA	μA	92.4	92.4	91.8	92.4	92.7	92.4	91.8	91.5	90.9	91.2	90.6	90.5	91.2	91.2	93.6	92.1	91.5	91.2	92.2	92.7	91.8	92.1	-	93
CHB	μA	115.2	115.2	115.2	116.1	116.1	115.8	114.9	114.0	113.4	113.4	114	113.4	114.9	115.2	117.6	115.5	114.6	114	116.1	116.1	115.2	115.2	-	115.5
CHC	μA	117.6	116.7	117.3	114.25	118.5	117.9	117.0	116.4	115.8	115.5	114	116.4	117	117.3	115.5	117	116.4	115.8	117.9	118.2	117.0	117	-	117.3
CHD	μA	99.6	99	99.5	99.9	100.5	99.9	99.9	98.7	97.8	97.8	97.2	98.4	98.7	99.6	99.6	99	101.4	98.4	100.5	97.6	99.3	99	-	99.6

SUBJECT DL-S-225 PAGE 2DL

COMPANY

Reactivity LifetimePS

DEPARTMENT

Shippingport

DIVISION

COMPLETION

CHECKED

DATE

Table IA

DATE	TIME	7/6	7/7
ION CURRENTS - CH A	uA	92.1 92.1 91.5 91.2 92.1 92.4 92.1 92.1 91.2 91.5 91.5 91.2 91.2 91.5 91.8 92.4 93 91.8 92.7 91.8 91.8 92.7 93 93	92.1 92.1 91.5 91.2 92.1 92.4 92.1 92.1 91.2 91.5 91.5 91.2 91.2 91.5 91.8 92.4 93 91.8 92.7 91.8 91.8 92.7 93 93
CH B	"	115.2 115.5 114 114 115.5 106.5 115.5 115.5 114.6 114.6 114.3 114 114 114.6 114.9 115.8 116.7 114.9 115.2 114.3 114.3 115.5 117 116.4	115.2 115.5 114 114 115.5 106.5 115.5 115.5 114.6 114.6 114.3 114 114 114.6 114.9 115.8 116.7 114.9 115.2 114.3 114.3 115.5 117 116.4
CH C	"	117 117.6 116.7 116.1 117.9 118.5 118.2 117.9 117 117 117 116.4 116.7 116.7 116.7 117 117.3 116.7 116.7 116.4 116.4 117.6 118.7 118.5	117 117.6 116.7 116.1 117.9 118.5 118.2 117.9 117 117 117 116.4 116.7 116.7 116.7 117 117.3 116.7 116.7 116.4 116.4 117.6 118.7 118.5
CH D	"	99.9 99.6 98.7 98.1 99.9 100.2 99.9 100.2 99.3 99 98.7 98.1 98.4 98.7 99 99.3 99.9 98.7 99 99 99.9 100.3 100.5	99.9 99.6 98.7 98.1 99.9 100.2 99.9 100.2 99.3 99 98.7 98.1 98.4 98.7 99 99.3 99.9 98.7 99 99 99.9 100.3 100.5

DATE	TIME	7/7	7/8
ION CURRENTS - CH A	uA	93 93 91.8 91.5 91.2 93.3 94.2 91.2 91.2 92.4 91.8 91.5 92.7 92.4 93 92.4 92.1 91.5 93 93 93 93.6 93 91.2	93 93 91.8 91.5 91.2 93.3 94.2 91.2 91.2 92.4 91.8 91.5 92.7 92.4 93 92.4 92.1 91.5 93 93 93 93.6 93 91.2
CH B	"	116.4 116.4 114.6 113.7 115.5 116.4 117.3 113.1 113.7 115.2 114.6 114 116.1 116.1 115.2 115.2 114.9 114.6 116.1 115.8 115.8 117 115.8 113.3	116.4 116.4 114.6 113.7 115.5 116.4 117.3 113.1 113.7 115.2 114.6 114 116.1 116.1 115.2 115.2 114.9 114.6 116.1 115.8 115.8 117 115.8 113.3
CH C	"	118.5 118.5 117.6 116.4 117 119.1 120 115.8 116.4 117.3 116.7 116.1 117.9 117.6 117.6 116.7 117 116.4 117.9 117.9 118.2 118.8 118.2 115.5	118.5 118.5 117.6 116.4 117 119.1 120 115.8 116.4 117.3 116.7 116.1 117.9 117.6 117.6 116.7 117 116.4 117.9 117.9 118.2 118.8 118.2 115.5
CH D	"	100.8 100.2 99 99 99.3 100.8 101.7 98.7 98.7 99.9 98.7 98.4 99.6 99.6 99.3 99 98.7 98.7 99.9 100.2 100.5 101.1 100.5 113.7	100.8 100.2 99 99 99.3 100.8 101.7 98.7 98.7 99.9 98.7 98.4 99.6 99.6 99.3 99 98.7 98.7 99.9 100.2 100.5 101.1 100.5 113.7

DATE	TIME	7/8	7/9
ION CURRENTS - CH A	uA	91.2 91.2 91.2 91.8 91.8 93.3 93.6 92.7 93 92.7 92.4 93.6 92.4 92.4 92.1 91.8 92.1 92.7 91.5 92.4 92.6 93.6 92.4 91.8	91.2 91.2 91.2 91.8 91.8 93.3 93.6 92.7 93 92.7 92.4 93.6 92.4 92.4 92.1 91.8 92.1 92.7 91.5 92.4 92.6 93.6 92.4 91.8
CH B	"	111.0 113.4 113.4 114 114 116.4 116.7 116.1 116.1 116.4 116.1 117.6 115.8 115.5 115.5 114.3 114.9 115.5 113.4 115.2 116.1 115.8 115.2 114	111.0 113.4 113.4 114 114 116.4 116.7 116.1 116.1 116.4 116.1 117.6 115.8 115.5 115.5 114.3 114.9 115.5 113.4 115.2 116.1 115.8 115.2 114
CH C	"	114 115.8 116.4 117 117 119.1 119.1 118.5 118.5 118.2 118.2 118.5 117.3 117 117 115.8 116.1 116.4 115.2 117 118.5 118.8 117.5 117	114 115.8 116.4 117 117 119.1 119.1 118.5 118.5 118.2 118.2 118.5 117.3 117 117 115.8 116.1 116.4 115.2 117 118.5 118.8 117.5 117
CH D	"	101.4 99 99.3 99.3 99.3 100.8 101.4 100.2 100.2 99.9 99.4 100.2 99 99 98.4 97.2 98.4 98.7 98.8 98.6 100.3 101.7 100.5 99.6	101.4 99 99.3 99.3 99.3 100.8 101.4 100.2 100.2 99.9 99.4 100.2 99 99 98.4 97.2 98.4 98.7 98.8 98.6 100.3 101.7 100.5 99.6

DATE	TIME	7/9	7/10
ION CURRENTS - CH A	uA	88.5 90.15 90.06 90.18 90.18 90.18 90.15 90.9 91.5 91.3 91.4 93 92.4 92.4 92.4 93 93 93.3 93 93 93.6 92.4 91.2	88.5 90.15 90.06 90.18 90.18 90.18 90.15 90.9 91.5 91.3 91.4 93 92.4 92.4 92.4 93 93 93.3 93 93 93.6 92.4 91.2
CH B	"	111.6 112.8 112.2 114 114 116.4 115.5 114 113.4 114.3 114.9 115.2 116.4 115.5 115.2 115.5 100.5 115.8 115.8 115.2 115.2 115.5 115.8 114.3 112.3	111.6 112.8 112.2 114 114 116.4 115.5 114 113.4 114.3 114.9 115.2 116.4 115.5 115.2 115.5 100.5 115.8 115.8 115.2 115.2 115.5 115.8 114.3 112.3
CH C	"	114.6 116.1 115.8 117.6 117.6 117.6 117.6 115.5 115.8 116.4 116.4 117 116.4 116.4 116.1 101.7 117.3 117.6 118.2 118.2 113.5 118.8 117.9 117	114.6 116.1 115.8 117.6 117.6 117.6 117.6 115.5 115.8 116.4 116.4 117 116.4 116.4 116.1 101.7 117.3 117.6 118.2 118.2 113.5 118.8 117.9 117
CH D	"	97.8 98.7 98.4 99.9 99.9 100.2 99 97.5 97.8 97.8 98.4 98.7 97.8 98.4 98.1 98.4 99.6 100.2 101.1 100.5 101.1 102 100.8 99.5	97.8 98.7 98.4 99.9 99.9 100.2 99 97.5 97.8 97.8 98.4 98.7 97.8 98.4 98.1 98.4 99.6 100.2 101.1 100.5 101.1 102 100.8 99.5

DATE	TIME	7/10	7/11
ION CURRENTS - CH A	uA	91.2 95.7 91.8 93 93 92.4 91.8 - 93 93 93 93.3 93.3 93.9 94.5 93.6 93.9 93 93 92.4 92.4 90.9 91.5 91.5	91.2 95.7 91.8 93 93 92.4 91.8 - 93 93 93 93.3 93.3 93.9 94.5 93.6 93.9 93 93 92.4 92.4 90.9 91.5 91.5
CH B	"	112.5 115.2 114.9 115.8 115.8 115.8 115.8 - 116.7 116.4 116.7 117 117 117 117 116.4 115.8 114.9 114.6 113.7 112.8 111.6 112.2 112.2	112.5 115.2 114.9 115.8 115.8 115.8 115.8 - 116.7 116.4 116.7 117 117 117 117 116.4 115.8 114.9 114.6 113.7 112.8 111.6 112.2 112.2
CH C	"	115.8 117.2 118.5 118.5 118.5 118.2 117.9 - 117 116.7 116.4 117 117 117.9 118.5 118.5 118.5 117.9 117.6 117.6 117.0 115.5 116.7 117.0	115.8 117.2 118.5 118.5 118.5 118.2 117.9 - 117 116.7 116.4 117 117 117.9 118.5 118.5 118.5 117.9 117.6 117.6 117.0 115.5 116.7 117.0
CH D	"	99 100.5 100.5 100.5 100.2 99.6 101.7 - 98.4 97.8 97.8 98.4 98.7 97.3 99.9 100.5 100.8 100.8 100.5 100.8 101.1 99.6 100.2 100.5	99 100.5 100.5 100.5 100.2 99.6 101.7 - 98.4 97.8 97.8 98.4 98.7 97.3 99.9 100.5 100.8 100.8 100.5 100.8 101.1 99.6 100.2 100.5

2A

DL-5-225 3
 COMPANY Reactivity LifeTime
 PS
 Shipping Port

TABLE IA

DATE	TIME	7/11	7/12
ION CURRENTS	Ch A wa	91.8 93 92.4 92.7 93 92.7 91.8 91.8 91.8 92.4 93 93.3 93 92.7 92.1 91.2 90.3 91.2 90.9 90.9 91.8 91.5 92.4 91.8	113.7 116.1 115.5 117 117 117 117 116.4 117 117 118.2 117.3 116.7 115.5 114 111.9 110.7 110.4 109.5 110.1 111.3 111.3 112.8 113.1
	Ch B "	117.6 119.4 118.5 118.5 118.5 117.6 117 116.1 115.5 116.4 117 117 117 116.4 116.1 114.3 114 114.9 115.2 115.5 117.3 117 117.9 117.6	100.8 101.4 100.2 99.9 99.6 98.4 97.5 96.6 96.0 97.2 97.8 98.4 99 98.7 99 98.4 98.7 99.9 100.2 101.1 102 101.1 101.4 100.5
	Ch C "		
	Ch D "		

DATE	TIME	7/12	7/13
ION CURRENTS	Ch A wa	92.7 93 91.5 92.4 92.4 93.3 92.4 93.3 92.4 93 93 93.3 93 93 92.1 92.1 93 91.5 90.6 90.9 92.4 91.0 91.3	115.5 116.4 115.5 117.6 118.8 119.4 119.7 119.7 118.5 117.9 117 116.4 114.6 112.5 111.3 110.4 111 109.2 108.6 107.9 101.0 1.8 0.3
	Ch B "	118.5 118.5 116.4 117.3 117 117.3 117 117 115.8 116.4 116.4 117 116.4 116.1 116.4 116.1 117.9 117.0 115.5 116.1 118.5 1.8 0.3	100.8 99.9 97.5 97.2 96.3 96.6 96 96.3 95.7 96.6 97.8 99 99.9 100.8 101.4 102.6 104.4 103.5 102.3 102.3 102.3 1.8 0.3
	Ch C "		
	Ch D "		

DATE	TIME	7/13	7/14
ION CURRENTS	Ch A wa	12.6 58.5 62.4 67.7 83.4 88.5 86.4 90 90.4 90.3 88.8 88.8 87 - - 87.8 89.4 87 88.2 87.2 89.7 84.5 84.5	15.6 73.5 76.8 79.1 109.6 120 117.9 111 112.2 111 110.1 109.5 109.2 - - 109.1 108.7 111 112.8 111 111.9 117.9 117.9
	Ch B "	15.9 72.9 78 79.5 101.1 111.9 111.3 114 116.4 115.8 114.3 105.3 112.5 - - 115.5 114 114.3 112.2 115 112.5 119.4 118.8	13.5 62.1 62.1 67.2 85.5 88.2 87.9 94.2 97.5 98.4 98.1 98.7 97.5 - - 99 97.5 104.8 104.8 95.7 95.3 11.7 101.7
	Ch C "		
	Ch D "		

DATE	TIME	7/14	7/15
ION CURRENTS	Ch A wa	91.5 92.1 94.5 93.6 93.3 93.3 93 93.6 93.3 92.1 92.4 91.5 91.5 91.5 92.7 93 93.3 93.6 92.3 92.4 92.2 94.5 93.6 93.6	113.7 112.8 116.1 114.6 114.3 114.9 114.6 115.5 115.2 114.6 116.1 115.5 115.5 115.5 117.2 118.5 112.8 113.2 115.8 117.6 117 115.8 115.2
	Ch B "	115.2 115.5 118.5 117.6 117.6 117.9 118.5 118.5 118.5 117.6 118.5 117 117.9 117.6 119.1 119.7 120 119.6 119.1 117 119.1 118.5 117 117	98.7 99 102.3 101.7 102 101.7 102 101.4 101.4 99.9 102.5 99 99 93.4 99.9 102.2 100.2 100.2 100.2 99.3 103.8 101.7 103.8 100.8
	Ch C "		
	Ch D "		

DATE	TIME	7/15	7/16
ION CURRENTS	Ch A wa	93.9 93.3 93.6 93.6 93 94.2 93 92.4 92.4 93 91.8 91.8 90.6 90.9 93 93.3 93.3 92.4 92.1 92.1 93 93.9 93.6 93	114.3 114 114 114 113.7 115.5 115.2 115.2 115.2 117.6 116.4 116.7 115.5 115.8 118.2 118.8 118.2 116.4 115.2 114 114.6 114.6 113.7 112.2
	Ch B "	116.7 117 116.7 117 117 118.2 117.6 117.6 117.9 119.7 118.5 118.2 117.3 117 119.1 119.4 119.1 117 115.8 115.5 116.1 116.4 115.5 114.3	101.1 101.7 101.7 101.4 101.4 101.7 100.8 100.2 100.2 100.5 99.0 98.7 97.5 97.2 99 99.6 99.6 99 98.4 98.7 100.2 100.8 100.8 100.5
	Ch C "		
	Ch D "		

SUBJECT DL-S-225 SHEET NO. 4
 COMPANY Reactivity Life Time
 DEPARTMENT PS
 DIVISION Shipping port COMPILED ON _____ CHECKED BY _____ DATE _____

TABLE IA

DATE	TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	
ION CURRENTS	Ch A	wa	92.4	94.5	93	92.7	93	93.3	91.8	91.2	91.5	91.5	91.2	91.8	91.2	92.1	90.9	90.9	-	-	-	-	94.5	94.5	93.6	94.8
	Ch B	"	111	114.3	112.2	113.1	114	115.5	114.9	114.9	116.4	117	117	118.2	118.2	118.2	115.8	114.3	-	-	-	-	113.1	112.5	111.6	112.5
	Ch C	"	114	117.3	115.5	116.1	117.3	118.2	117.3	117.9	118.5	118.5	119.1	118.5	119.1	117.0	116.1	-	-	-	-	115.5	114	114	115.5	
	Ch D	"	100.2	102.6	100.5	101.1	101.1	101.4	99.3	99	98.4	98.4	97.8	98.4	97.5	98.1	96.9	96.3	-	-	-	-	101.7	101.1	101.1	103.2

DATE	TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600
ION CURRENTS	Ch A	wa	94.2	94.2	92.7	92.7	94.8	91.8	91.2	91.2	90.3	90	90	90.4	91.5	92.1	92.9	94.5	95.4	94.8	94.8	93.9	94.5	93.9	94.2
	Ch B	"	112.5	112.5	114	113.7	114.3	115.8	115.8	118.2	117.6	117.6	117.6	118.2	117.9	117.6	117.6	117	115.5	113.4	112.2	110.1	110.1	109.5	111
	Ch C	"	115.5	115.8	117	116.7	118.2	118.5	117.9	118.3	119.4	119.1	118.5	118.5	118.2	118.8	118.5	117.9	117.6	115.2	114	113.8	113.1	112.8	114
	Ch D	"	102.3	102	102	100.8	100.5	99.6	98.4	98.4	96.9	96.6	96	96.3	96.4	96.9	99	100.2	116.4	102.3	102	102	102	102.3	102.6

DATE	TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	
ION CURRENTS	Ch A	wa	94.5	93.9	93.3	92.7	90.3	90	-	87	87	88	88	84.5	91	93.5	96	97.4	94.8	96.8	97.3	92	94.5	94.4	96.5	96.5
	Ch B	"	113.5	113.7	114.2	115.5	115.2	115.5	-	120	119	119	119	119	117.5	120	120	119	113.4	113.4	112	107.2	107.2	107.2	110	112.0
	Ch C	"	115.5	117	117	118.2	117.6	117.6	-	120	119	119	118	120	119	121.5	123	120	114.6	116	116	111.5	111	112	114	115.5
	Ch D	"	103.5	102.3	101.1	100.5	97.8	-	-	96	94	96	95	96	96	101.3	103	104	105.4	105.4	106.8	103	103.5	104.5	104.8	104.8

DATE	TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600		
ION CURRENTS	Ch A	wa	95.4	94.8	92	91	91	91	94.8	96.4	96.4	93.5	94.8	94.8	96.4	96.4	92	92	92	92	89.5	89.5	89.5	90.7	90.7	90.7	
	Ch B	"	113	115.7	116	119	121.6	123	120	113.5	113.5	115	117.5	117.5	120	123	117.5	117.5	117.5	119	116.2	114.8	117.5	116.2	117.5	114.7	
	Ch C	"	117	120	119	121.6	123	124.3	121.6	115	113.5	116.2	117.5	117.5	120	123	119	120	119	124.2	119	117.5	120	119	123	119	
	Ch D	"	102.8	103	100.5	100	97.6	97.6	101.5	101.5	101.5	101.5	101.5	101.5	101.5	101.5	105	100	100	101.5	97.5	97.5	96.5	97.8	97.8	101.5	100

DATE	TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	
ION CURRENTS	Ch A	wa	92	93.3	93.3	92	93.3	96.0	96	96	96	95	95	95	95	92	91	91	90.5	90.5	91	90.5	89.5	90.7	90.7	91.18
	Ch B	"	116	116	113.3	112	112.5	113.3	113.3	114.7	114.7	114.7	117.5	119	117.5	117.5	117.5	117.5	117.5	117.5	117.5	116.3	114.5	114.5	113.5	114.1
	Ch C	"	119	119	116	114.1	114.1	114.7	113.3	114.7	114.7	116.5	117.5	118	119	119	120	120	121.4	121	121.4	120	118.5	119	117.5	117.3
	Ch D	"	101.5	102.7	101.5	100	100.8	101.5	100	101.3	101.5	102.5	101.5	101.5	100	100	98.7	97.5	97.9	97.5	97.9	97.9	98.5	100	100	101.3

2C

SUBJECT DL-S-225 SHEET NO. 5
 COMPANY DL
 DEPARTMENT PS
 DIVISION Shippingport COMPLETED BY _____ CHECKED BY _____ DATE _____

FORM G22-7112

Table IA

Date	Time	7/21	7/22	7/23	7/24	7/25	7/26
Ion CURRENTS	Ch A	93.87 93.33 95.99 101.33 93.87 92.79 90.77 96	95 93.5 93.5 93.5 93.5 93.5 92 91.7 92 91.5 91 91 91 91 90.4 92.8	92.3 92.3 92.3 92.3 93.3 93.3 90.9 90.9 92 92 93.3 93.3 92 92 92 91.5 91.3 92 91 91.5 92 92 93.5	83.0 84 82.4 83.2 82.7 83.6 82.3 83 83 82 82 81.5 82 82 82 83 83.2	94.67 93.3 92.0 90.6 90.6 90.6 90.6 92 91.7 93.5 90.6 93.5 90.11 93.5 93.5 93.5 95 95 95 95 96.5 95 95 106.5	93.6 95.2 95.2 92 93.9 92.8 92.8 92.8 92 92 105 93.5 95 93.5 95 95.5 94 93.5 93.5 94 94 96.5 96.5 93.3
	Ch B	114.1 114.1 114.1 114.7 117.3 115.2 114.13 121.5	120 120 118 118 118 118 117.2 117 117 115 113.5 113.5 112 113.5 113.5 115.5	116 116 116.8 116 116 115.7 114.6 117.5 117.5 117.5 117.5 117.5 117.5 117.5 116.2 115 115 112 112 112.5 113.5 114.8	102.5 104 102.3 103.8 83.5 104.5 104 105 103 103 103 112.5 103 103 102 102	117.33 117.3 114.6 116 116 116 114.6 117.3 117.3 119 114.6 117.3 111.97 116.5 115 115 116.5 115 115 115 117.5 117.5 117.5 106.2	117.6 119.2 118.7 117.3 118.7 118.7 117.3 117.3 117.3 117 117.3 115 116 115 116 116 115 113.5 115 117 117 118.6 118.6 114.4
	Ch C	102.8 102.5 102.3 114.6 117.3 114.6 114.6 123	120 120 118 118 120 121.5 119 118.5 118.5 120 115 114.5 117.5 117.5 117.5 117.1	117 117.8 116.8 115.7 116 115.2 114.4 117.5 117.5 117.5 119 119 120 120 121.5 121.5 119 119 117 117.5 116 117.5 118	103 104.3 102 103.4 103 103.6 103.9 105.5 104.5 104.5 105.5 105.5 106.5 106.5 105 106 106	116.8 117.3 114.6 114.6 114.6 114.6 114.6 — 119.4 123 119.4 120 117.3 121.5 120 119 119 117.3 119 117.5 119 117.5 117.5 106.2	116.8 118.7 117.6 117.3 118.1 118.7 118.1 120 120 120 123 121.5 121.5 119 120 120 115 117 117 117 117.5 117.5 117.4 117.3
	Ch D	101.5 101.3 101.87 101.33 101.77 97.06 95.98 101.5	101.5 101.5 99 99 101.5 101.5 101 101.5 101.5 101.5 101 100 100 101.5 101.5 100.8	100.8 100.8 98.7 98.7 98.1 97.9 96.8 99 100 100 100 101.5 101.5 101.5 101.5 101.5 101.5 100 101.5 101.5 101.5 101.5	88.6 89.1 87.1 87.8 87.8 87.9 87.8 89 89 88 89 89 90.5 91 90 91 91	100.53 99.97 96.5 96 97.3 96 96 96 98.6 98.6 101.5 101.5 101.5 98.6 103 104.3 103 103 103 103 103 102 101.5 101.5 102.5 106.2	96.9 100 100 98.6 99.2 99.2 99.2 101.5 101.5 101.5 103 103 104 102 104 102.5 102.5 101.5 101.5 100 99 101.5 100 100

DL-5-225
 Reactivity Lifetime
 COMPANY
 DEPARTMENT
 Shipping post

TABLE IA

DATE	TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600
7/26	ION CURRENT Ch A	93.3	90.6	92.8	92.8	92.2	91.73	91.20	92	90.6	91.0	92.0	91.8	92	93.5	95	92	96	97.3	96.5	96	96	93.3	93.3	93.5
	Ch B	117.9	117.4	117.9	117.4	117.3	116	114.6	115	113.5	115	116	112.1	112.1	112.1	115	112.8	116	116.3	117.5	118.6	113.6	118.7	117.8	119.6
	Ch C	117.4	117.4	117.4	117.3	117.3	117.87	117.3	118	118	120	123	112.2	117.5	117.5	117.5	114.7	117.5	116.3	117.5	117.9	117.9	117.3	117.3	117.5
	Ch D	98.6	97.3	97.0	97	98.4	98.13	98.6	100	100	103	105	102.5	101.5	103	103	100	103	99.5	101.5	100.7	100.3	98.7	97.3	97.2
7/27	ION CURRENT Ch A	91.8	93.5	92.4	92.2	92.2	92.2	90.5	91	91.3	93.5	93.5	93.45	92.12	93.5	96.1	93.5	93.5	-	94	95	94	94	94	116.0
	Ch B	119.1	118	117.7	117.5	117.5	116.2	114.8	114	112.7	113.48	113.48	113.48	112.14	113.5	114.8	114.8	116	-	116	117.5	117.5	119	120	117.5
	Ch C	118.5	118.5	118.5	118.5	120.8	120	119.5	117.8	117.7	120.15	117.48	117.48	114.81	117.5	117.5	114.8	114.8	-	115	115	116	117.5	117.5	117.5
	Ch D	97.7	97.2	99.3	100	100	101.8	101.8	101.8	102.8	102.8	109.13	100.13	101.46	102.8	102.8	101.46	100.1	-	97	97	97	97	97	97
7/28	ION CURRENT Ch A	92.0	91.5	93.5	94.8	93.1	93.5	92.1	92.1	91.3	94.8	94.8	93.5	93.2	96.1	96.1	93.5	92.6	93.3	93.3	91.44	92.6	92.7	92.7	93.3
	Ch B	120.0	117.5	117.5	117.5	116.9	117.5	114.8	112.1	110.8	112.1	117.5	114.5	117.7	118.3	118.8	113.3	117.3	117.3	116.0	117.3	114.3	114.3	113.7	116.2
	Ch C	120.0	119.0	114.5	121.5	121.5	121.5	119.6	118.5	116.1	118.8	118.3	116.9	117.5	117.5	117.5	114.8	117.6	117.3	116.0	117.3	117.3	117.3	117.3	119.0
	Ch D	100.0	99.0	100.0	101.5	101.5	104.2	102.0	101.7	100.4	102.8	101.5	96.9	101.5	98.8	98.8	96.7	98.6	100.0	100.0	98.6	100.0	101.3	101.3	103.0
7/29	ION CURRENT Ch A	94.8	92.0	92.0	93.5	93.5	93.5	95.5	93.5	94.8	92.45	96.1	94.0	94.8	96.1	96.1	96.1	96.1	97.5	95.0	93.5	95.5	94.0	94.0	94.5
	Ch B	116.2	114.8	114.8	-	114.8	115.5	117.5	117.5	117.5	117.5	118.3	117.7	118.3	117.6	120.1	120.1	120.1	118.3	117.5	114.8	114.8	118.0	118.0	116.5
	Ch C	121.5	121.5	120.15	121.5	121.5	119.0	121.5	118.3	120.2	117.5	117.5	117.5	117.5	118.5	117.5	118.8	120.1	120.1	120.1	117.5	118.8	119.0	120.0	123.0
	Ch D	105.9	103.0	103.0	104.0	103.0	101.5	103.0	100.9	101.7	101.5	100.1	98.9	98.3	100.1	101.2	100.0	101.5	105.5	105.5	100.1	105.5	102.8	102.8	105.0
7/30	ION CURRENT Ch A	92.0	91.3	91.3	94.8	92.5	94.8	96.5	94.3	95.5	96.1	-	-	-	-	10.7	-	64.0	64.6	69.4	85.9	80.1	86.7	84.1	85.5
	Ch B	113.0	112.8	113.5	116.1	114.0	117.5	120.0	117.7	118.3	120.2	-	-	-	-	13.4	-	74.7	78.7	82.7	106.8	106.8	112.1	112.9	112.0
	Ch C	119.0	118.6	118.0	121.5	119.0	122.5	123.0	119.3	119.6	120.2	-	-	-	-	10.9	-	69.9	73.4	78.7	93.4	101.4	109.4	112.1	116.3
	Ch D	105.0	102.5	102.3	102.8	101.0	103.0	103.0	101.2	99.6	101.5	-	-	-	-	10.7	-	61.4	66.7	66.7	84.1	85.4	92.1	89.4	96.5
7/31	ION CURRENT Ch A	92.0	91.3	91.3	94.8	92.5	94.8	96.5	94.3	95.5	96.1	-	-	-	-	10.7	-	64.0	64.6	69.4	85.9	80.1	86.7	84.1	85.5
	Ch B	113.0	112.8	113.5	116.1	114.0	117.5	120.0	117.7	118.3	120.2	-	-	-	-	13.4	-	74.7	78.7	82.7	106.8	106.8	112.1	112.9	112.0
	Ch C	119.0	118.6	118.0	121.5	119.0	122.5	123.0	119.3	119.6	120.2	-	-	-	-	10.9	-	69.9	73.4	78.7	93.4	101.4	109.4	112.1	116.3
	Ch D	105.0	102.5	102.3	102.8	101.0	103.0	103.0	101.2	99.6	101.5	-	-	-	-	10.7	-	61.4	66.7	66.7	84.1	85.4	92.1	89.4	96.5

2E

CURSOR DL-5-225 7
DL COMPANY REACTIVITY LifeTime
PS DEPARTURE

Shippingport DATE 7/31/58 to 8/5/58

TABLE I A

DATE	TIME	7/31	8/1	8/2	8/3	8/4	8/5
TEMP.		1700 1800 1900 2000 2100 2200 2300 2400 0100 0200 0300 0400 0500 0600 0700 0800 0900 1000 1100 1200 1300 1400 1500 1600					
ION CURRENT	Ch A	ua 85.5 85.4 85.4 86.5 87.0 95.6 93.4 95.0 95.0 93.5 96.5 94.8 96.5 95.0 93.45 92.2 96.5 93.5 73.5 73.5 93.5 93.5 95.0 90.78					
	Ch B	" 112.0 102.1 106.8 106.9 107.0 114.8 113.5 113.5 113.5 113.5 115.0 114.8 117.5 117.5 117.5 115.0 121.5 117.5 119.0 119.0 117.5 117.5 119.0 117.2					
	Ch C	" 116.5 113.5 112.14 112.14 117.0 121.5 117.5 116.25 116.25 119.0 116.25 114.8 116.25 116.25 116.25 113.5 119.0 117.5 120.0 120.0 120.0 119.0 120.0 117.2					
	Ch D	" 96.5 95.6 94.79 95.8 96.25 104.1 101.5 101.5 101.5 103.5 101.5 98.79 100.0 100.0 98.79 97.5 101.5 98.9 98.9 101.5 121.5 121.5 101.5 101.5					

DATE	TIME	8/1	8/2	8/3	8/4	8/5
TEMP.		1700 1800 1900 2000 2100 2200 2300 2400 0100 0200 0300 0400 0500 0600 0700 0800 0900 1000 1100 1200 1300 1400 1500 1600				
ION CURRENT	Ch A	ua 93.45 93.45 95.0 95.0 94.79 94.79 96.1 96.1 96.1 94.8 94.8 100.1 100.1 72.1 93.5 90.6 93.3 96.5 92.8				
	Ch B	" 114.8 115.3 115.0 114.8 114.8 114.8 116.2 117.4 116.2 117.5 116.4 117.5 117.5 115.6 117.5 114.1 118.4 119 116.3				
	Ch C	" 117.48 118.5 118.6 118.6 118.8 117.5 117.5 117.5 117.5 117.5 116.1 117.5 116.9 113.5 116.1 112 118.1 121.0 117.1				
	Ch D	" 100.12 101.7 101.7 103.5 104.1 102.8 101.5 101.5 100.1 101.2 99.9 101.2 100.1 96.1 98.8 96.5 100.8 101.0 98.7				

DATE	TIME	8/2	8/3	8/4	8/5
TEMP.		1700 1800 1900 2000 2100 2200 2300 2400 0100 0200 0300 0400 0500 0600 0700 0800 0900 1000 1100 1200 1300 1400 1500 1600			
ION CURRENT	Ch A	ua 41.38 58.74 64.08 65.42 65.42 65.42 66.75 70.00 84.37 96.5 94.0 95.0 95.0 96.5 93.4 96.1 96.1 96.7 93.45 96.1 94.79 94.79 94.79 94.79			
	Ch B	" 51.26 74.76 77.43 81.44 78.77 82.27 81.44 85.5 104.13 117.0 117.5 119.0 117.5 120.0 118.2 121.5 121.5 120.2 118.8 120.2 117.48 114.8 117.48 117.48			
	Ch C	" 53.4 81.43 84.11 88.11 90.78 93.45 92.11 92.11 109.45 121.5 117.5 117.5 115.3 117.5 116.9 117.5 117.5 118.3 117.48 118.8 113.5 117.48 121.49 121.49			
	Ch D	" 46.72 65.41 73.43 74.76 77.43 78.77 80.10 80.10 95.58 103.5 101.2 99.0 97.7 99.0 96.4 98.8 100.9 101.2 101.46 101.5 101.46 101.46 102.8 102.8			

DATE	TIME	8/3	8/4	8/5
TEMP.		1700 1800 1900 2000 2100 2200 2300 2400 0100 0200 0300 0400 0500 0600 0700 0800 0900 1000 1100 1200 1300 1400 1500 1600		
ION CURRENT	Ch A	ua 92.12 92.12 92.12 91.31 92.12 90.78 90.78 93.8 93.8 92.9 94.0 94.0 93.4 93.4 93.4 96.1 96.1 96.1 96.1 93.4 96.1 95.9 94.8 92.0		
	Ch B	" 114.81 114.81 113.48 113.48 114.81 114.81 116.4 116.4 116.4 117.5 117.5 117.2 117.5 116.1 120.2 121.5 121.5 118.8 117.5 118.8 117.5 116.9 115.2		
	Ch C	" 120.15 118.12 118.12 118.12 118.12 117.48 117.48 117.5 117.5 116.2 117.5 117.5 116.1 116.1 114.8 119.6 118.8 118.8 120.2 118.8 121.5 120.2 120.2 117.6		
	Ch D	" 101.46 102.8 102.26 101.73 101.73 100.13 100.46 101.5 101.5 100.1 101.5 100.1 96.9 100.1 97.5 101.5 101.5 101.5 101.5 101.5 101.5 102.8 102.8 102.8 100.8		

DATE	TIME	8/4	8/5
TEMP.		1700 1800 1900 2000 2100 2200 2300 2400 0100 0200 0300 0400 0500 0600 0700 0800 0900 1000 1100 1200 1300 1400 1500 1600	
ION CURRENT	Ch A	ua 92.5 91.2 90.9 91.2 92.5 92.5 92.8 95.0 95.0 95.0 96.5 192.0 96.5 93.5 96.1 95.6 95.6 93.5 93.5 92.1 96.4 95.1 92.9 90.8	
	Ch B	" 114.9 112.8 112.3 112.8 114.9 113.9 116.8 117.5 117.2 119.0 119.0 117.8 117.4 117.5 120.2 118.0 117.5 114.8 117.5 113.4 116.1 116.9 114.8 113.4	
	Ch C	" 117.6 117.1 116.8 117.1 118.4 117.3 117.9 119.0 118.0 117.5 119.0 117.34 117.3 116.25 117.5 119.1 117.5 117.5 118.0 114.8 119.6 118.0 117.5 116.4	
	Ch D	" 101.6 100.8 101.3 101.1 101.6 101.1 100.7 101.5 100.9 101.5 101.5 98.7 98.7 98.7 101.2 98.8 101.5 98.8 102.0 100.1 102.0 101.7 101.5 100.1	

25

COMPANY

DEPARTMENT

DIVISION

SHEET NO. 9

SHEET NO. 9

TABLE I A

DATE 8/10/58 To 8/14/58

FORM C-33-7112

Date										
Time										
Ion Current	Ch A	na								
	Ch B	na								
	Ch C	na								
	Ch D	na								

24

DATE _____

FORM GSA-7112

[illegible]

21

SUBJECT: DL-S-225

COMPANY: Reactivity Life Time

DEPARTMENT:

DATE:

DATE:

DATE:

DATE:

TABLE IB MISCELLANEOUS DATA

DATE	7/5	7/6																														
TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600								
MAIN GEN OUT INTEG MWHR	65.3	64.9	65.4	65.4	65.7	65.9	65.8	65.4	64.9	63.4	65.6	62.7	64.4	65.1	65.3	64.9	64.9	-	66.8	63.3	65.2	67.0	61.9	66.0								
NO. 1 STATION TFRM INTEG "	2.7	2.4	2.9	2.3	2.3	2.6	2.8	2.4	2.5	2.5	2.6	2.5	2.6	2.5	2.7	2.4	2.7	2.3	2.8	2.3	2.7	2.4	2.6	2.8								
138 KV TFRM INTEG "	4.6	4.7	4.6	4.8	4.9	4.6	4.7	5.0	5.0	4.8	4.8	4.8	4.7	4.7	4.7	4.8	4.6	4.8	4.8	4.7	4.7	4.9	4.8	5.1								
NET STATION OUTPUT "	58.0	57.8	57.9	58.3	58.5	58.7	58.3	58.0	57.4	56.1	58.2	55.4	57.1	57.9	57.9	57.7	57.4		59.2	56.2	57.8	60.7	54.5	57.1								
MAIN GEN INDIC "	66	66	67	→ 66										66	65.5	65	65	65.8	66	→ 66.5										66.5	66	→
NET ST ₂ OUTPUT IND "	60	→ 60.3			60.5	60.5	60.5	61	60.3	60											→ 60.2											

DATE	7/6	7/7																							
TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	
MAIN GEN OUT INTEG MWHR	64.1	70.5	59.7	64.5	64.2	64.6	64.8	64.5	65.2	64.9	64.8	64.7	64.7	64.6	64.7	65.0	65.1	65.3	64.5	64.5	64.3	64.7	64.1	66.4	
NO. 1 STATION TFRM INTEG "	2.9	2.3	2.5	2.4	2.5	2.2	2.3	2.4	2.4	2.4	2.7	3.1	2.5	2.4	2.3	2.6	2.3	2.3	2.6	2.4	2.4	2.2	2.5	2.6	
138 KV TFRM INTEG "	3.8	5.0	4.7	5.2	5.1	4.8	3.1	6.6	4.9	5.0	4.9	5.0	4.9	5.0	4.8	5.1	5.0	5.1	5.0	4.9	5.1	5.0	5.0	5.0	
NET STATION OUTPUT "	57.4	63.2	52.5	56.9	56.6	57.6	59.4	55.5	57.9	57.5	57.2	56.6	57.3	57.2	57.6	57.3	57.8	57.9	56.9	57.2	56.8	57.5	56.6	58.8	
MAIN GEN INDIC "	66	66	66	65.5	66	66	66.2	66	67	66									65.8	66	66	66.5			
NET STATION OUTPUT IND "	60.2	60				59.9	60				59.9								60.1	60	60	59.9	59.9	60	60.1

DATE	7/7	7/8																							
TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	
MAIN GEN OUT INTEG MWHR	65.4	65.3	64.9	64.4	64.3	64.6	65.3	64.4	63.8	64.5	64.2	64.0	65.7	63.3	64.8	64.6	64.5	64.3	64.4	64.5	64.8	64.9	64.7	63.2	
NO. 1 STATION TFRM INTEG "	2.2	2.4	2.4	2.7	2.2	2.2	2.7	2.6	2.3	2.1	2.3	2.6	2.4	2.5	2.2	2.5	2.6	2.2	2.5	2.2	2.6	2.5	2.3	2.5	
138 KV TFRM INTEG "	4.9	5.0	4.9	4.6	4.9	5.1	4.9	5.1	4.8	4.9	5.0	4.9	5.0	4.9	4.7	5.3	5.0	4.9	5.0	5.0	4.9	4.3	5.1	5.0	
NET STATION OUTPUT "	58.3	57.9	57.6	57.1	57.2	57.3	57.7	56.7	56.7	57.5	56.9	56.5	58.3	55.9	57.9	56.8	56.9	57.2	56.9	57.3	57.3	57.6	57.3	56.4	
MAIN GEN INDIC "	66.5	66.5	66	65.5	65	66.5	66.5	66	65.8	66	65	65	66	66	66	65.5	65.5	65.5	66					64.5	
NET STATION OUTPUT IND "	60.9	60.9	60.1	59.9	59.9	60.2	60.2	59.9	59.9	59.9									59.9					59.9	

DATE	7/8	7/9																							
TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	
MAIN GEN OUT INTEG MWHR	63.8	63.6	64.0	67.8	60.2	64.7	64.4	64.1	64.9	66.3	64.3	64.4	64.5	64.5	64.0	63.8	64.4	63.0	64.3	64.3	64.9	64.9	64.7		
NO. 1 STATION TFRM INTEG "	2.4	2.3	2.4	2.3	2.7	2.2	2.2	2.5	2.5	2.4	2.3	2.4	2.4	2.5	2.3	2.5	2.5	2.4	2.9	1.7	2.6	2.4	2.7	2.4	
138 KV TFRM INTEG "	5.0	4.8	4.9	4.9	5.0	4.9	5.0	4.9	5.0	4.9	4.7	5.0	4.8	4.8	4.8	4.2	6.2	4.9	4.1	3.7	4.7	5.2	4.8	5.3	
NET STATION OUTPUT "	56.4	56.5	56.7	60.6	52.5	57.6	57.1	56.7	57.4	57.0	57.3	57.0	57.3	57.2	56.9	57.1	55.7	55.7	57.3	57.6	57.0	57.3	57.4	57.0	
MAIN GEN INDIC "	65	65	64.5	65	65.5	66	66	66	66	66	65.5	66	66	66	65	64.5	65	65	64.5	65	65.5	66	65.5	64	
NET STATION OUTPUT IND "	59.5	59	59	59.3	59.4	59.7	59.8	59.9									59	59.3	59.3	59	59.3	59.5	59.9	59.9	59

SUBJECT OL-5-225 SHEET NO 3
 COMPANY Reactivity Lifetime
 DIVISION _____
 CONFIRMED BY _____ DATE _____

TABLE IB

MISCELLANEOUS DATA

DATE	7/9	7/10																														
TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600								
MAIN GEN. OUT INTEG. MWHR	62.9	63.5	63.2	63.8	64.0	64.4	64.3	63.4	63.4	63.4	63.4	63.7	63.2	63.8	64.2	64.2	64.1	64.6	64.5	64.7	64.8	64.8	64.8	63.8								
No 1 STATION TFM INTEG. "	2.4	2.4	2.3	2.5	2.2	2.8	2.2	2.3	2.4	2.4	2.4	2.1	2.4	2.4	2.7	2.2	2.3	2.4	2.6	2.3	2.5	2.4	2.6	2.3								
138 KV TFM INTEG. "	4.7	4.9	4.9	5.0	4.8	4.7	5.0	4.8	5.1	4.8	5.0	4.7	5.0	5.0	4.8	4.7	5.2	4.9	5.1	4.9	5.0	4.9	5.1	4.8								
Net STATION OUTPUT	55.8	56.2	56.0	56.3	57.0	56.9	57.1	56.3	55.9	56.0	56.0	56.9	55.8	56.4	56.7	57.3	56.6	57.3	56.8	57.5	57.3	57.5	57.1	56.7								
MAIN GEN INDIC. "	64	65	→ 65										→ 64.5										64.5	65	65	65.5	65.5	66	66	66	66	65
Net ST ₂ OUTPUT IND. "	58	59	59	59.5	59.5	59.5	59.5	59	→ 59.9										59.0	59.9	→ 59											

DATE	7/10										7/11																								
TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600											
MAIN GEN OUT INTEG MWHR	63.6	64.2	64.7	64.4	65.1	64.3	64.5	64.5	64.1	64.5	64.6	64.4	64.1	64.8	64.9	64.6	65.2	64.4	64.5	64.4	64.4	64.3	64.1	63.8											
NO.1 STATION TFM INTEG "	2.4	2.4	2.5	2.2	2.4	2.5	2.5	2.1	2.4	2.4	2.9	2.1	2.3	2.4	2.4	2.5	2.3	2.5	2.5	2.2	2.9	2.1	2.5	2.3											
138 KV TFM INTEG "	5.0	4.7	4.9	4.9	4.9	4.9	5.3	4.4	4.9	4.9	5.1	5.0	5.0	4.8	4.9	4.8	4.8	5.2	5.0	5.0	6.0	4.2	4.9	5.2											
NET STATION OUTPUT "	56.2	57.1	57.3	57.3	57.8	57.9	57.7	57.8	56.8	57.2	56.6	57.3	56.8	57.6	57.6	57.3	58.1	56.7	57.0	57.2	55.5	58.0	56.7	56.3											
MAIN GEN INDIC "	65	66											66	66	66	66	65.9	65.9	66	66	66	66				65	65	65							
NET STA OUTPUT IND. "	59	59	60											59.9	59.9	59.9											60	60	60				59	59	59.3

DATE	7/11										7/12																	
TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600				
MAIN GEN. OUT INTEG. MWHR	63.8	64.5	64.8	64.7	64.9	64.6	64.4	64.0	64.2	64.2	63.9	64.2	64.3	64.2	64.0	63.9	63.3	62.9	63.2	63.1	63.5	64.0	64.1	64.4				
NO. 1 STATION TFM R INTEG "	2.4	2.5	2.2	2.6	2.3	2.3	2.6	2.4	2.2	2.2	2.5	2.8	2.1	2.5	2.4	2.4	2.7	2.2	2.3	2.3	2.4	2.7	2.0	2.4				
138 KV TFM R INTEG "	5.0	4.9	5.0	4.8	5.0	4.8	4.9	5.1	4.8	5.0	4.9	5.0	5.0	4.9	5.0	5.0	5.0	4.9	4.7	4.8	5.0	4.8	4.9	5.0				
NET STATION OUTLET "	56.4	57.1	57.6	57.3	57.6	57.5	56.9	56.5	57.2	57.0	56.5	56.4	57.2	56.8	56.6	56.5	55.6	55.8	56.2	56.0	56.1	56.5	57.2	57.0				
MAIN GEN. INDIC. "	65.5	66	→ 65										65	65	66	66	65	65	65	64.5	64	64	64	64.2	65	65	65.5	65.5
NET STA. OUTPUT IND. "	59.4	59.9	→ 60										60	60	59.9	60	60	60	59.9	59	58.8	58.8	57.6	57.2	59.2	59.3	59.8	

DATE	7/12												7/13												
TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	
MAIN GEN. OUT INTEG	MWHR	64.4	64.6	64.5	63.7	64.2	64.9	64.1	64.3	64.3	63.9	64.2	64.3	64.1	64.3	64.1	63.9	64.4	64.3	63.6	63.5	64.4	47.2	0.1	0
NO. 1 STATION TFMR INTEG	"	2.7	2.3	2.3	2.4	2.6	2.2	2.5	2.4	2.5	2.1	2.6	2.3	2.7	2.2	2.3	2.4	2.5	2.5	2.3	2.4	2.5	2.0	0	0
138 KV TFMR INTEG	"	4.9	5.0	4.9	4.7	5.0	4.8	4.8	5.0	4.9	5.0	4.8	4.8	4.9	4.9	4.9	5.0	4.7	4.9	5.0	4.7	5.0	5.0	6.4	6.3
NET STATION OUTLET	"	56.8	57.3	57.3	56.6	56.6	57.9	56.8	56.9	56.9	56.8	56.8	57.2	56.5	57.2	56.9	56.5	57.2	56.9	56.3	56.4	56.9	40.0	-	-
MAIN GEN. INDIC.	"	66	65.8	65	65.8	65.5	66	65.9	65.9	65.9	65.5						56	65	65	65	65	65	0	0	0
NET STA. OUTPUT IND.	"	59.9									59.8							59.9					0	0	0

2K

4

Reactivity - Life time

PS. DEPT

1

SHIPPING PORTS

MISCELLANEOUS DATA

DATE	7/13										7/14													
TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600
MAIN GEN. OUT INTEG. MWHR	0	0	18.8	47.3	46.7	47.1	60.3	61.7	61.2	61.4	62.1	62.2	62.0	61.4	61.1	61.6	61.6	62.0	62.0	62.1	61.1	62.1	64.1	64.3
No.1 STATION TFMR INTEG "	0	0	0	2.9	3.9	2.9	2.1	3.0	3.1	2.9	2.8	2.9	3.0	3.1	2.9	2.8	2.1	2.8	3.1	3.1	2.8	3.0	3.0	2.8
138 KV TFMR INTEG. "	6.1	6.5	4.3	4.2	4.4	4.1	4.2	4.5	4.2	4.2	4.4	4.3	4.2	4.3	4.5	4.1	4.2	4.4	4.4	4.4	4.5	4.1	4.3	4.6
Net STATION Output "	0	0	14.5	40.2	39.4	41.1	54.0	54.2	53.9	54.3	54.9	55.0	54.8	54.0	53.7	54.7	55.2	54.8	54.5	54.6	53.8	55.0	56.8	56.9
MAIN GEN INDIC. "	0	0	48	47	48	62	62	62.5	62.5	63	63.5	63.5	63	62.5	62.5	63	63	63.5	63.5	63	62.5	63	66	66
Net STATION Output IND. "	0	0	41	41.8	41.8	57	56	56.5	56.5	57	57.5	57.5	57.5	57.0	56.6	57.0	57.0	57.5	57.5	57	57	57	60	57.9

DATE	7/14										7/15															
TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600		
MAIN GEN. OUT INTEG	MWHR	64.3	63.2	63.8	64.9	64.5	64.8	64.8	64.8	64.4	64.9	64.1	64.0	63.5	63.8	63.7	64.8	64.9	64.7	64.8	64.5	64.4	64.8	64.8	64.3	
No.1 STATION TMR INTEG	"	3.2	3.0	3.0	3.0	3.3	2.8	3.0	3.2	3.5	3.2	3.3	2.7	3.0	2.9	3.1	2.9	2.9	3.1	2.9	3.1	2.9	2.9	3.0	2.9	
138 KV TMR INTEG.	"	4.1	4.2	4.3	4.5	4.0	4.2	4.3	3.4	4.0	4.6	4.1	4.2	4.2	4.5	4.4	4.2	4.7	4.2	4.2	4.6	4.3	4.2	4.6	4.1	
NET STATION OUTPUT	"	57.0	56.0	56.5	57.4	57.2	57.8	57.5	58.2	56.9	57.1	56.7	57.1	56.3	56.4	56.2	57.7	57.3	57.4	57.7	56.7	57.2	57.7	57.2	57.3	
MAIN GEN. INDIC	"	64	64	67	66	66	66							65	65	65	66	65.5	66	66	66	65.5	65.8	66	65.8	65.8
NET STATION OUTPUT IND.	"	59.2	59.0	60.9	60.1	59.9	59.9	60							59	60							60	59.9		

DATE	7/15										7/16																		
TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600					
MAIN GEN Out INTEG. MN/Hr	64.4	64.6	64.7	64.8	64.6	64.8	64.8	64.3	64.0	64.4	64.4	63.2	63.8	63.1	63.0	65.0	64.7	64.7	64.0	64.0	63.8	63.9	64.5	63.8					
No.1 Station TFR. INTEG. "	3.3	2.8	3.2	3.0	2.7	3.3	2.9	3.0	3.2	2.8	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.1	2.9	2.9	3.1	2.9	2.8	3.0					
138KV TFR. INTEG. "	4.2	4.1	4.5	4.2	4.0	4.5	4.0	4.4	4.0	4.1	4.0	4.7	4.2	4.2	4.1	4.5	4.2	4.1	4.3	4.3	4.2	4.0	4.5	4.4					
NET STATION OutPut "	56.9	57.7	57.0	57.6	57.9	57.0	57.9	56.9	56.8	57.5	57.4	55.5	56.6	55.9	55.9	57.5	57.5	57.5	56.8	56.8	56.5	56.5	57.2	56.4					
MAIN GEN INDIC	65.8	66	66	66.2	66	66	66	66	66	66	65	65	64.5	64	66	66	66.5	66	65.5	65.0	65.2	65.5	65.5	65					
NET STATION OutPut IND. "	59.9											59.5	59.0	59.9											59.4	59.7	59.9	59.9	59.2

[illegible]

DL-C COMPANY
P.S. DEPT DEPARTMENT
SHIPPING PORTAL
S-225
Activity Lifetime
5

TABLE IB

MISCELLANEOUS DATA

DATE	7/7	7/8																														
TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600								
MAIN GEN. OUT INTEG. MN/HR	64.5	64.4	64.7	64.3	64.3	64.5	64.3	64.2	63.4	65.3	64.1	64.0	63.4	63.5	65.7	64.6	64.7	64.0	65.2	64.4	64.4	64.1	64.2	64.1								
NO.1 STATION TFRM. INTEG. "	2.8	2.7	2.9	3.2	2.8	2.9	3.0	2.9	3.0	3.0	2.9	2.9	3.1	3.0	2.7	2.8	2.8	3.2	2.9	3.1	2.8	2.9	2.9	3.1								
138KV TFRM INTEG. "	4.0	4.1	4.1	4.5	4.3	4.0	4.4	4.3	4.0	4.3	4.2	4.3	4.3	4.0	4.4	4.2	4.4	4.3	4.1	4.6	4.0	4.4	4.4	4.4								
NET STATION OUTPAT "	57.7	57.6	57.7	56.6	57.2	57.6	56.9	57.0	56.4	58.0	57.0	56.8	56.0	56.5	58.6	57.6	57.5	56.5	59.2	56.7	57.6	56.8	56.9	56.6								
MAIN GEN. INDIC "	66	66	66	66	→ 65.5										65.5	65.5	65.5	66	66	66	66	66	67	66	65.5							
NET STATION OUTPUT IND. "	59.9	→ 59.9										→ 59.9										→ 60.9							59.9	59.8	59.7	59.8

DATE	7/8												7/19																	
TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600						
MAIN GEN. OUT INTEG. MN/HR	64.3	65.3	65.5	65.3	65.4	64.4	63.9	64.3	62.7	63.8	64.7	62.3	63.6	64.9	65.6	65.7	65.1	65.4	65.4	64.2	64.1	64.2	63.8	65.4						
NOI STATION TFRM INTEG. "	3.0	3.0	3.5	2.8	2.9	3.1	3.4	2.9	2.9	3.5	2.6	3.3	3.0	3.0	3.2	2.9	3.2	3.1	3.2	3.3	2.8	3.3	2.9							
138KV TFRM INTEG. "	4.2	4.4	4.2	4.2	4.2	4.4	4.3	4.2	4.4	4.2	4.2	4.3	4.3	4.3	4.4	4.0	4.3	4.4	4.4	4.2	4.3	4.2	4.5							
NET STATION OUTPAT. "	57.1	57.9	57.8	58.3	58.3	56.9	56.2	57.2	55.4	56.1	57.9	54.7	56.3	57.6	58.3	58.1	58.2	57.9	57.9	56.6	56.6	57.1	56.3	58.0						
MAIN GEN. INDIC. "	65.5	66.5	66.5	66.5	66	65.5	65.0													66.5	66.5	67	66.5	66.5	66	65	65	65	66	65.5
NET STATION OUTPAT IND. "	59.1	59.9	59.9	59.9	60.2	59.9	59.9	59.0													59.9	59.9	59.9	60.1	59.9	59.9	59.1	60	59.9	59.7

DATE	7/19	7/20																								
TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600		
MAIN GEN OUT INTEG MN/HR	67.4	63.9	64.6	65.6	64.5	64.4	64.0	64.3	64.4	64.0	64.2	63.8	64.6	65.0	64.7	65.0	64.8	64.2	64.1	63.9	63.5	64.0	64.3	64.5		
NOI STATION TFRM INTEG "	3.1	2.9	3.2	3.3	2.9	3.0	3.2	3.1	3.3	3.0	2.9	3.2	3.0	3.0	3.0	3.2	3.0	3.1	3.0	3.2	2.9	3.2	3.0	3.0		
138KV TFRM INTEG. "	4.0	4.5	4.2	4.4	4.3	4.3	4.2	4.3	4.6	4.3	4.1	4.3	4.6	4.1	4.2	4.5	4.1	4.2	4.4	4.3	4.3	4.2	4.5	4.1		
NET STATION OUTPUT "	60.3	56.5	57.2	57.9	57.3	57.1	56.6	56.9	56.5	56.7	57.2	56.3	57.0	56.9	57.5	57.3	57.7	56.9	56.7	56.4	56.6	56.6	56.8	57.4		
MAIN GEN. IN DIC. "	65.5	66	66	65.5	65.5	65.5								66	66	66.2	66	65.5	65.5	65.5	65	65.5	65	66	66	
NET STATION OUTPUT IND "	59.3	59.9						59.8	58.9	59.5	59.5	59.5	59.5	59	60	60	60	60	59.8	59.8	59.4	59	59.4	59.0	60	59.9

DATE	7/20	7/21																									
TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600			
MAIN GEN. OUT INTEG. MN/HR	64.8	65.0	65.1	64.3	64.2	64.3	64.7	64.4	64.4	64.6	65.0	64.8	64.8	64.7	64.8	65.0	64.7	65.1	64.9	65.2	64.9	64.0	64.0	64.0			
NOI STATION TFRM INTEG. "	3.1	2.8	3.1	3.2	3.0	2.9	3.0	3.2	3.0	3.0	3.1	2.9	3.1	3.0	3.0	3.1	3.1	3.2	3.1	3.2	3.2	2.9	3.1	3.2			
138KV TFRM INTEG. "	4.2	4.3	4.2	4.4	4.0	4.3	4.3	4.4	4.2	4.4	4.2	4.3	4.3	4.3	4.2	4.5	4.4	4.3	4.0	4.8	4.0	4.5	4.4	4.3			
NET STATION Output "	57.5	57.9	57.8	56.7	57.2	57.1	57.4	56.8	57.0	57.2	57.7	57.6	57.4	57.4	57.6	57.4	57.2	57.6	57.8	57.2	57.7	56.6	56.5	56.5			
MAIN GEN. INDIC. "	66	66.5	66	65.5	65.5	66	66	65.5	65.5	66														→ 65.5 65 65 65			
NET STATION Output IND. "	60.2	60.8	60.2	59.8	59.8	60.2	59.9	59.8	59.2	60.2	60	60	60	60	60.1	60	60.1	60.1	60.2	60.2	60	59.9	59.2	59.2	59.2		

2M

PROJECT: DL-S-225
 REACTIVITY LIFETIME

6

TABLE IB

DLC
 PS
 SAPS

MISCELLANEOUS DATA

DATE	7/21	7/22
TIME	1700 1800 1900 2000 2100 2200 2300 2400 0100 0200 0300 0400 0500 0600 0700 0800 0900 1000 1100 1200 1300 1400 1500 1600	
MAIN GEN OUT INTEG MWHR	64.6 64.6 64.8 64.7 64.5 64.8 64.2 64.8 65.4 65.0 64.8 65.2 64.5 64.9 65.0 64.7 65.1 65.0 64.8 64.2 64.2 64.1 64.2 64.6	
No.1 STa TFMR INTEG "	3.0 3.0 3.0 3.1 3.0 3.1 2.9 3.2 2.9 3.2 3.1 3.0 3.0 3.0 2.9 2.7 3.0 2.9 3.0 3.0 2.9 2.9 3.0 3.0	
138 KV TFMR INTEG "	4.2 4.7 4.1 4.1 4.1 4.7 4.2 4.4 4.4 4.1 4.2 4.6 4.2 4.1 4.4 4.5 4.0 4.2 4.6 4.2 4.3 4.7 4.2 4.4	
Net STa OUTPUT "	57.4 56.9 57.7 57.5 57.4 57.0 57.1 57.2 58.1 57.7 57.5 57.6 57.3 57.8 57.7 57.5 58.1 57.9 57.2 57.0 57.0 56.5 57.0 57.2	
MAIN GEN INDIC "	65.7 65.7 65.7 66 65.9 65.7 64.9 66 66 66 65.8 66 66 66 66 66 66 66.2 65.8 65.5 64.5 65.5 65 66	
Net STa OUTPUT IND "	59.9 59.9 59.9 60 59.9 59.5 59 60.5 60.2 60 59.8 60 60 60.1 60.1 60.3 60.1 60.1 59.4 59.8 59 59.7 59.4 59.9	

DATE	7/22	7/23
TIME	1700 1800 1900 2000 2100 2200 2300 2400 0100 0200 0300 0400 0500 0600 0700 0800 0900 1000 1100 1200 1300 1400 1500 1600	
MAIN GEN OUT INTEG MWHR	64.5 64.7 64.4 64.7 64.5 64.5 64.4 64.1 64.7 64.5 64.3 64.8 64.9 64.8 65.2 64.8 64.9 65.0 64.7 64.9 64.1 64.2 64.7 64.9	
No.1 STa TFMR INTEG "	3.0 3.0 2.9 2.9 2.7 3.0 2.8 3.0 3.0 2.9 2.9 2.7 3.3 2.8 2.9 2.7 3.0 2.9 2.9 3.2 2.8 3.0 2.7 3.1	
138 KV TFMR INTEG "	4.2 4.3 4.2 4.3 4.4 4.2 4.4 4.2 4.4 4.4 4.3 4.2 4.4 4.1 4.5 4.2 4.4 4.4 4.5 4.3 4.5 4.3 4.2	
Net STa OUTPUT "	57.3 57.1 57.3 57.6 57.4 57.3 57.2 56.9 57.3 57.2 57.1 57.9 57.2 57.6 57.2 57.6 57.7 57.7 57.4 56.3 57.0 56.7 57.7 57.6	
MAIN GEN INDIC "	65.8 66 65.8 65.5 66 66 65 66 66 65.5 65.5 66 65.5 65.5 66 65.5 65.5 65 65 65.5 65.5 66 65.5	
Net STa OUTPUT IND "	59.9 60.1 59.9 60 60.1 59.9 59.2 59.9 60 59.9 59.9 59.9 60 60.5 60.5 60.2 60 60.1 59.0 59.5 59.5 59.9 60 59.4	

DATE	7/23	7/24
TIME	1700 1800 1900 2000 2100 2200 2300 2400 0100 0200 0300 0400 0500 0600 0700 0800 0900 1000 1100 1200 1300 1400 1500 1600	
MAIN GEN OUT INTEG MWHR	64.8 65.0 64.8 64.2 64.6 64.8 64.6 64.4 64.4 64.4 64.3 64.1 64.5 64.8 64.7 64.5 65.1 64.9 64.3 63.4 63.3 63.9 65.2 64.6	
No.1 STa TFMR INTEG "	3.0 2.9 2.9 2.6 3.0 3.4 2.3 2.8 3.0 3.0 2.9 2.7 2.9 2.8 2.8 3.0 3.0 3.0 2.9 3.3 3.1 3.2 2.9 3.0	
138 KV TFMR INTEG "	4.5 4.2 4.4 4.4 4.3 4.2 4.3 4.4 4.2 4.3 4.5 4.2 4.3 4.2 4.4 4.2 4.4 4.4 4.7 4.3 4.7 4.1 4.4	
Net STa OUTPUT "	57.3 57.9 57.5 57.2 57.3 57.0 58.0 57.2 57.2 57.1 56.9 57.2 57.3 57.8 57.5 57.3 57.7 57.5 57.0 56.4 56.4 56.0 58.2 57.2	
MAIN GEN INDIC "	65.8 66.2 65.8 66 65.8 65.8 65.8 65 65.5 65.5 65.5 65.5 65.8 65.8 66 66 65 65 64.5 65 66 65	
Net STa OUTPUT IND "	60.2 60.3 59.4 60 59.8 60 59.9 59.5 59.3 59.6 59.9 59.5 59.7 59.9 59.9 60 60.2 60.5 59.0 59.0 57.5 59 60.5 59.5	

DATE	7/24	7/25
TIME	1700 1800 1900 2000 2100 2200 2300 2400 0100 0200 0300 0400 0500 0600 0700 0800 0900 1000 1100 1200 1300 1400 1500 1600	
MAIN GEN OUT INTEG MWHR	64.0 64.8 63.9 64.6 64.3 64.9 64.1 63.6 64.0 65.1 65.0 64.6 64.5 64.3 64.3 65.0 64.7 64.5 64.9 64.7 64.7 65.2 64.1 64.2	
No.1 STa TFMR INTEG "	3.0 2.8 2.7 2.9 2.9 2.9 2.9 2.8 2.9 2.8 3.0 2.8 3.2 2.8 2.7 2.9 3.0 2.7 2.7 3.3 2.8 2.8 2.9 3.0	
138 KV TFMR INTEG "	4.5 4.2 4.3 4.3 4.3 4.3 4.4 4.2 4.3 4.3 4.6 4.1 4.1 4.4 4.3 4.2 4.4 4.5 4.2 4.4 4.6 4.2 4.5 4.4	
Net STa OUTPUT "	56.5 57.8 56.7 57.4 57.1 57.7 56.8 56.6 56.8 58.0 57.4 57.7 57.2 57.1 57.3 57.9 57.3 57.1 58.0 57.0 57.5 58.2 56.7 56.8	
MAIN GEN INDIC "	65.8 65.5 65.5 65 65.9 65.8 65.9 65.2 65.5 65.5 65.5 66 66 65.5 65 66 65.5 65 66 65.5 65 65.5	
Net STa OUTPUT IND "	60 60 59.5 59.7 59.9 59.7 59.5 59.3 59 60.2 59.9 59.9 59.8 59.8 59.8 59.7 59.9 59.9 59.9 59.7 60 60 59.5 58.9	

2N

SUBJECT: DL-S-225 7
Reactivity Lifetime

DSC
 PS
 SAPS

TABLE IB

MISCELLANEOUS DATA

DATE	7/25	7/26																							
TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	
MAIN GEN OUT INTEG MWHR	63.6	65.3	66.0	64.1	64.8	65.4	64.7	64.3	69.6	54.5	65.0	65.3	65.0	64.6	65.0	64.6	64.9	64.2	64.2	64.0	64.0	65.0	64.9	64.9	
No 1 STA TFRM INTEG "	2.7	3.1	3.0	2.6	3.0	2.7	2.4	3.0	2.8	3.1	2.8	2.7	3.1	2.9	2.8	2.9	3.1	2.8	2.8	3.0	2.7	3.0	2.8	2.8	
138 KV TFRM INTEG "	4.4	4.3	4.1	4.6	4.3	4.3	4.5	4.2	4.3	4.3	4.5	4.1	4.4	4.4	4.2	4.3	4.5	4.2	4.2	4.2	4.4	4.5	4.4	4.4	
Net STA OUTPUT "	56.5	57.9	58.9	56.9	57.5	58.4	57.8	57.1	57.5	57.1	57.7	58.5	57.5	57.3	58.0	57.4	57.3	57.2	57.2	56.8	56.9	57.5	57.7	57.4	
MAIN GEN INDIC "	65.5	65.8	65.8	66	66	66	66	65.5	65.5	65.5	66	66	66	65.5	65.5	66	66	65	65	65	65	66.2	66	66	
Net STA OUTPUT IND "	59.8	60.1	59.9	60	60.2	60.3	60	60	59.5	60	60.2	60.1	60	59.8	59.9	59.9	60	59	59.4	59	59	60.4	60	60	

DATE	7/26												7/27											
TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600
MAIN GEN OUT INTEG MWHR	65.0	64.8	64.2	64.4	64.0	66.0	64.3	64.0	64.2	65.1	65.2	63.6	64.0	64.2	63.8	64.3	64.2	65.2	64.4	64.6	64.6	64.8	64.7	64.2
No 1 STA TFRM INTEG "	3.2	2.2	3.1	3.3	1.9	3.3	2.7	2.9	2.9	3.1	2.7	3.0	2.8	3.0	2.9	2.7	3.1	2.8	2.9	2.9	3.0	2.8	2.8	3.1
138 KV TFRM INTEG "	4.1	4.4	4.3	4.1	3.7	4.4	4.2	4.2	4.2	4.5	4.2	4.3	4.4	4.3	4.2	4.2	4.4	4.4	4.3	4.2	4.6	4.1	4.1	4.6
Net STA OUTPUT "	57.7	58.2	56.8	57.0	58.4	58.3	57.4	56.9	57.1	57.5	58.3	56.3	56.8	56.9	56.7	57.4	56.7	58.0	57.2	57.5	57.0	57.9	57.8	56.5
MAIN GEN INDIC "	66	66	65.8	65.9	65.9	65.9	65	65	65	66	66	65	65	65	65	65.5	66	65.5	65	65.8	65.5	65.5	65.5	65.5
Net STATION OUTPUT INDIC "	60	60	59.9	59.9	59.9	59.9	59.5	59.1	59.5	60	60.2	59	59.2	59.3	59.5	59.3	59.9	59.9	59.5	59.9	59.9	59.9	59.9	59.9

DATE	7/27												7/28											
TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600
MAIN GEN OUT INTEG MWHR	64.8	64.8	65.0	64.8	64.6	64.6	64.3	64.1	64.3	64.5	64.0	64.3	64.5	64.5	64.1	65.4	64.1	65.0	64.6	63.9	64.1	64.0	65.0	64.7
No 1 STA TFRM INTEG "	2.7	2.9	3.0	3.0	2.9	2.9	3.1	2.9	2.9	3.1	2.9	3.0	2.2	3.7	2.7	3.1	3.2	2.7	2.8	3.1	2.7	3.1	3.0	3.9
138 KV TFRM INTEG "	4.4	4.0	4.4	4.5	4.3	4.3	4.5	4.1	4.6	4.4	4.4	4.6	3.9	4.6	4.3	4.2	4.7	4.3	4.4	4.5	4.2	4.7	4.2	4.4
Net STA OUTPUT "	57.7	57.9	57.6	57.3	57.4	57.4	56.7	57.1	56.8	57.0	56.7	56.7	58.4	56.2	57.1	58.1	56.2	58.0	57.9	56.3	57.2	56.2	57.8	56.4
MAIN GEN INDIC "	66	66	66	66	65.5	65.5	65.0	65.0	65.0	65.0	65.5	65.0	66.0	65.5	65.0	66.0	64.0	66.0	65.0	65.0	65.0	66.0	66.0	65.5
Net STA OUTPUT IND "	59.9	60.1	60.1	60	60	59.5	59.2	59.2	59.4	59.6	59.8	59.5	59.8	59.5	59.5	59.9	60.0	61.0	59.0	58.8	59.1	60.0	59.8	59.5

DATE	7/28										7/29															
TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600		
MAIN GEN OUT INTEG MWHR	64.4	64.8	65.1	64.3	65.0	64.8	66.4	64.5	64.0	64.4	64.6	64.2	63.9	64.2	64.3	64.5	64.0	65.0	64.5	63.6	63.8	64.1	64.3	64.5		
No 1 STA TFRM INTEG "	2.9	3.0	3.1	2.8	2.9	2.9	2.8	3.0	2.8	3.1	2.8	2.8	2.9	3.0	2.8	3.2	3.0	2.9	2.8	3.0	3.0	2.7	3.0	2.9		
138 KV TFRM INTEG "	4.5	4.3	4.4	4.4	4.2	4.5	4.1	4.5	4.3	4.3	4.2	4.6	4.1	4.3	4.6	4.4	4.3	4.4	4.4	4.5	4.3	4.4	4.4	4.5		
Net STA OUTPUT "	57.0	57.5	57.6	57.1	58.9	57.4	59.5	57.0	57.9	57.0	57.6	57.8	56.9	56.9	57.9	56.9	56.7	57.7	57.3	56.1	56.5	57.0	56.6	57.1		
MAIN GEN INDIC "	66.0	66.0	65.5	65.5	66.0	66.0	65.8	66.0	65.8	66.0	65.5	65.0	65.2	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.8	65.0	65.5		
Net STA OUTPUT IND "	59.9	59.9	59.9	59.9	60.2	60.1	59.9	59.8	59.2	59.9	59.2	59.2	59.4	59.2	59.4	59.7	59.0	59.5	59.5	59.0	59.7	59.7	59.5	59.8		

20

SUBJECT DL-S-225

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DLG

COMPANY

PS

DEPARTMENT

SAPS

DIVISION

Test Group

DATE

TABLE IB

Miscellaneous Data

FORM 623-7-11-2		Miscellaneous Data																							
DATE		7/29												7/30											
TIME		1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600
MAIN GEN. INTEG.	MWHR	64.9	65.0	64.7	64.8	64.2	64.6	64.4	64.7	64.3	64.8	64.5	64.9	64.3	64.6	64.6	64.6	65.0	65.1	65.2	64.8	63.9	64.2	64.4	64.6
#1 STA. TFMR INTEG.	"	3.1	2.7	3.1	2.8	2.8	2.8	3.1	2.7	2.8	3.2	2.8	2.8	2.9	3.0	2.7	3.1	2.9	2.7	3.0	3.0	2.8	3.0	3.0	3.0
138 KV TFMR INTEG.	"	4.3	4.5	4.1	4.6	4.2	4.3	4.5	4.1	4.6	4.2	4.5	4.3	4.3	4.5	4.1	4.6	4.2	4.5	4.3	4.6	3.9	5.3	4.3	4.3
NET STA. OUTPUT	"	57.5	57.8	57.5	57.4	57.2	57.5	56.8	58.1	56.9	57.4	57.2	57.3	57.1	57.1	57.8	56.9	57.9	57.9	57.5	57.2	57.7	55.9	56.7	56.4
MAIN GEN. INDIC.	"	66.0	66.0	66.0	66.0	66.0	65.0	66.0	66.0	65.5	65.5	65.5	65.2	65.5	65.5	66.0	66.0	66.0	66.0	66.0	65.0	65.0	65.0	65.0	65.5
NET STA. OUTPUT IND.	"	60.5	60.0	60.0	60.0	60.1	59.4	60.2	59.9	59.7	59.6	59.5	59.2	59.7	59.9	60.0	60.1	60.1	60.5	60.1	59.9	59.0	59.5	57.8	60.0

DATE		7/30										7/31													
TIME		1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600
MAIN GEN. INTEG.	MWHR	64.7	65.3	64.2	64.2	65.6	64.1	64.6	64.5	64.3	64.4	—	—	—	—	—	24.9	42.4	48.7	47.5	55.7	52.3	52.8	60.4	60.9
#1 STA. TFMR INTEG	"	3.0	2.8	3.1	2.8	2.9	3.0	2.7	3.0	3.1	2.9	2.4	0.0	0.0	0.0	0.1	2.4	2.6	3.0	2.9	2.5	2.8	3.1	3.6	3.1
138 KV TFMR INTEG	"	4.7	4.1	4.9	4.3	4.5	4.3	4.3	4.4	4.2	4.6	4.6	6.0	6.2	6.1	6.3	4.2	4.3	4.3	4.2	4.5	4.3	4.3	4.3	4.8
NET STA. OUTPUT	"	57.0	58.4	56.7	57.1	58.2	56.8	57.6	57.1	57.0	58.9	—	—	—	—	—	18.3	35.5	41.4	40.4	48.7	51.2	51.4	52.5	53.0
MAIN GEN. IND.	"	65.0	65.0	65.0	65.0	65.0	65.5	65.5	65.3	65.5	65.5	—	—	—	—	6.0	33.0	50.0	49.5	48.0	60.0	54.0	62.0	62.0	62.0
NET STA. OUTPUT IND.	"	59.5	59.0	59.5	59.5	58.9	59.6	60.0	59.4	59.5	59.5	—	—	—	—	0.0	26.5	44.5	43.0	42.0	56.0	59.5	59.5	57.0	56.0

DATE		7/31										8/1													
TIME		1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600
MAIN GEN. INTEG.	MWHR	60.7	60.0	59.9	59.8	59.9	61.8	64.4	64.0	63.9	64.2	63.5	64.5	63.5	64.3	64.4	63.0	64.6	65.2	64.6	64.7	65.5	65.1	65.2	65.4
#1 STA. TFMR. INTEG.	"	3.0	2.7	2.9	2.7	3.0	2.7	3.0	3.0	2.8	2.9	2.7	2.9	2.9	2.9	3.0	3.6	2.9	2.9	2.9	2.9	2.9	2.9	3.0	
138 KV TFMR. INTEG.	"	4.2	4.1	4.4	4.3	4.3	4.4	4.5	4.1	4.2	4.6	4.2	4.5	4.2	4.2	4.5	5.1	2.3	4.5	3.4	3.5	4.3	4.3	4.4	4.5
NET STA. OUTPUT	"	53.5	53.2	52.6	52.8	52.6	54.7	56.9	56.9	57.0	56.7	56.6	56.7	56.4	57.2	52.9	54.3	52.4	57.8	58.3	58.3	58.3	58.3	57.9	57.9
MAIN GEN. IND.	"	61.5	60.5	60.5	61.0	61.0	65.5	65.0	65.0	64.5	64.5	64.5	64.5	65.5	65.5	65.0	64.0	66.0	65.0	66.0	66.0	66.0	66.0	67.0	65.5
NET STA. OUTPUT IND.	"	55.8	54.8	54.8	55.0	55.0	59.9	59.0	59.1	58.6	58.8	59.0	59.0	59.3	59.1	59.5	58.1	60.5	59.5	59.8	60.5	60.0	60.0	60.5	59.7

DATE	8/1	8/1/58 8/2/58																									
TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600			
MAIN GEN. INTEG.	MWHR	64.3	64.3	65.0	64.9	65.1	64.9	64.8	64.9	64.4	55.0	64.6	64.8	64.6	64.5	63.9	63.6	64.2	65.0	65.0	64.5	0	0	0	0		
*1 STA. TFMR INTEG	"	3.0	2.7	2.9	2.7	3.1	2.9	3.0	2.9	2.9	2.9	3.0	3.0	2.7	3.0	2.8	3.1	2.8	2.9	3.0	0	0	0	0			
138 KV TFMR INTEG	"	4.2	4.2	4.9	4.0	4.2	4.8	4.5	4.2	4.5	4.3	4.3	4.3	4.4	4.3	4.2	4.4	4.4	4.2	4.5	4.4	0	0	0	0		
NET STA. OUTPUT	"	57.1	56.9	57.2	58.2	57.8	57.2	57.3	57.8	57.0	57.8	57.4	57.5	57.2	57.5	56.7	56.4	56.7	58.0	57.6	57.1	0	0	0	0		
MAIN GEN. IND.	"	65.0	66.0	65.5	64.9	66.0	66.0	66.0	66.0	66.0	66.0	65.5	66.0	66.0	65.0	65.0	65.9	65.9	65.9	65.9	0	0	0	0	8		
NET STA. OUTPUT IND.	"	58.9	60.0	59.9	57.7	60.2	60.0	60.0	60.3	60.1	60.0	59.6	60.0	60.0	59.0	59.0	58.9	60.2	60.1	60.1	59.8	0	0	0	0		

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DL-S-225

9

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COMPANY

DEPARTMENT

Test Group

8/3/58 to 8/6/58

Table IB

Miscellaneous

DATE	8/2/58	8/3/58																							
TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	
MAIN GEN. INTEG.	MWHR	27.7	45.7	49.2	49.0	48.7	47.9	47.8	47.8	53.2	63.1	62.8	63.3	63.7	63.3	63.3	63.5	63.8	64.5	63.9	65.3	64.9	65.2	65.3	65.1
#1 STAT TFRM INTEG	"	2.5	3.2	2.8	2.7	3.0	2.7	2.9	2.9	3.0	2.9	2.9	3.1	2.9	2.8	2.8	3.1	2.9	2.9	3.1	2.8	3.0	2.8	3.0	2.8
138 KV TFRM. INTEG.	"	4.4	4.1	4.4	4.3	4.1	4.4	4.3	4.2	4.2	4.2	4.5	4.2	4.3	4.3	4.4	4.1	4.3	4.4	4.7	4.4	4.4	4.3	4.3	4.1
NET. STAT. OUTPUT	"	20.8	38.4	42.0	42.0	41.6	40.8	40.6	40.7	46.0	56.0	55.4	56.0	56.5	56.2	56.1	56.3	56.6	57.2	56.6	58.1	57.5	58.1	58.0	58.2
MAIN GEN. INDIC.	"	38	50	50	50	49	49	49	49.0	59.9	65.5	64.0	64.5	64.5	64.5	64.5	64.5	64.5	66.0	66.0	66.0	66.0	66.0	67.0	66.5
NET STAT. OUTPUT IND.	"	31.5	44	44	44	43	42.5	43	42.9	53.9	59.8	57.9	58.4	58.5	58.6	58.6	58.7	58.3	60.0	60.0	60.9	60.4	60.0	65.3	60.8

DATE	8/3/58	8/4/58																							
TIME	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	
MAIN GEN INTEG	MWHR	65.4	65.3	65.2	64.9	64.9	64.8	64.6	64.2	64.3	64.5	64.5	64.6	64.6	64.3	63.4	63.6	65.3	65.3	65.3	65.6	64.5	65.3	64.9	65.1
#1 STAT. TFRM. INTEG	"	3.1	3.1	2.7	2.9	3.0	2.8	2.9	3.0	2.9	3.1	2.8	3.2	2.9	2.9	3.0	2.8	3.1	2.9	3.2	2.7	3.0	3.4	2.7	2.9
138 KV TFRM. INTEG	"	4.4	4.4	4.3	4.4	4.4	4.3	4.3	4.4	4.0	4.6	4.6	4.2	4.2	4.5	4.3	4.3	4.8	4.2	4.4	4.3	4.5	4.4	4.3	4.6
Net STAT. OUTPUT	"	57.9	57.8	58.2	57.6	57.5	57.7	57.4	56.8	57.4	56.8	57.1	57.2	57.5	56.9	56.1	56.5	57.4	58.2	57.7	58.6	57.0	57.5	57.9	57.6
MAIN GEN INDIC	"	66.5	66.5	66.5	66.0	66.0	66.0	65.5	65.0	65.5	65.5	65.0	65.8	66.0	65.0	64.5	66.0	66.0	66.0	66.3	66.0	66.0	66.0	66.0	66.0
Net Station OUTPUT Int	"	60.7	60.8	60.5	60.0	60.1	60.0	59.6	59.7	59.6	59.7	59.8	60.0	59.9	59.1	58.6	60.0	60.5	60.3	60.5	60.3	60.0	60.0	60.0	59.9

Date		8/5/58																							
Time		1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600
Main Gen. Integ.	MWHR	65.0	64.7	64.5	64.3	64.2	64.6	64.2	64.4	65.2	65.2	65.3	64.8	64.7	64.5	64.7	64.8	65.1	65.1	64.9	64.5	64.1	64.9	64.4	64.8
#1 Stat. Tfrmr. Integ.	"	3.1	2.9	2.8	2.9	3.3	2.7	2.9	3.0	3.0	2.6	3.1	3.0	2.7	2.9	3.2	2.5	2.9	3.2	2.8	3.3	2.7	2.9	3.1	2.9
138 KV Tfrmr. Integ.	"	4.1	4.6	4.3	4.3	4.3	4.5	4.3	4.3	4.5	3.9	4.7	4.4	4.1	4.4	4.3	4.4	4.8	4.1	4.5	4.4	4.3	4.6	4.4	4.4
Net Stat. Output	"	57.8	57.2	57.4	57.1	56.6	57.4	57.0	57.1	57.7	58.7	57.5	57.4	57.9	57.2	57.2	57.9	57.4	57.8	57.6	56.8	57.1	57.4	56.9	57.5
Main Gen Indic.	"	66.5	65.5	65.5	66.0	66.0	65.5	66.0	65.5	66.0	66.0	66.5	65.5	66.0	65.5	66.0	66.0	66.0	66.0	65.5	64.2	65.5	66.0	65.0	67.0
Net Station Output Ind.	"	60.3	59.7	59.2	59.5	59.9	59.5	59.9	59.8	60.1	60.3	60.8	59.5	59.9	60.0	60.0	60.5	60.5	60.0	59.5	58.2	59.5	59.8	59.2	60.05

Date	8/6/58																									
Time	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600		
Main Gen. Integ.	MWHR	65.4	64.7	64.6	64.3	64.5	64.5	64.0	64.3	64.4	64.5	64.3	64.2	64.3	64.5	64.5	64.6	64.9	65.1	65.2	65.3	65.4	65.1	64.4	64.5	
#1 Stat. Tfrmr. Integ.	"	3.1	3.1	2.7	3.2	2.9	2.9	3.0	3.2	2.8	2.9	3.0	2.7	3.1	2.8	3.2	2.7	2.9	3.2	2.7	3.0	3.0	2.9	2.9	3.1	
138 KV Tfrmr. Integ	"	4.2	4.1	4.5	4.0	4.5	4.4	4.0	4.9	4.0	4.1	4.7	4.3	4.2	4.4	4.4	4.3	4.6	4.2	4.4	4.4	4.3	4.6	4.4	4.6	
Net Stat. Output	"	57.6	57.5	57.4	57.1	57.1	57.2	57.0	56.2	57.6	57.5	56.6	57.2	57.0	57.3	56.9	57.6	57.4	57.7	58.1	57.9	58.1	57.6	57.1	56.8	
Main Gen. Indic.	"	66.0	66.0	65.0	65.0	66.0	65.0	65.0	65.5	65.5	65.5	65.5	65.5	65.0	65.5	66.0	66.0	66.0	66.0	66.0	66.0	66.0	65.5	65.0	65.8	
Net Station Output Indic.	"	60.05	60.0	60.0	59.6	60.0	59.5	59.5	59.1	59.5	59.5	59.5	59.4	59.5	59.9	60.0	60.0	60.0	59.9	60.2	59.8	60.5	59.8	59.2	59.6	

20

DL-S-225

10

TABLE I B

DL

PS

SAPS

Reactivity Lifetime

Test Group

3/6/58 to 8/10/58

Miscellaneous Data

Date	8/6/58	8/6/58	8/4/58	8/6/58	8/6/58	8/6/58	8/6/58	8/6/58	8/7/58	8/7/58	8/7/58	8/7/58	8/7/58	8/7/58	8/7/58	8/7/58	8/7/58	8/7/58	8/7/58	8-7-58	8-7-58				
Time	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	
Main Gen. Intg.	MW Hr.	64.4	64.6	65.1	64.6	64.9	65.9	63.6	64.5	65.0	64.9	64.9	65.0	64.5	64.6	64.9	64.5	64.4	64.8	64.9	65.6	65.0	64.9	65.0	64.8
* 1 Sta. Xfmr Intg.	"	3.0	2.9	2.9	3.0	2.9	3.0	2.9	3.0	3.1	2.6	2.8	3.0	2.9	2.9	3.1	2.9	2.9	3.1	2.8	3.1	2.9	3.0	2.9	3.1
138 KV Xfmr Intg.	"	4.2	4.3	4.5	4.3	4.5	4.4	4.3	4.2	4.6	4.3	4.0	4.5	4.4	4.2	4.5	4.4	4.6	4.1	4.5	4.4	4.3	4.5	4.3	4.4
Net Sta. Output.	"	57.2	57.4	57.7	57.3	57.5	58.0	56.4	57.3	57.3	58.0	58.1	57.5	57.2	57.5	57.3	57.2	56.9	57.6	57.6	58.1	57.9	57.4	57.8	57.3
Main Gen. Ind.	"	65.8	66.0	66.0	66.0	66.0	66.0	65.0	66.0	66.0	66.0	66.0	65.5	65.5	66.0	66.0	64.5	65.5	66.0	66.5	66.0	66.0	66.0	66.0	66.5
Net Sta. Output Ind.	"	59.6	59.8	60.0	60.0	60.0	60.0	59.5	60.1	60.0	60.3	60.1	59.9	59.8	60.0	59.9	59.0	60.0	60.0	60.9	60.0	60.0	60.3	60.5	

Date	8/7/58	8/7/58	8/7/58	7-7-58	8/7/58	8/7/58	8/7/58	8/7/58	8/8/58	8/8/58	8/8/58	8/8/58	8/8/58	8/8/58	8/8/58	8/8/58	8/8/58	8/8/58	8/8/58	8/8/58	8/8/58	8/8/58	8/8/58	8/8/58	8/8/58
Time	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	
Main Gen. Intg.	MW Hr.	65.6	64.6	64.0	64.0	64.1	64.0	64.6	64.8	64.0	64.9	65.1	64.8	65.1	64.8	65.0	65.1	65.0	64.8	64.9	64.6	64.2	64.6	64.9	64.9
* 1 Sta. Xfmr Intg.	"	2.0	2.9	2.6	3.2	3.0	2.8	3.0	2.9	3.0	3.0	3.0	2.7	2.9	2.8	3.1	3.0	3.0	2.9	2.9	3.3	2.7	3.0	3.1	
138 KV Xfmr Intg.	"	4.1	4.4	4.2	4.3	4.5	4.4	4.3	4.4	4.1	4.2	4.6	4.4	4.2	4.2	4.4	4.4	4.3	4.4	4.6	4.2	4.3	4.5	4.3	4.5
Net Sta. Output	"	58.5	57.3	57.2	56.5	56.6	56.4	57.3	57.5	56.9	57.7	57.5	57.4	58.2	57.7	57.8	57.6	57.7	57.4	57.4	57.5	56.6	57.4	57.6	57.3
Main Gen. Ind.	"	66.0	65.5	65.0	65.0	65.5	65.0	65.5	66.0	66.0	66.0	66.0	65.5	65.5	66.0	66.0	66.0	66.0	65.5	66.0	65.0	65.0	66.0	65.5	66.0
Net Sta. Output Ind.	"	60.0	59.6	59.0	59.0	59.0	59.3	60.0	59.9	60.2	60.2	60.2	60.0	60.0	60.1	60.2	60.2	60.1	59.9	60.0	59.5	59.9	60.0	60.1	

Date	8/8/58	8/8/58	8/8/58	8/8/58	8/8/58	8/8/58	8/8/58	8/8/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58
Time	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	
Main Gen. Intg.	MW Hr.	65.6	65.0	64.9	64.8	65.9	65.7	65.2	64.9	64.9	64.6	64.8	64.0	64.9	64.7	64.8	65.1	65.0	65.0	64.8	64.6	64.6	65.1	65.4	
* 1 Sta. Xfmr. Intg.	"	3.1	2.7	3.0	3.2	2.8	3.1	3.0	2.9	2.8	3.1	2.9	3.0	2.8	3.1	2.8	3.1	3.0	2.8	3.1	3.0	3.0	2.9	3.2	
138 KV Xfmr Intg.	"	4.3	4.4	4.6	4.2	4.3	4.4	4.5	4.5	4.1	4.4	4.6	4.3	4.2	4.7	4.0	4.8	4.2	4.4	4.5	4.4	4.2	3.6	4.5	4.4
Net Sta. Output	"	58.2	57.9	56.8	57.4	58.8	58.2	57.7	57.5	58.0	57.1	57.3	56.7	57.9	56.9	58.0	57.2	57.8	57.8	57.2	57.2	57.9	58.0	57.7	57.8
Main Gen. Ind.	"	66.5	66.0	66.0	66.5	67.0	67.0	66.0	66.0	65.5	66.0	66.0	66.0	66.0	66.0	65.5	66.5	66.0	66.0	65.5	65.5	65.5	66.0	66.0	
Net Sta. Output Ind.	"	60.9	59.7	59.3	61.0	61.1	61.0	60.0	60.0	59.6	59.9	60.0	60.0	59.9	60.2	59.8	60.5	60.0	60.0	59.9	59.9	59.7	59.5	60.5	60.5

Date	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58	8/9/58
Time	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	
Main Gen Intg.	MW Hr	65.4	65.1	65.2	64.7	64.2	65.0	64.8	63.9	65.0	65.0	64.9	65.0	64.3	64.6	64.9	64.6	65.5	64.9	65.2	66.0	63.7	64.8	64.7	64.7
* 1 Sta Xfmr Intg.	"	3.0	2.9	3.0	3.0	2.7	3.2	3.1	2.7	3.1	3.1	2.6	2.9	3.0	2.9	3.0	2.8	3.0	2.9	3.0	2.9	2.9	2.9	3.2	
138 KV Xfmr Intg.	"	4.6	4.1	4.4	4.1	4.5	4.5	4.4	4.3	4.2	4.5	4.4	4.3	4.1	4.5	4.3	4.4	4.7	4.0	4.2	4.2	4.3	4.3	4.3	
Net Sta. Output	"	57.8	58.1	57.8	57.6	57.0	58.0	57.3	56.9	57.7	57.4	57.9	57.8	57.2	57.2	57.1	57.4	57.8	57.0	58.0	58.9	56.5	57.3	57.5	57.2
Main Gen Ind.	"	66.0	66.0	66.0	65.5	65.0	66.0	66.0	65.5	66.2	66.0	66.0	66.0	65.0	66.0	65.5	66.0	67.0	66.0	65.5	66.0	66.0	65.0	65.5	66.0
Net Sta. Output Ind.	"	60.5	60.2	60.5	59.8	58.7	60.1	59.0	59.3	60.1	60.0	60.3	60.0	59.5	59.9	59.9	60.0	61.4	60.2	57.9	60.0	60.0	60.0	60.0	60.0

2 R

SHEET NO. 11

DL COMPANY Reactivity Lifetime

PS _____ DEPARTMENT

SAPS DIVISION COMPILED BY Test Group CHECKED BY _____ DATE 8/10/58 to 8/

FCIM 623-7112

MISCELLANEOUS DATA

[illegible]

DEPARTMENT

DIVISION

COMPILED BY *Test Group* CHECKED BY

DATE 7-18-58.

ISSN 0381-7372

DATE		7-2-58																							
TIME		0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
MAIN GEN. OUTPUT	MW	59.1	59.8	60.0	59.9	57.2	62.5	60.4	55.1	62.3	63.0	64.0	63.9	64.0	63.9	63.7	63.3	62.5	62.8	63.2	63.8	63.4	63.2	62.8	
NET STATION OUTPUT	MW	51.6	53.0	52.8	52.6	49.8	55.5	53.6	55.1	55.6	56.9	56.8	56.6	56.6	56.4	56.1	55.5	55.4	56.1	56.5	56.3	55.3	56.0		
CH. A LINEAR LEVEL	%	94.0	93.0	94.0	93.0	94.0	96.0	94.0	94.0	95.0	101	99	102	104	104	104	102	102	100	99	100	102	102.5	104.0	103
CH. B LINEAR LEVEL	%	94.0	94.0	98.0	95.0	96.0	98.0	96.0	97.0	97.0	104	103	107	110	109	111	105	103	101	100	102	103	104	104.0	104
CH. C LINEAR LEVEL	%	93.0	93.0	97.5	95.0	96.0	97.5	95.5	96.0	97.0	102.5	100	104	106	104	106	102.5	103	102	101	102	103	104	103.0	103
CH. D LINEAR LEVEL	%	94.0	93.0	99.0	95.0	96.0	97.0	96.0	96.0	97.0	102.5	100	104	106	105	107	102.5	102	102	102	101	102.5	103	102.5	102.5
EAPH	HRS	0.8	1.0	1.0	0.9	0.9	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	1.0	1.1	0.9	1.0	0.9	1.1
ROD 21 POSITION	IN	21.76	22.40	23.10	23.59	24.14	24.64	24.98	25.39	25.88	26.14	26.26	26.52	26.72	26.89	27.14	27.47	27.61	27.85	28.17	28.31	28.43	28.59	28.76	28.91
ROD 22 POSITION	IN	21.69	22.32	23.03	23.51	24.06	24.56	24.90	25.31	25.80	26.07	26.19	26.44	26.64	26.81	27.06	27.39	27.53	27.77	28.07	28.29	28.36	28.51	28.68	28.82
ROD 23 POSITION	IN	21.62	22.26	22.96	23.46	24.00	24.50	24.83	25.25	25.72	26.00	26.13	26.38	26.58	26.75	27.00	27.33	27.47	27.71	28.02	28.17	28.30	28.45	28.63	28.74
ROD 24 POSITION	IN	21.63	22.26	22.97	23.46	24.01	24.51	24.84	25.26	25.73	26.01	26.13	26.38	26.59	26.75	27.01	27.34	27.47	27.71	28.03	28.22	28.33	28.50	28.62	28.81
ROD 61 POSITION	IN	21.68	22.33	23.03	23.51	24.05	24.57	24.91	25.31	25.80	26.07	26.17	26.43	26.63	26.80	27.05	27.38	27.52	27.76	28.05	28.18	28.33	28.46	28.63	28.76
ROD 62 POSITION	IN	21.70	22.35	23.05	23.54	24.08	24.60	24.94	25.34	25.83	26.09	26.21	26.45	26.66	26.83	27.08	27.41	27.55	27.79	28.08	28.21	28.37	28.47	28.66	28.80
ROD 63 POSITION	IN	21.67	22.33	23.03	23.51	24.05	24.57	24.91	25.31	25.80	26.07	26.18	26.43	26.63	26.90	27.04	27.38	27.51	27.75	28.05	28.18	28.33	28.46	28.63	28.78
ROD 64 POSITION	IN	21.57	22.23	22.92	23.41	23.95	24.47	24.81	25.21	25.69	25.97	26.08	26.33	26.52	26.69	26.94	27.28	27.41	27.65	27.95	28.08	28.23	28.36	28.53	28.67
GROUP I ROD POS	IN	-	-	-	-	-	-	-	69.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FORM 922-7412

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FOIA b 7 - D
Page 6 of 8

36

TABLE IC (CON'T)

3c

DL-5-225

SHEET NO. 5

DLC COMPANY REACTIVITY LIFETIME

P.S. DEPT. DEPARTMENT

SHIPPING PORT DIVISION GROUP NO. TEST GROUP ENTERED BY DATE 7-78-58

TABLE IC (CONT'D)

DATE	7-9-58																											
TIME	0100 0200 0300 0400 0500 0600 0700 0800 0900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400																											
MAIN GENERATOR OUTPUT MW	64.9	64.5	64.3	64.4	64.5	64.5	64.0	63.8	68.7	58.8	72.9	54.6	64.3	64.9	64.9	64.7	62.9	63.5	63.2	63.8	64.0	64.4	64.3	63.4				
NET STATION OUTPUT MW	57.4	57.2	57.3	57.0	57.3	57.2	56.9	57.1	60.0	51.5	63.9	49.2	57.0	57.3	57.8	57.0	54.8	57.2	56.0	56.3	57.0	56.9	57.1	56.3				
CH. A LINEAR LEVEL %	100.0	100.0	100.0	100.0	99.5	99.5	99.0	99.5	98.5	98.5	97.5	98.0	99.5	99.5	99.0	98.0	96.0	97.0	97.0	97.0	97.0	100	99	98.5				
CH. B	"	"	"	102.3	102.3	102.4	102.6	102.5	102.0	100.0	99.5	100.0	100.5	99.0	99.5	101.0	102.0	101.0	100.0	95.0	98.0	98	100	100	102	99.5		
CH. C	"	"	"	102.5	102.5	102.5	102.5	102.0	102.0	100.5	100.0	100.0	101.5	100.0	100.5	102.0	102.0	102.5	102.0	100	101	101	104	104	105	103	100.0	
CH. D	"	"	"	100.0	99.8	99.5	99.8	99.5	99.0	97.5	97.5	95	98	97.5	98.5	100.0	100.0	99.5	95.0	97.0	97.0	100	100	100	98.0	98.5		
E.F.P.H.	HRS	.9	1.0	1.0	1.0	1.0	1.0	1.0	.9	1.0	1.0	1.0	.9	.9	.9	.9	1.1	1.0	0.9	1.0	.9	1.0	1.0	.9	1.0			
ROD 21 POSITION	IN	32.48	32.48	32.48	32.56	32.56	32.56	32.56	32.73	32.73	32.73	32.73	32.73	32.73	32.73	32.73	32.73	32.73	32.73	32.73	32.73	32.73	32.73	32.73	32.73			
" 22	"	32.40	32.40	32.40	32.48	32.48	32.48	32.48	32.48	32.48	32.48	32.48	32.48	32.48	32.48	32.48	32.48	32.48	32.48	32.48	32.48	32.48	32.48	32.48	32.48			
" 23	"	32.33	32.33	32.33	32.42	32.42	32.42	32.42	32.42	32.42	32.42	32.42	32.42	32.42	32.42	32.42	32.42	32.42	32.42	32.42	32.42	32.42	32.42	32.42	32.42			
" 24	"	32.34	32.34	32.34	32.43	32.43	32.43	32.43	32.43	32.43	32.43	32.43	32.43	32.43	32.43	32.43	32.43	32.43	32.43	32.43	32.43	32.43	32.43	32.43	32.43			
ROD 61 POSITION	IN	32.24	32.24	32.24	32.33	32.33	32.33	32.33	32.33	32.50	32.50	32.50	32.42	32.51	32.51	32.51	32.42	32.42	32.68	32.68	32.68	32.68	32.68	32.68	32.68			
" 62	"	32.27	32.27	32.27	32.36	32.36	32.36	32.36	32.36	32.53	32.53	32.53	32.46	32.54	32.54	32.54	32.45	32.45	32.63	32.63	32.63	32.63	32.63	32.63	32.63			
" 63	"	32.24	32.24	32.24	32.33	32.33	32.33	32.33	32.33	32.50	32.50	32.50	32.42	32.51	32.51	32.51	32.42	32.42	32.60	32.60	32.60	32.60	32.60	32.60	32.60			
" 64	"	32.14	32.14	32.14	32.23	32.23	32.23	32.23	32.23	32.40	32.40	32.40	32.32	32.41	32.41	32.41	32.32	32.32	32.50	32.50	32.50	32.50	32.50	32.50	32.50			
GROUP I Rod Pos.	"																											

DATE	TIME	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
MAIN GENERATOR OUTPUT MW		63.4	63.4	63.4	63.7	63.2	63.8	63.1	63.1	63.1	64.4	64.5	64.7	64.8	64.8	64.8	63.8	63.6	64.2	64.7	64.8	65.1	65.1	64.3	64.5
NET STATION OUTPUT MW		55.9	55.9	56.0	56.9	55.8	56.4	55.6	55.6	55.6	51.3	51.8	51.5	51.3	51.5	51.1	56.7	56.2	57.1	57.3	58.3	57.7	57.7	57.8	57.9
CH. A LINEAR LEVEL %		98.5	99.5	99.5	100	99.5	99.5	99.0	98.5	99.0	99.0	98.5	98.5	99	100	98.5	98.5	98	99	99	100	100	100	100	99.5
CH. B		100.0	101.0	101.3	102.4	102.0	102	100.0	100.0	101.0	101.5	100.5	100	100.5	101.0	100	99	98	101	101	102	102	102	102	102.0
CH. C		100.5	100.5	100	101.5	100	100.8	100.0	100.0	101.5	101.5	102	102	102.5	103	102	102	102	103	103	103	103	103	103	101.0
CH. D		98.0	98.0	98.0	98.0	98.0	98.0	96.6	98.0	98.5	99.0	100	99.0	99.5	100	99	98	96	100	100	100	99	98	98	98.5
E.F.P.H.	HRS	1.0	1.0	.9	1.0	1.0	1.0	.9	1.02	1.04	1.07	1.0	1.0	.9	1.0	1.0	1.0	.9	.9	1.0	1.0	1.0	1.0	1.0	1.0
ROD 21 POSITION	IN	33.02	33.02	33.02	33.02	33.02	33.02	32.93	32.93	32.93	32.93	32.93	32.93	32.93	32.93	32.93	33.06	33.06	33.16	33.18	33.18	33.18	33.18	33.18	33.28
" 22	"	32.94	32.94	32.94	32.94	32.94	32.94	32.85	32.85	32.85	32.85	32.85	32.85	32.85	32.85	32.85	32.96	32.96	33.10	33.10	33.10	33.10	33.10	33.10	33.20
" 23	"	32.88	32.88	32.88	32.88	32.88	32.88	32.79	32.79	32.79	32.79	32.79	32.79	32.79	32.79	32.79	32.92	32.92	33.04	33.04	33.04	33.04	33.04	33.04	33.13
" 24	"	32.89	32.89	32.89	32.89	32.89	32.89	32.79	32.79	32.79	32.79	32.79	32.79	32.79	32.79	32.79	32.92	32.92	33.04	33.04	33.04	33.04	33.04	33.04	33.15
" 61	"	32.79	32.79	32.79	32.79	32.79	32.79	32.68	32.68	32.68	32.68	32.68	32.68	32.68	32.68	32.68	32.83	32.83	32.92	32.92	32.92	32.92	32.92	32.92	33.05
" 62	"	32.82	32.82	32.82	32.82	32.82	32.82	32.71	32.71	32.71	32.71	32.71	32.71	32.71	32.71	32.71	32.86	32.86	32.96	32.96	32.96	32.96	32.96	32.96	33.08
" 63	"	32.79	32.79	32.79	32.79	32.79	32.79	32.68	32.68	32.68	32.68	32.68	32.68	32.68	32.68	32.68	32.83	32.83	32.92	32.92	32.92	32.92	32.92	32.92	33.04
" 64	"	32.69	32.69	32.69	32.69	32.69	32.69	32.57	32.57	32.57	32.57	32.57	32.57	32.57	32.57	32.57	32.73	32.73	32.82	32.82	32.82	32.82	32.82	32.82	32.94
GROUP I ROD POS.	IN																								

DUGUESNE LIGHT COMPANY
POWER STATIONS DEPARTMENT
Shipping Report

SUBJECT DL-S-225 SHEET NO. 6
REACTIVITY LIFE TIME
COMPILED BY TEST GROUP CHECKED BY _____ DATE 7-11 & 7-12

TABLE I (CON'T)

DATE	TIME	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
MAIN GENERATOR OUTPUT	MAN	64.1	64.5	64.6	64.4	64.1	64.8	64.9	64.6	65.2	64.4	64.5	64.4	64.9	64.3	64.1	63.8	63.8	64.5	64.8	64.7	64.9	64.6	64.4	64.0
NET STATION OUTPUT	MAN	56.8	57.2	56.6	57.3	56.8	57.6	57.6	57.3	58.1	56.7	57.0	57.2	55.5	58.0	57.7	56.2	56.4	57.1	57.6	57.3	57.6	57.5	56.9	56.5
CH A LINEAR LEVEL	70	100.0	100.0	100.5	100.5	100.5	101.0	101.0	100.0	100.0	100.0	99	98	98	91.5	97.5	98.0	99.0	101	101	101	101	100	99	99.5
CH B	"	103.0	103.0	103.4	103.3	103.3	103.5	104.0	102.0	102.0	100.0	100.0	99	99	97.5	97.5	98.5	100.0	102	102.5	103	103.5	103	103	103.0
CH C	"	102.5	102.0	102.3	102.4	102.4	102.5	102.5	102.0	102.0	102.0	102.0	102.0	102	101	101	102.0	102.5	103	103	103	103	102	102	102.1
CH D	"	99.0	99.0	98.0	98.0	99.0	99.0	100.0	100.0	100.0	101.0	100.0	100.0	100	99	99	99.0	99.5	100	100	99	98.5	97.5	97.5	97.0
EFPH	HRS	1.0	1.0	1.0	1.0	1.0	1.0	.9	.9	1.0	1.1	.9	1.0	1.0	.9	1.0	0.9	0.9	1.0	1.0	1.0	1.0	1.0	0.9	1.0
ROD 21 POSITION	IN	33.28	33.28	33.28	33.28	33.39	33.39	33.39	33.39	33.39	33.39	33.39	33.39	33.39	33.39	33.39	33.53	33.53	33.60	33.52	33.52	33.52	33.52	33.52	33.65
" 22	"	33.20	33.20	33.20	33.20	33.31	33.31	33.31	33.31	33.31	33.31	33.31	33.31	33.31	33.31	33.31	33.46	33.46	33.54	33.44	33.44	33.44	33.44	33.44	33.57
" 23	"	33.13	33.13	33.13	33.13	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.39	33.39	33.46	33.38	33.38	33.38	33.38	33.38	33.51
" 24	"	33.15	33.15	33.15	33.15	33.26	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.39	33.39	33.47	33.39	33.39	33.39	33.39	33.39	33.51
ROD 61 POSITION	IN	33.05	33.05	33.05	33.05	33.16	33.16	33.16	33.16	33.16	33.16	33.16	33.16	33.16	33.17	33.17	33.30	33.30	33.30	33.28	33.25	33.25	33.25	33.25	33.42
" 62	"	33.08	33.08	33.08	33.08	33.20	33.20	33.20	33.20	33.20	33.20	33.20	33.20	33.20	33.20	33.20	33.33	33.33	33.33	33.40	33.33	33.33	33.33	33.33	33.45
" 63	"	33.04	33.04	33.04	33.04	33.16	33.17	33.17	33.17	33.17	33.17	33.17	33.17	33.17	33.17	33.17	33.30	33.30	33.30	33.38	33.29	33.29	33.29	33.29	33.42
" 64	"	32.94	32.94	32.94	32.94	33.06	33.06	33.06	33.06	33.06	33.06	33.07	33.07	33.06	33.06	33.06	33.28	33.28	33.28	33.28	33.19	33.19	33.19	33.19	33.32
GROUP I ROD POS.	IN																								

DATE	TIME	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
MAIN GENERATOR OUTPUT	MAN	64.2	64.2	63.9	64.2	64.3	64.2	64.0	63.9	63.3	62.9	63.2	63.1	63.5	64.0	64.1	64.9	64.9	64.6	64.3	63.7	64.2	64.9	64.1	64.3
NET STATION OUTPUT	MAN	57.2	57.0	56.5	56.4	57.2	56.8	56.6	56.5	55.9	55.8	56.2	56.0	56.1	56.5	57.2	57.0	56.8	57.3	57.0	56.6	56.6	57.9	56.8	56.9
CH A LINEAR LEVEL	70	99.5	100.0	100.0	100.5	100.5	100.0	100.0	99.0	97.5	98	98.0	98.0	98.5	98.0	99.0	99.0	99.0	100.0	98.5	99.0	99.0	100.0	100.0	99.5
CH B	"	102.5	103.0	104.0	104.0	102.5	102.0	100.0	98.0	97.0	97.5	96.0	96.5	97.5	97.5	99.0	99.0	101.0	102.5	102	103.0	105.0	106.0	103.0	105
CH C	"	101.0	101.5	102.0	102.0	102.0	102.0	101.0	100	100	100	100	100	102	102	102	102.0	102.5	102.5	101	102.0	102.0	102.0	102.0	101.5
CH D	"	96.0	96.8	97.5	97.5	98.0	98.0	97.5	97.5	99	99.0	100.0	100	101	102	101.0	99.0	99.0	96.5	96.0	96.0	95.0	94.5	94.0	94.0
EFPH	HRS	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.9	.9	1.0	.8	.9	.9	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
ROD 21 POSITION	IN	33.45	33.73	33.73	33.73	33.73	33.73	33.73	33.73	33.73	33.73	33.73	33.73	33.73	33.73	33.73	33.73	33.73	33.73	33.73	33.73	33.73	33.73	33.73	33.73
" 22	"	33.57	33.65	33.65	33.65	33.65	33.65	33.65	33.65	33.65	33.65	33.65	33.65	33.65	33.65	33.65	33.65	33.65	33.65	33.65	33.65	33.65	33.65	33.65	33.65
" 23	"	33.51	33.59	33.59	33.59	33.59	33.59	33.59	33.59	33.59	33.59	33.59	33.59	33.59	33.59	33.59	33.59	33.59	33.59	33.59	33.59	33.59	33.59	33.59	33.59
" 24	"	33.51	33.60	33.60	33.60	33.60	33.60	33.60	33.60	33.60	33.60	33.60	33.60	33.60	33.60	33.60	33.60	33.60	33.60	33.60	33.60	33.60	33.60	33.60	33.60
ROD 61 POSITION	IN	33.42	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51
" 62	"	33.46	33.54	33.54	33.54	33.54	33.54	33.54	33.54	33.54	33.54	33.54	33.54	33.54	33.54	33.54	33.54	33.54	33.54	33.54	33.54	33.54	33.54	33.54	33.54
" 63	"	33.42	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51	33.51
" 64	"	33.32	33.41	33.41	33.41	33.41	33.41	33.41	33.41	33.41	33.41	33.41	33.41	33.41	33.41	33.41	33.41	33.41	33.41	33.41	33.41	33.41	33.41	33.41	33.41
GROUP I ROD POS.	IN																								

DUQUESNE LIGHT

DL-S-225
REACTIVITY LIFETIME

7

Power Stations

Shipping port

Test Group

7-13 & 7-14-58

TABLE I C

DATE

TIME

7-13-58

		0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
MAIN GENERATOR OUTPUT M.W.		64.3	63.9	64.2	64.3	64.1	64.3	64.1	63.9	64.1	64.3	63.6	63.5	64.4						28.8	47.3	46.7	48.1	60.2	61.7
NET STATION OUTPUT M.W.		56.9	56.8	56.8	57.2	56.5	57.2	56.9	56.5	56.9	56.9	56.3	56.4	56.9						22.2	40.3	39.4	41.1	53.0	54.5
Ch A Linear level %		99.5	100	100	100	100	100	99.5	99	100	99	97	97	97.5					11	58	62	70	94	95	97
Ch B " "		105	104	103	102.5	100	99	97.5	97.0	97.5	95	89.5	90	92.5					9	57	61.5	73	101	103.5	107
Ch C " "		101	101	101	101.5	101	101	100.5	100.5	102.5	101.5	100	95	96					8.5	55	60.5	73	93	95	98
Ch D " "		94	95	96	96.5	100	99	99.5	900	102.5	103	101	94	100					11	53	58	70	88	88	89
FFPH HRS		1.0	1.1	.9	1.0	1.0	1.0	.9	1.0	.9	.9	.7	.8	.9					0	.4	.5	.7	.8	1.0	1.0
Rod 21 Position INS.		33.85	33.78	33.78	34.00	34.00	34.00	34.0	34.0	34.0	34.0	34.0	34.06	34.10					62.01	54.72	47.60	42.80	38.64	34.14	31.94
" 22 " "		33.85	33.85	33.89	33.91	33.91	33.91	33.91	33.91	33.91	33.91	33.91	33.98	34.03					61.99	54.65	47.53	42.72	38.56	34.07	31.88
" 23 " "		33.71	33.79	33.83	33.85	33.85	33.85	33.85	33.85	33.85	33.85	33.85	33.92	33.96					62.00	54.71	47.59	42.79	38.62	34.13	31.45
" 24 " "		33.71	33.80	33.84	33.85	33.85	33.85	33.85	33.85	33.85	33.85	33.85	33.92	33.96					62.01	54.70	47.58	42.80	38.63	34.14	31.45
Rod 61 Position INS.		33.59	33.65	33.72	33.75	33.75	33.75	33.75	33.75	33.75	33.75	33.75	33.80	33.87					62.04	54.59	47.45	42.71	38.55	34.08	31.88
" 62 " "		33.61	33.70	33.74	33.78	33.78	33.78	33.78	33.78	33.78	33.78	33.78	33.83	33.90					61.95	54.50	47.38	42.72	38.45	33.99	31.29
" 63 " "		33.58	33.67	33.71	33.75	33.75	33.75	33.75	33.75	33.75	33.75	33.75	33.80	33.87					62.04	54.59	47.45	42.71	38.54	34.09	31.35
" 64 " "		33.48	33.57	33.61	33.65	33.65	33.65	33.65	33.65	33.65	33.65	33.65	33.70	33.77					62.07	54.50	47.45	42.74	38.57	34.11	31.45

STATION SHUT DOWN TO REMOVE
16 COOLANT LOOP FROM SERVICE
AND PLACE 16 COOLANT LOOP IN SERVICE

Date	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14
Time	0030	0100	0130	0200	0230	0300	0330	0400	0430	0500	0530	0600	0630	0700	0730	0800	0830	0900	0930	1000	1030	1100	1130	1200	
Main generator output	61.0	61.4	61.9	61.9	62.2	62.0	62.4	62.0	62.0	62.0	61.4	61.4	61.0	61.2	61.6	61.6	61.8	61.4	62.4	61.6	62.0	62.0	61.8	62.9	
Net station output MW		54.1		54.3		54.8		54.8		54.8		54.0		53.8		54.7		55.0		53.4		54.5		54.9	
Ch A Linear level %	97.5	98.0	98.5	99.0	98.5	98.5	98.0	98.0	98.0	98.0	96.0	96.0	96.00	95.0	95.0	95.0	97.0	96.0	97.0	97.5	95.0	97.5	96.0		
Ch B Linear level %	105.0	99.5	97.0	95.0	97.0	97.0	98.5	98.0	95.0	97.0	95.5	97.0	97.0	97.00	97.0	97.0	97.0	97.5	98.0	99.0	100.0	98.0	100.5	99.0	
Ch C " "	99.0	100.0	102.0	102.0	101.0	101.5	101.0	100.5	101.0	100.0	101.0	99.5	98.0	99.00	99.0	99.0	99.0	101.0	100.0	100.0	100.0	98.0	100.0	98.0	
Ch D " "	91.5	96.5	98.0	99.0	99.5	100.5	100.0	100.5	101.5	101.5	101.5	100.0	99.5	99.5	99.5	100.0	99.5	101.0	100.0	100.0	99.0	101.0	98.0		
FFPH hrs.	1.0		0.9		1.0		0.9		1.0		0.9		1.0		0.9		0.9		1.0		0.9				
Rod 21 Position ins.	30.63		29.97		29.73		29.61		30.02		30.39		30.80		31.01		31.93		31.68		31.68		32.18		
" 22 " "	30.63		29.98		29.98		29.61		30.02		30.68		31.06		31.27		31.72		31.98		31.98		32.23		
" 23 " "	30.61		29.95		29.29		29.60		30.60		30.38		30.78		30.99		31.42		31.67		31.67		32.17		
" 24 " "	30.62		29.96		29.71		29.61		30.01		30.39		30.79		31.00		31.43		31.67		31.67		32.18		
Rod 61 Position ins.	30.63		29.96		29.96		29.62		30.01		30.67		31.05		31.25		31.71		31.96		31.96		32.21		
" 62 " "	30.45		29.79		29.53		29.45		29.83		30.23		30.62		30.83		31.28		31.54		31.54		32.04		
" 63 " "	30.54		29.88		29.63		29.54		29.92		30.33		30.71		30.92		31.38		31.63		31.63		32.13		
" 64 " "	30.57		29.90		29.65		29.56		29.95		30.36		30.74		30.95		31.41		31.65		31.65		32.5		

* MFTERS RECALIBRATED

3f

DLC
PS
SAPS

DL-S-225
Reactivity Lifetime

8

TABLE IC

DATE	TIME	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19
		1230	1300	1330	1400	1430	1500	1530	1600	1630	1700	1800	1900	2000	2100	2200
MAIN GENERATOR OUTPUT	MW	62.2	60.0	68.2	60.0	65.2	63.0	66.9	65.0	65.0	63.6	63.2	63.8	69.9	69.5	69.8
NET STATION OUTPUT	MW	52.7		52.9		55.7	58.8	57.8	57.2	56.8	56.0	56.5	57.9	57.2	57.8	56.5
SHA LINEAR LEVEL	%	97.5	97.0	98.0	97.5	102.0	—	102.5	102.5	102.0	100.0	100.5	103.5	103.0	102.5	102.5
ChB	"	99.0	97.5	99.0	98.0	103.0	—	104.0	103.0	102.5	100.0	99.5	102.5	101.0	100.5	100.5
ChC	"	100.0	98.0	100.0	99.0	103.0	—	103.5	103.0	102.5	102.5	104.0	103.5	102.5	102.5	102.5
ChD	"	99.0	98.0	100.0	99.0	103.0	—	103.5	104.0	102.5	100.5	101.0	104.5	104.5	103.0	103.5
EFPH	HRS	1.0		0.9		1.0	0.9	0.5	0.5	0.5	1.0	1.0	0.9	1.0	1.0	1.0
ROD 21	POSITION	INS	32.19		32.49		32.69	32.56	32.58	32.56	32.56	32.56	32.56	33.18	33.18	33.18
22	"	"	32.23		32.48		32.73	32.56	32.56	32.56	32.56	32.56	32.56	33.10	33.10	33.10
23	"	"	32.17		32.42		32.67	32.54	32.54	32.54	32.54	32.54	32.54	33.16	33.16	33.16
24	"	"	32.18		32.43		32.68	32.55	32.55	32.55	32.55	32.55	32.55	33.17	33.17	33.17
ROD 61	"	"	32.21		32.46		32.71	32.55	32.55	32.55	32.55	32.55	32.55	33.09	33.09	33.09
62	"	"	32.29		32.29		32.59	32.37	32.37	32.37	32.37	32.37	32.37	33.00	33.00	33.00
63	"	"	32.38		32.38		32.63	32.47	32.47	32.47	32.47	32.47	32.47	33.09	33.09	33.09
64	"	"	32.41		32.41		32.65	32.50	32.50	32.50	32.50	32.50	32.50	33.12	33.12	33.12

DATE	TIME		0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
MAIN GENERATOR OUTPUT MW			64.9	64.9	64.1	64.0	63.5	63.8	63.7	64.8	64.9	64.7	64.8	64.5	64.4	64.8	64.8	64.3	64.4	64.6	64.7	64.8	64.6	64.8	64.8
NET STATION OUTPUT MW			57.9	57.3	56.7	57.1	56.3	56.4	56.2	57.7	57.3	57.4	57.7	56.8	57.2	57.5	57.2	57.3	56.9	57.7	57.0	57.6	57.9	57.0	57.9
CHA LINEAR LEVEL %			102.0	101.0	101.0	100.0	100.0	100.0	100.0	101.0	101.8	101.8	101.8	100.5	102.5	103.0	102.5	103.0	103.0	102.5	103.0	103.0	102.5	103	102.5
ChB " "			101.0	101.0	102.5	102.0	102.5	102.5	103.0	105.0	105.2	104.8	104.8	102.5	103.7	103.8	102.5	102.0	101.0	101.0	101.0	101.5	101.0	102.5	102
ChC " "			103.0	102.5	103.0	102.5	102.5	102.5	103.0	104.3	104.5	104.0	104.0	102.5	103.8	103.5	102.6	102.5	102.5	102.5	102.5	102.5	102.5	103	103
ChD " "			103.5	102.0	102.0	101.0	101.0	102.0	101.0	101.7	102.4	102.4	102.0	103.4	105.5	105.2	105.0	104.0	104.0	104.0	104.5	105.0	105.0	105.5	103.5
ROD 21 POSITION INS.			33.58	33.68	33.72	33.92	34.10	34.27	34.21	34.21	34.21	34.21	34.21	34.21	34.21	34.35	34.35	34.35	34.90	34.52	34.53	34.53	34.56	34.56	34.64
ROD 22 "			33.19	33.60	33.69	33.85	34.03	34.20	34.13	34.13	34.13	34.13	34.13	34.13	34.13	34.28	34.28	34.28	34.35	34.46	34.47	34.47	34.48	34.48	34.56
" 23 "			33.55	33.67	33.71	33.91	34.09	34.25	34.20	34.20	34.20	34.20	34.20	34.20	34.39	34.39	34.39	34.38	34.50	34.53	34.53	34.54	34.54	34.62	34.62
" 24 "			33.55	33.67	33.71	33.88	34.09	34.26	34.21	34.21	34.21	34.21	34.21	34.21	34.34	34.34	34.34	34.39	34.51	34.53	34.53	34.55	34.55	34.63	34.63
ROD 61 "			33.49	33.59	33.63	33.84	34.00	34.17	34.11	34.11	34.11	34.11	34.11	34.11	34.11	34.26	34.26	34.26	34.30	34.42	34.45	34.45	34.46	34.46	34.55
62 "			33.40	33.49	33.53	33.74	33.91	34.08	34.01	34.01	34.01	34.01	34.01	34.01	34.01	34.17	34.17	34.17	34.21	34.32	34.36	34.36	34.37	34.37	34.45
63 "			33.47	33.59	33.63	33.83	34.00	34.17	34.11	34.11	34.11	34.11	34.11	34.11	34.11	34.26	34.26	34.26	34.30	34.42	34.45	34.45	34.46	34.46	34.54
64 "			33.51	33.61	33.65	33.86	34.03	34.20	34.14	34.14	34.14	34.14	34.14	34.14	34.14	34.28	34.28	34.28	34.33	34.45	34.48	34.48	34.49	34.49	34.57
EFPH HRS			1.0	1.0	0.9	1.0	0.9	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0	

Dispersive Light COMPANY
Power Station DEPARTMENT
SAPS DIVISION

Reactivity Lifetime

COMPILED BY _____ CHECKED BY _____ DATE 7/5 - 7/17/58

TABLE IC

Date	Time	7/5	7/6	7/7	7/8	7/9	7/10	7/11	7/12	7/13	7/14	7/15	7/16	7/17	7/18	7/19	7/20	7/21	7/22	7/23	7/24					
Main Generator Output	MW	64.3	64.0	64.4	64.4	63.2	63.6	63.1	63.0	65.0	65.0	64.7	64.0	64.0	63.8	64.3	64.5	63.8	63.7	64.1	64.4	64.3	64.4	64.7	64.4	64.0
Net Station Output	MW	56.9	56.8	57.1	57.4	55.5	56.4	55.9	55.9	57.8	57.8	57.4	56.9	56.8	56.5	57.4	57.2	56.4	56.4	57.4	57.2	56.9	57.5	57.7	57.3	56.8
Ch A Linear Level	%	102.0	102.0	102.0	101.0	100.5	100.0	100.0	101.0	102.0	101.5	101.0	101.0	100.0	102.0	102.5	102.5	102.0	101.5	105.0	102.5	102.5	102.5	102.5	101.0	101.0
Ch B " "	%	102.5	102.5	102.0	103.0	103.5	102.5	102.5	105.0	105.0	105.0	103.0	102.0	100.5	101.0	101.5	100.0	98.0	98.0	101.0	99.5	100.0	100.5	102.5	101.0	102.0
Ch C " "	%	102.5	103.0	102.0	104.0	103.5	103.0	102.5	105.0	105.0	105.0	103.0	102.0	101.5	102.0	102.0	102.6	100	100	102.5	101.0	102.0	102.5	103.0	102.5	102.5
Ch D " "	%	102.5	102.5	102.5	100.0	100.0	99.5	99.5	101.5	102.0	102.0	101.0	101.0	100.5	102.5	103.0	103.0	102.0	102.0	104.5	103.0	103.0	103.0	104.5	100.0	100.0
EFPH	Hrs	1	1	1	1	1	1	1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Rod # 21 Position	Ins	34.72	34.76	34.76	34.76	34.73	34.78	34.73	35.01	34.89	34.76	34.76	34.76	34.85	35.00	35.02	35.02	34.93	34.97	34.96	34.93	34.93	34.93	34.89	34.85	34.97
Rod # 22 " "	"	34.64	34.69	34.69	34.69	34.75	34.80	34.86	34.94	34.81	34.69	34.69	34.69	34.77	34.92	34.93	34.93	34.85	34.89	34.88	34.85	34.85	34.85	34.82	34.78	34.90
Rod # 23 " "	"	34.71	34.75	34.75	34.75	34.81	34.85	34.92	35.00	34.88	34.75	34.75	34.75	34.84	34.98	35.00	35.00	34.92	34.95	34.95	34.92	34.92	34.92	34.88	34.84	34.95
Rod # 24 " "	"	34.71	34.75	34.75	34.75	34.81	34.87	34.92	35.01	34.88	34.75	34.75	34.75	34.84	34.98	35.01	35.01	34.92	34.96	34.96	34.92	34.92	34.92	34.89	34.84	34.97
Rod # C1 " "	"	34.63	34.67	34.67	34.64	34.73	34.80	34.84	34.92	34.79	34.67	34.67	34.67	34.76	34.89	34.91	34.91	34.82	34.86	34.84	34.80	34.80	34.80	34.79	34.75	34.88
Rod # C2 " "	"	34.53	34.58	34.58	34.55	34.63	34.70	34.74	34.83	34.70	34.58	34.58	34.58	34.66	34.79	34.82	34.82	34.73	34.76	34.74	34.72	34.72	34.72	34.70	34.66	34.78
Rod # C3 " "	"	34.62	34.67	34.67	34.64	34.72	34.79	34.83	34.92	34.79	34.66	34.66	34.66	34.75	34.88	34.91	34.91	34.82	34.85	34.84	34.80	34.80	34.80	34.79	34.76	34.88
Rod # C4 " "	"	34.64	34.69	34.69	34.66	34.74	34.82	34.86	34.92	34.81	34.69	34.69	34.69	34.78	34.91	34.93	34.93	34.85	34.88	34.86	34.83	34.83	34.83	34.82	34.78	34.90
Date	Time	7/1	7/2	7/3	7/4	7/5	7/6	7/7	7/8	7/9	7/10	7/11	7/12	7/13	7/14	7/15	7/16	7/17	7/18	7/19	7/20	7/21	7/22	7/23	7/24	
Main Generator Output	MW	62.8	64.0	64.0	64.1	64.8	64.7	64.1	62.9	64.0	65.0	65.2	63.7	64.9	64.6	64.3	65.4	64.5	64.6	64.4	64.8	64.7	64.3	64.3	64.5	
Net Station Output	MW	55.2	56.8	57.0	56.8	57.5	57.7	56.9	55.8	56.9	57.3	58.6	55.9	57.2	57.9	56.4	57.9	55.1	55.1	57.6	57.6	57.7	56.6	57.2	57.6	
Ch A Linear Level	%	100.0	100.0	99.0	100.0	100.0	101.0	100.0	96.0	102.0	103.0	105.0	105.0	103.0	99.0	99.0	99.0	99.0	99.0	103.0	103.0	103.5	102.5	101.5	101.0	
Ch B " "	%	102.5	103.0	103.0	105.0	105.0	105.0	103.0	103.0	105.0	105.0	105.0	100.0	100.0	99.0	99.0	99.0	99.0	99.5	100.0	100.0	100.0	101.0	102.5		
Ch C " "	%	103.0	103.0	103.0	104.5	104.0	104.5	102.5	102.0	105.0	104.0	105.0	102.5	101.5	100.0	100.5	101.0	101.0	101.0	101.5	102.5	102.5	102.5	103.0	104.0	
Ch D " "	%	92.5	99.5	98.5	102.5	101.0	101.0	99.5	97.0	101.0	103.0	105.0	105.0	104.0	105.0	106.5	106.5	106.0	105.5	105.5	106.0	105.5	105.0	102.5	100.0	
EFPH	Hrs	1	1	1	1	1	1	1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Rod # 21 Position	Ins	35.02	35.02	35.02	35.02	34.97	34.97	35.02	35.11	35.35	35.19	35.19	35.26	35.06	34.96	34.96	35.06	35.06	35.06	35.06	35.06	35.06	35.06	35.06	35.06	
" # 22 " "	"	34.94	34.94	34.94	34.94	34.89	34.89	34.95	35.04	35.27	35.28	35.28	35.35	34.98	34.98	34.98	34.98	34.98	34.98	34.98	34.98	34.98	34.98	34.98	34.98	
" # 23 " "	"	35.01	35.01	35.01	35.01	34.90	34.90	35.01	35.10	35.33	35.13	35.13	35.20	35.05	34.95	34.95	35.05	35.05	35.05	35.05	35.05	35.05	35.05	35.05	35.05	
" # 24 " "	"	35.01	35.01	35.01	35.01	34.96	34.96	35.02	35.10	35.33	35.13	35.13	35.20	35.05	34.95	34.95	35.05	35.05	35.05	35.05	35.05	35.05	35.05	35.05	35.05	
" C1 " "	"	34.92	34.92	34.92	34.92	34.84	34.84	34.92	35.01	35.25	35.09	35.09	34.96	34.96	34.95	34.95	34.96	34.96	34.96	34.96	34.96	34.96	34.96	34.96	34.96	
" C2 " "	"	34.83	34.83	34.83	34.83	34.75	34.75	34.84	34.92	35.25	34.99	34.99	34.86	34.86	34.75	34.75	34.87	34.87	34.87	34.87	34.87	34.87	34.87	34.87	34.87	
" C3 " "	"	34.92	34.92	34.92	34.92	34.84	34.84	34.92	35.01	35.29	35.04	35.04	34.76	34.76	34.91	34.91	34.96	34.96	34.96	34.96	34.96	34.96	34.96	34.96	34.96	
" C4 " "	"	34.95	34.95	34.95	34.95	34.87	34.87	34.95	35.03	35.28	35.06	35.06	34.99	34.99	34.96	34.96	34.98	34.98	34.98	34.98	34.98	34.98	34.98	34.98	34.98	

DUQUESNE LIGHT COMPANY REACTIVITY LIFETIME

POWER STATIONS DEPARTMENT

SAPS

DIVISION

COMPILED BY TEST GROUP CHECKED BYDATE 7/19 - 7/20

TABLE I C

DATE	TIME	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	
		2030	2130	2130	2200	2200	2300	2300	2400	0030	0100	0130	0200	0200	0300	0330	0400	0430	0500	0530	0600	0630	0700	0730	0800
MAIN GENERATOR OUTPUT	MW	66.6	64.5	66.6	64.4	64.4	64.1	64.4	64.3	64.4	64.4	62.0	64.0	64.2	65.2	63.8	64.6	64.6	65.2	65.0	64.6	64.7	65.0	65.0	
NET STATION OUTPUT	MW	-	57.3	-	57.1	-	56.7	-	56.9	-	56.5	-	56.7	-	57.0	-	56.3	-	57.0	-	57.9	-	57.5	-	57.3
CH. A LINEAR LEVEL	%	97.5	98.0	98.0	97.5	97.0	102.0	103.0	104.0	106.0	104	103	103	102	103	101	100	102	102.5	103	102	101	102	101	107
CH. B " "	%	105.0	105.5	107.0	107.0	107.5	104.0	101.5	98.0	100	98	98	100	100	100	100	99	102	102.5	103	102	102	103	103	103
CH. C " "	%	105.5	105.5	106.5	107.0	107.5	104.0	102.0	100	100	99	99	100	100	100	100	100	102	102	102.5	102	102	103	103	104
CH. D " "	%	99.5	98.5	98.0	98.0	97.5	101.5	104.0	103	105	103	102	102	101	101	100	100	101	101	101.5	100	100	101	101	104
E.F.P.H.	HRS.	-	1.0	-	1.0	-	1.1	-	.9	-	1.0	-	1.0	-	1.0	-	.9	-	1.0	-	1.0	-	1.0	-	1.0
ROD # 21 POSITION	INS.	-	35.60	-	35.60	35.60	35.31	35.12	35.17	35.41	35.41	35.54	35.59	35.89	35.89	35.89	35.89	36.02	35.97	35.97	35.85	35.85	35.85	35.85	35.85
ROD # 22 " "	"	-	35.52	-	35.53	35.53	35.23	35.10	35.10	35.34	35.44	35.47	35.81	35.81	35.81	35.81	35.81	35.94	35.89	35.89	35.77	35.77	35.77	35.77	35.77
ROD # 23 " "	"	-	35.59	-	35.59	35.59	36.25	36.25	36.25	36.25	36.00	35.88	35.88	35.88	35.88	35.88	36.00	35.94	35.96	35.94	35.84	35.84	35.84	35.84	35.84
ROD # 24 " "	"	-	35.60	-	35.59	35.59	36.25	36.25	36.25	36.25	36.01	35.89	35.89	35.89	35.89	35.89	36.01	35.97	35.96	35.84	35.84	35.84	35.84	35.84	35.84
ROD # 61 " "	"	-	35.46	-	35.46	35.46	35.01	35.01	35.01	35.26	35.26	35.39	35.75	35.75	35.75	35.75	35.87	35.80	35.80	35.68	35.68	35.68	35.68	35.68	35.68
ROD # 62 " "	"	-	35.37	-	35.37	35.37	35.02	35.02	35.02	35.02	35.78	35.65	35.65	35.65	35.65	35.65	35.78	35.70	35.70	35.53	35.53	35.68	35.68	35.68	35.68
ROD # 63 " "	"	-	35.46	-	35.46	35.46	35.10	35.10	35.10	36.10	35.85	35.79	35.79	35.79	35.79	35.79	35.87	35.79	35.79	35.67	35.67	35.67	35.67	35.67	35.67
ROD # 64 " "	"	-	35.49	-	35.49	35.49	35.03	35.03	35.03	35.26	35.26	35.42	35.77	35.77	35.77	35.77	35.90	35.82	35.82	35.70	35.70	35.70	35.70	35.70	35.70
DATE	TIME	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-21	7-21	
		0830	0900	0930	1000	1030	1100	1130	1200	1230	1300	1330	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200
MAIN GENERATOR OUTPUT	MW	65.2	64.8	64.4	64.2	64.0	65.1	64.0	63.9	63.6	64.8	64.0	64.0	64.3	64.5	64.8	65.0	65.1	64.3	64.2	64.3	64.7	64.4	64.2	64.6
NET STATION OUTPUT	MW	-	57.7	-	55.9	-	58.1	-	56.4	-	57.6	-	56.6	56.8	57.3	57.5	57.9	57.8	56.7	57.2	57.1	57.4	57.8	57.0	57.2
CH. A LINEAR LEVEL	%	102	99.0	98	98.5	99	99	98.5	98.0	98.0	99.0	99	99	101.5	101.5	102.5	103.5	103.5	102.5	103.0	105.0	105.0	103.0	103.0	104.0
CH. B " "	%	105	102	102.0	102.0	102.5	102.0	101.5	101.0	101.0	101.5	101.0	101.0	102.5	101.5	102.0	102.0	101.0	99.0	99.0	100.0	100.0	99.0	99.0	101.0
CH. C " "	%	105	103	102.5	102.5	104.0	104.0	103.0	103.0	103.5	104.0	103.0	104.0	105.0	103.5	103.5	103.5	102.0	101.0	100	101.0	100.0	100.0	100.0	103.0
CH. D " "	%	100	99	99	99	101.0	101.0	100.0	100.0	101.0	101.0	101.0	102.5	102.5	102.0	103.0	104.0	102.5	102.0	102.5	103.0	104.5	102.0	101.0	102.5
E.F.P.H.	HRS.	-	1.0	-	0.9	-	1.0	-	0.9	-	1.0	-	1.0	1.0	1.0	0.9	1.0	1.0	1.0	0.9	1.0	1.0	.9	1.0	.9
ROD # 21 POSITION	INS.	35.85	35.85	35.85	35.85	35.94	35.94	35.84	35.94	36.01	36.06	36.06	36.06	35.98	35.93	35.93	35.93	35.84	35.89	35.98	36.06	36.06	36.06	36.06	36.11
ROD # 22 " "	"	35.77	35.77	35.77	35.77	35.86	35.87	35.87	35.87	35.93	35.99	35.99	35.99	35.90	35.85	35.85	35.85	35.76	35.81	35.90	35.98	35.98	35.98	35.98	36.04
ROD # 23 " "	"	35.84	35.84	35.84	35.84	35.93	35.93	35.93	35.93	36.00	36.05	36.05	36.05	35.96	35.91	35.91	35.91	35.83	35.87	35.96	36.05	36.05	36.05	36.05	36.11
ROD # 24 " "	"	35.84	35.84	35.84	35.84	35.94	35.94	35.94	35.94	36.00	36.06	36.06	36.06	35.97	35.92	35.92	35.92	35.83	35.88	35.96	36.05	36.05	36.05	36.05	36.11
ROD # 61 " "	"	35.68	35.68	35.68	35.68	35.79	35.79	35.79	35.79	35.84	35.92	35.92	35.92	35.80	35.75	35.75	35.75	35.67	35.71	35.80	35.89	35.89	35.89	35.89	35.93
ROD # 62 " "	"	35.58	35.58	35.58	35.58	35.70	35.70	35.70	35.70	35.74	35.82	35.82	35.82	35.71	35.66	35.66	35.66	35.58	35.62	35.70	35.79	35.79	35.79	35.79	35.84
ROD # 63 " "	"	35.67	35.67	35.67	35.67	35.79	35.79	35.79	35.79	35.83	35.91	35.91	35.91	35.80	35.75	35.75	35.75	35.67	35.71	35.80	35.89	35.89	35.89	35.89	35.94
ROD # 64 " "	"	35.70	35.70	35.70	35.70	35.81	35.81	35.81	35.81	35.96	35.99	35.99	35.99	35.83	35.78	35.78	35.78	35.69	35.74	35.82	35.91	35.91	35.91	35.91	35.92

PROJECT DL-5-225 SHEET NO. 12

Duquesne Light COMPANY

REACTIVITY LIFETIME

POWER STATIONS

SAPS

TEST GROUP

7/21 - 7/21/55

TABLE I C

DATE		7-21	7-21	7-21	7-21	7-21	7-21	7-21	7-21	7-21	7-21	7-21	7-21	7-21	7-21	7-21	7-21	7-21	7-21	7-21	7-21	7-21	7-21	7-21	
TIME		0300	0400	0500	0600	0700	0800	0900	1000	1030	1100	1130	1200	1230	1300	1400	1500	1600	1700	1800	1900	2000	2030	2100	
MAIN GENERATOR OUTPUT	MW	65.0	64.8	64.8	64.7	64.8	65.0	64.7	65.1	-	64.9	-	65.2	-	64.9	64.0	64.0	64.0	64.6	64.6	64.8	64.7	-	64.5	
NET STATION OUTPUT	MW	57.7	57.6	57.4	57.4	57.6	57.4	57.2	57.7	-	57.8	-	57.2	-	57.7	56.6	56.9	57.3	57.1	57.4	57.7	57.5	-	57.4	
CHA LINEAR LEVEL	%	103.0	102.5	102	101.0	100.0	100.0	99.0	98.5	98.0	98.5	98.5	98.5	99.0	98.0	98.5	99.5	100	103.1	105.0	105.0	106.0	107.3	103.5	
CH.B.	"	%	102.0	102.5	102	102.5	103.0	103.5	103.0	102.5	102.5	102.5	102.0	102.0	100.0	99.5	99.0	99.5	100.2	100.5	100.0	100.0	101.5	103.0	
CH.C.	"	%	102.0	102.5	102.5	104.0	104.0	105.0	106.0	105.0	105.5	105.5	105.0	105.0	103.5	103.0	102.5	102.5	102.8	102.5	102.3	101.5	102.3	103.5	
CH.D.	"	%	102.0	101	101.5	101.5	102.0	102.0	102.5	100.0	100.0	100.5	100.5	101.0	103.5	102.0	102.0	102.5	102.5	103.5	104.0	104.0	104.0	105.0	101.7
EFPH	HRS.	1.1	.9	1.0	1.0	1.0	1.0	1.0	-	1.0	-	1.0	-	1.0	-	1.0	.9	1.0	1.0	1.0	1.0	1.0	-	1.0	
ROD #21 POSITION	INS.	36.06	36.06	36.03	36.03	36.03	36.03	36.03	36.03	36.03	36.03	36.03	36.03	36.03	36.03	36.18	36.26	36.30	36.30	36.23	36.23	36.23	-	36.40	
ROD #22	"	35.98	35.98	35.95	35.95	35.95	35.95	35.95	35.95	35.95	35.95	35.95	35.95	35.95	35.95	36.11	36.19	36.22	36.22	36.15	36.15	36.15	-	36.33	
ROD #23	"	36.05	36.05	36.02	36.02	36.02	36.02	36.02	36.02	36.02	36.02	36.02	36.02	36.02	36.02	36.02	36.17	36.25	36.22	36.28	36.21	36.21	36.21	-	35.91
ROD #24	"	36.05	36.05	36.04	36.04	36.04	36.03	36.03	36.03	36.03	36.03	36.03	36.03	36.03	36.03	36.18	36.26	36.28	36.28	36.22	36.22	36.22	-	35.92	
ROD #61	"	35.88	35.88	35.85	35.85	35.85	35.84	35.84	35.84	35.84	35.84	35.84	35.84	35.84	35.84	36.00	36.08	36.10	36.10	36.04	36.04	36.04	-	36.22	
ROD #62	"	35.79	35.79	35.75	35.75	35.75	35.75	35.75	35.75	35.75	35.75	35.75	35.75	35.75	35.75	35.91	35.99	36.01	36.01	35.94	35.94	35.94	-	35.83	
ROD #63	"	35.88	35.88	35.84	35.84	35.84	35.84	35.84	35.84	35.84	35.84	35.84	35.84	35.84	35.84	36.00	36.08	36.10	36.10	36.04	36.04	36.04	-	35.71	
ROD #64	"	35.90	35.90	35.87	35.87	35.87	35.87	35.87	35.87	35.87	35.87	35.87	35.87	35.87	35.87	36.03	36.11	36.13	36.13	36.06	36.06	36.06	-	36.25	

DATE	TIME	7-21	7-21	7-21	7-21	7-21	7-21	7-22	7-22	7-22	7-22	7-22	7-22	7-22	7-22	7-22	7-22	7-22	7-22	7-22	7-22	7-22	7-22	7-22
		2130	2200	2230	2300	2330	2400	0030	0100	0130	0200	0230	0300	0330	0400	0430	0500	0530	0600	0630	0700	0730	0800	0830
MAIN GENERATOR OUTPUT	MW	-	64.8	-	64.2	-	64.8	-	65.4	-	65.0	-	64.8	-	65.2	-	64.5	-	64.9	-	65.0	-	64.7	-
NET STATION OUTPUT	MW	-	57.0	-	57.1	-	57.2	-	58.1	-	57.7	-	57.5	-	57.6	-	57.3	-	57.8	-	57.7	-	57.5	-
CHA LINEAR LEVEL	%	102.2	101.5	101.0	101.0	103.0	105.0	103.0	103.0	102.5	102.5	102.0	102.0	102.0	102.5	102.0	102.5	102.5	102.0	101.5	102.0	101.5	101.5	102.0
CH.B.	%	102.6	102.4	102.0	100.5	102.7	105.0	103.0	103.5	103.5	103.5	102.5	102.5	102.5	102.5	102.5	103.0	103.0	102.5	101.5	102.5	101.5	101.5	102.0
CH.C.	%	102.5	102.4	102.0	101.2	102.5	104.0	102.5	102.5	102.5	103.0	102.5	102.5	103.0	103.0	103.0	103.5	103.0	104.0	103.5	105.0	103.5	104.0	105.0
CH.D.	%	100.0	99.9	99.0	99.2	101.0	102.0	102.0	101	100.5	100.0	100.0	100.0	100.5	102.0	102.0	103.0	101.5	102.0	101.0	101.5	100.5	102.0	102.5
EFPH	HRS	-	1.0	-	1.0	-	.9	-	1.1	-	.9	-	1.0	-	1.0	-	.9	-	1.0	-	1.1	-	0.9	-
ROD #21 POSITION	INS	-	36.40	-	36.40	-	36.40	-	36.30	-	36.30	-	36.30	-	36.40	-	36.40	-	36.40	-	36.40	-	36.40	-
ROD #22	"	-	36.30	-	36.33	-	36.33	-	36.23	-	36.23	-	36.23	-	36.33	-	36.33	-	36.33	-	36.33	-	36.33	-
ROD #23	"	-	36.16	-	36.41	-	36.41	-	36.29	-	36.29	-	36.29	-	36.42	-	36.42	-	36.42	-	36.39	-	36.39	-
ROD #24	"	-	36.17	-	36.42	-	36.42	-	36.30	-	36.30	-	36.30	-	36.43	-	36.43	-	36.43	-	36.40	-	36.40	-
ROD #61	"	-	36.22	-	36.22	-	36.22	-	36.12	-	36.12	-	36.12	-	36.23	-	36.22	-	36.22	-	36.22	-	36.22	-
ROD #62	"	-	35.87	-	36.12	-	36.12	-	36.03	-	36.03	-	36.03	-	36.15	-	36.15	-	36.15	-	36.14	-	36.14	-
ROD #63	"	-	35.96	-	36.21	-	36.21	-	36.12	-	36.11	-	36.11	-	36.24	-	36.24	-	36.24	-	36.22	-	36.22	-
ROD #64	"	-	36.25	-	36.25	-	36.25	-	36.15	-	36.15	-	36.15	-	36.25	-	36.25	-	36.25	-	36.25	-	36.25	-

DL-5-225
REACTIVITY LIFETIME

13

Test Group

7/22- 7/24/52

TABLE IC

[illegible][illegible]

SUBJECT DL-S-225

16

DUQUESNE LIGHT COMPANY REACTIVITY LIFETIME

POWER STATIONS

SHIPPING PORT APS

DATE July 27-28-29

TABLE IC

DATE	7-28	7-29
TIME	0500 0600 0700 0800 0900 1000 1100 1200 1300 1400 1430 1500 1600 1700 1730 1800 1900 2000 2100 2200 2230 2300 2400 0100	
MAIN GENERATOR OUTPUT MW	69.5 69.5 69.1 65.9 69.1 65.0 64.6 63.9 69.1 69.0 — 65.0 69.7 69.9 — 69.8 65.1 69.3 65.0 69.8 — 66.9 69.5 69.0	
NET STATION OUTPUT - MW	58.4 56.2 57.1 58.1 56.2 58.0 57.4 56.3 57.2 56.2 — 57.8 56.4 57.5 — 57.5 57.6 57.1 57.9 57.4 — 59.5 57.0 56.9	
CHA. A LINEAR LEVEL %	103.0 102.5 103.0 102.5 103.0 103.0 102.0 102.0 102.0 102.5 102.5 101.5 101.5 102.5 102.0 101.5 101.0 101.0 102.0 102.5 102.0 101.5 102.0 101.5	
CHA. B " " " " "	99.0 98.5 99.5 100.0 102.5 103.0 101.5 102.0 109.0 105.0 106.0 104.5 104.5 105.0 105.0 104.5 103.0 102.0 102.0 102.0 100.0 99.5 99.0 98.0	
CHA. C " " " " "	102.0 101.5 102.0 102.0 102.5 102.5 100.0 102.0 102.0 103.0 103.5 103.0 103.5 105.0 105.0 109.5 109.5 104.5 105.0 105.5 109.5 109.0 103.5 102.0	
CHA. D " " " " "	105.0 109.5 109.0 103.0 102.5 102.0 100.0 100.0 99.5 101.0 102.0 100.5 100.0 100.0 100.0 100.0 100.0 103.0 109.5 105.5 105.0 105.0 109.0	
EE PH	1.0 1.0 0.9 1.0 1.0 — 1.0 1.0 0.9 1.0 — 1.0 1.0 1.0 — 1.0 1.0 1.0 1.0 0.9 — 1.0 1.0 0.9	
ROD #21 POSITION IN	38.32 38.29 38.24 38.24 38.21 38.21 38.15 38.30 38.30 38.30 38.30 38.22 38.22 38.22 38.24 38.23 38.23 38.27 38.31 38.31 38.31 38.35 38.45 38.45	
ROD #22 " "	38.23 38.16 38.16 38.16 38.14 38.14 38.08 38.23 38.23 38.23 38.23 38.14 38.14 38.14 38.16 38.15 38.15 38.19 38.23 38.23 38.23 38.27 38.37 38.37	
"23 " "	38.29 38.22 38.22 38.22 38.20 38.20 38.14 38.29 38.29 38.29 38.29 38.20 38.20 38.20 38.22 38.21 38.21 38.25 38.30 38.30 38.30 38.34 38.43 38.43	
"24 " "	38.30 38.23 38.23 38.23 38.21 38.21 38.15 38.30 38.30 38.30 38.30 38.21 38.21 38.21 38.23 38.22 38.22 38.26 38.30 38.30 38.30 38.34 38.44 38.44	
ROD #61 " "	38.07 38.00 38.00 38.00 37.96 37.96 37.92 38.05 38.05 38.05 38.05 37.96 37.96 37.96 38.00 37.98 37.98 38.01 38.08 38.08 38.08 38.10 38.21 38.21	
"62 " "	37.97 37.91 37.91 37.91 37.87 37.87 37.83 37.96 37.96 37.96 37.96 37.87 37.87 37.87 37.91 37.89 37.89 37.91 37.98 37.98 37.98 38.00 38.11 38.11	
"63 " "	38.06 38.00 38.00 38.00 37.95 37.95 37.92 38.05 38.05 38.05 38.05 37.96 37.96 37.96 38.00 37.98 37.98 38.01 38.09 38.09 38.09 38.21 38.21 38.21	
"64 " "	38.10 38.03 38.03 38.03 37.97 37.97 37.89 38.07 38.07 38.07 38.07 37.98 37.98 37.98 38.03 38.02 38.02 38.04 38.10 38.10 38.10 38.12 38.24 38.24	
DATE	7-29	
TIME	0200 0230 0300 0330 0400 0430 0500 0530 0600 0630 0700 0730 0800 0830 0900 0930 1000 1030 1100 1130 1200 1230 1300 1330	
MAIN GENERATOR OUTPUT MW	64.9 — 64.6 — 64.2 — 63.9 — 64.2 — 64.3 — 64.5 — 69.0 — 65.0 — 64.5 — 63.6 — 63.8 —	
NET STATION OUTPUT MW	57.0 — 57.6 — 56.8 — 56.9 — 56.9 — 56.9 — 56.9 — 56.7 — 57.7 — 57.3 — 56.1 — 56.5 —	
CHA. A LINEAR LEVEL %	103.0 103.0 103.5 103.5 103.8 103.5 103.5 104.0 104.5 105.0 104.0 102.5 102.5 102.0 104.0 104.0 102.5 101.5 102.5 102.0 101.2 101.5 100.5 102.0	
CHA. B " " " " "	99.0 99.5 100.0 101.0 102.0 102.5 103.5 105.0 105.0 105.5 105.0 102.5 102.5 103.0 105.0 109.5 102.5 102.5 102.0 101.5 100.0 109.0 100.0 101.0	
CHA. C " " " " "	103.5 103.5 103.0 103.0 102.5 102.5 102.5 102.5 102.5 103.0 102.5 101.0 101.5 101.0 102.5 103.0 102.0 102.0 102.0 101.5 101.7 102.0 102.0 102.0	
CHA. D " " " " "	106.5 105.0 102.5 102.0 101.0 100.5 100.0 99.5 100.0 102.0 101.0 100.0 100.0 102.5 103.0 103.0 101.5 101.5 101.5 102.0 102.0 102.0 102.0 102.5	
EE PH	1.0 — 1.0 — 0.9 — 1.0 — 1.0 — 1.0 — 1.0 — 1.0 — 1.0 — 1.0 — 1.0 — 1.0 — 1.0 — 1.0 — 1.0 — 1.0 — 1.0 — 1.0 — 1.0 — 1.0 —	
ROD #21 POSITION IN	38.55 38.55 38.56 38.56 38.56 38.56 38.56 38.56 38.56 38.56 38.56 38.56 38.56 38.56 38.56 38.56 38.56 38.56 38.56 38.56 38.63 38.63 38.63 38.63	
"22 " "	38.47 38.47 38.48 38.48 38.48 38.48 38.48 38.48 38.48 38.48 38.48 38.48 38.48 38.48 38.48 38.48 38.48 38.48 38.48 38.48 38.56 38.56 38.56 38.56	
"23 " "	38.53 38.54 38.54 38.54 38.54 38.54 38.54 38.54 38.54 38.54 38.54 38.54 38.54 38.54 38.54 38.54 38.54 38.54 38.54 38.54 38.61 38.61 38.61 38.61	
"24 " "	38.54 38.05 38.05 38.05 38.05 38.05 38.05 38.05 38.30 38.54 38.54 38.54 38.54 38.54 38.54 38.54 38.54 38.54 38.54 38.54 38.62 38.62 38.62 38.62	
ROD #61 " "	38.29 38.29 38.29 38.30 38.30 38.30 38.30 38.30 38.30 38.30 38.30 38.30 38.30 38.30 38.30 38.30 38.30 38.30 38.30 38.30 38.38 38.38 38.38 38.38	
"62 " "	38.20 38.28 38.28 38.28 38.28	
"63 " "	38.29 38.09 37.80 37.80 37.80 37.80 37.80 37.80 38.05 38.30 38.30 38.30 38.30 38.30 38.30 38.30 38.30 38.30 38.30 38.30 38.38 38.38 38.38 38.38	
"64 " "	38.32 38.03 38.32 38.32 38.32 38.32 38.32 38.32 38.32 38.32 38.32 38.32 38.32 38.32 38.32 38.32 38.32 38.32 38.32 38.32 38.40 38.40 38.40 38.40	

17

Duguesne Light _____ COMPANY

Power Stations

Shipping point A.P.S

Test_Group

DATE 7/29 - 7/31/58

TABLE I C

[illegible]

DATE	7-30	7-30	7-30	7-30	7-30	7-30	7-30	7-30	7-30	7-30	7-30	7-30	7-30	7-30	7-30	7-30	7-30	7-31	7-31	7-31	7-31	7-31	7-31	7-31
TIME	0900	1000	1100	1200	1300	1400	1500	1600	1630	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700
MAIN GENERATOR Output - MW	65.1	65.2	64.8	63.9	64.2	64.4	64.6	—	64.7	65.3	64.2	64.2	63.6	69.1	64.6	64.5	54.3	64.4	0	0	0	0	0	6.0
NET STATION Output - MW	57.9	57.9	57.9	57.2	57.7	55.9	57.1	57.3	—	57.0	58.4	56.7	57.1	56.2	56.8	57.6	57.1	57.0	56.9	0	0	0	0	0
CHA. H LINEAR LEVEL - %	104	103	103	102	101.5	101.5	101.5	102.5	102.0	100.5	100.5	100.5	100.5	100.0	102.5	103.5	103.0	103.5	103.5	0	0	0	0	11.0
CHA. B	"	"	"	105	103.5	102.5	100	99	100.0	99.0	100.0	99.5	98.5	98.5	98.5	99.0	99.5	102.0	104.0	103.0	104.5	105.0	0	10.0
CHA C	"	"	"	103.5	103.5	103.5	102.5	102.5	104.0	103.0	105.0	104.5	103.0	103.0	102.5	103.5	104.5	103.0	103.0	103.0	0	0	0	11.5
CHA D	"	"	"	102.5	103.0	103.0	102.5	103.0	104.5	106.0	107.0	107.0	105.0	103.5	103.0	102.5	102.5	104.5	101.5	101.0	100.5	0	0	11.0
EFPH	1.0	1.0	1.0	1.0	.9	1.0	1.0	.9	—	1.0	0.9	1.0	.9	1.0	1.0	1.0	0.9	1.0	1.1	0	0	0	0	0
ROD #21 POSITION	%	38.85	38.82	38.77	38.80	38.92	38.98	38.98	38.98	38.94	38.94	39.01	39.06	39.10	39.19	39.23	39.14	38.97	38.97	38.97	0	0	0	GROUP 59.60
#22	"	38.77	38.75	38.69	38.72	38.85	38.90	38.90	38.90	38.86	38.86	38.93	38.98	39.02	39.12	39.15	39.06	38.89	38.89	38.89	0	0	0	TR (45) 69.52
#23	"	38.83	38.81	38.75	38.78	38.92	38.96	38.96	38.96	38.92	38.92	39.00	39.05	39.08	39.18	39.21	39.13	38.95	38.95	38.95	0	0	0	HIGHT 69.54
#24	"	38.84	38.82	38.76	38.79	38.92	38.97	38.97	38.97	38.94	38.94	39.06	39.05	39.09	39.19	39.22	39.19	38.96	38.96	38.96	0	0	0	TOR 69.59
#61	"	38.59	38.58	38.47	38.52	38.67	38.72	38.72	38.68	38.68	38.68	38.75	38.80	38.84	38.96	38.96	38.88	38.93	38.93	38.93	0	0	0	#1 69.61
#62	"	38.50	38.49	38.39	38.42	38.58	38.62	38.62	38.58	38.58	38.58	38.66	38.70	38.74	38.86	38.87	38.79	38.84	38.84	38.84	0	0	0	#2 69.52
#63	"	38.59	38.58	38.57	38.57	38.77	38.71	38.71	38.67	38.68	38.68	38.75	38.79	38.83	38.95	38.96	38.87	38.93	38.93	38.93	0	0	0	#3 69.61
#64	"	38.61	38.60	38.50	38.54	38.69	38.74	38.74	38.70	38.70	38.70	38.77	38.82	38.86	38.98	38.99	38.90	38.96	38.96	38.96	0	0	0	#4 69.51

SUBJECT DL-S-225 PAGE NO. 18

DUQUESNE LIGHT COMPANY REACTIVITY LIFE TIME

POWER STATIONS DEPARTMENT

SHIPPING PORT AFS. DIVISION COMPILED BY TEST GROUP CHECKED BY DATE 7-31-58 / 8-1-58

TABLE IC

CS-7112

DATE	TIME	7-31	7-31	7-31	7-31	7-31	7-31	7-31	7-31	7-31	7-31	7-31	7-31	7-31	7-31	7-31	7-31	8-1	8-1	8-1	8-1	8-1	8-1	
		0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600
MAIN GENERATOR OUTPUT	MW	24.9	42.4	48.7	47.5	55.7	58.3	58.8	60.4	60.9	60.7	60.0	59.9	59.8	59.9	61.8	64.4	64.0	63.9	64.2	63.5	64.5	63.5	64.3
NET STATION OUTPUT	MW	18.3	37.6	41.0	40.4	48.7	51.2	51.4	53.5	53.0	53.5	53.2	52.6	52.8	52.6	54.7	56.9	56.9	57.0	56.7	56.6	56.7	56.4	57.2
CHA. A LINEAR LEVEL	%	005	68.0	75.0	78.0	97.2	92.0	97.0	94.0	95.0	94.0	94.0	94.5	96.0	96.5	103.0	102.5	103.0	104.0	103.0	105.0	103.5	104.5	104.0
CHA. B LINEAR LEVEL	%	005	65.0	67.0	72.0	92.5	92.0	101.0	99.5	97.5	95.5	92.5	92.5	92.0	91.0	99.0	97.5	99.0	98.0	97.5	99.5	99.5	101.5	101.0
CHA. C LINEAR LEVEL	%	005	65.0	67.5	70.0	85.0	89.0	90.0	99.0	99.5	99.0	97.5	97.5	97.0	97.0	102.5	100.5	100.5	100.5	102.5	100.0	99.5	100.5	100.0
CHA. D LINEAR LEVEL	%	005	63.0	68.0	70.0	87.0	90.0	90.0	96.5	96.5	96.5	96.0	96.5	97.0	97.5	109.5	103.0	102.5	102.0	104.0	101.0	100.0	100.5	100.0
EFPH	hr	-	.6	.6	.7	.9	.9	.9	.9	1.1	0.9	0.9	0.9	0.9	0.9	0.9	1.0	0.8	1.0	1.0	0.9	1.0	1.0	0.9
ROD POSITION NO. 21	IN.	61.34	54.09	48.23	44.64	40.51	37.77	35.77	34.77	34.02	34.02	34.26	34.63	34.99	35.48	35.61	35.55	35.66	35.90	36.35	36.45	36.89	37.14	37.27
22	IN.	61.26	54.01	48.15	44.56	40.44	37.61	35.69	34.69	33.94	33.94	34.18	34.55	34.91	35.41	35.53	35.47	35.59	35.82	36.28	36.38	36.81	37.07	37.19
23	IN.	61.33	54.08	48.22	44.63	40.50	37.75	35.75	34.75	33.76	33.76	34.29	34.64	35.01	35.51	35.64	35.58	35.71	35.96	36.39	36.63	36.97	37.13	37.26
24	IN.	61.46	54.20	48.35	44.75	40.63	37.88	35.88	34.88	34.14	34.14	34.38	34.75	35.10	35.59	35.72	35.67	35.77	36.02	36.47	36.76	37.01	37.26	37.38
ROD POSITION NO. 61	IN.	61.37	54.12	48.28	44.67	40.54	37.80	35.80	34.80	34.05	34.05	34.30	34.67	35.05	35.55	35.67	35.59	35.73	35.99	36.42	36.74	36.96	37.21	37.34
62	IN.	61.27	54.03	48.20	44.58	40.45	37.71	35.71	34.71	33.70	33.70	34.20	34.58	34.96	35.46	35.58	35.51	35.65	35.90	36.34	36.65	36.97	37.12	37.25
63	IN.	61.36	54.12	48.29	44.67	40.54	37.80	35.80	34.80	34.05	34.05	34.30	34.67	35.05	35.55	35.67	35.59	35.72	35.98	36.42	36.74	36.96	37.21	37.34
64	IN.	61.27	54.02	48.19	44.58	40.45	37.70	35.70	34.70	33.95	33.95	34.20	34.57	34.95	35.45	35.57	35.49	35.63	35.88	36.32	36.64	36.96	37.11	37.24

DATE	TIME	8-1	8-1	8-1	8-1	8-1	8-1	8-1	8-1	8-1	8-1	8-1	8-1	8-1	8-1	8-1	8-1	8-1	8-2	8-2	8-2	8-2	8-2	8-2
		0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500
MAIN GENERATOR OUTPUT	MW	64.4	63.0	64.6	65.2	64.6	64.7	65.5	65.1	65.2	65.4	64.3	64.3	65.0	64.9	65.1	64.9	64.8	64.9	64.4	65.0	64.6	64.8	64.6
NET STATION OUTPUT	MW	56.9	54.3	58.4	57.8	58.3	58.3	58.3	58.3	57.9	57.9	57.1	56.9	57.2	58.2	57.8	57.2	57.3	57.8	57.0	57.8	57.4	57.5	57.2
CHA. A LINEAR LEVEL	%	103	102.0	104.5	102.5	102.5	102.5	102.5	102.0	102.5	101.5	100.0	102.5	101.5	103.0	104.0	104.0	104.5	104.5	105.0	104.5	104.5	105.0	104.5
CHA. B LINEAR LEVEL	%	101	100.0	104.0	102.0	102.0	102.5	102.0	102.0	102.0	100.0	98.0	100.0	98.0	99.5	100.0	100.0	100.0	100.0	100.5	100.0	101.0	101.5	101.5
CHA. C LINEAR LEVEL	%	100	98.5	102.5	101.5	102.0	102.5	102.5	102.5	103.0	102.0	105.0	102.5	101.5	102.0	102.0	102.0	102.0	101.5	101.0	100.5	101.0	101.0	101.0
CHA. D LINEAR LEVEL	%	99	98.0	100.0	99.0	99.0	100.0	101.0	101.5	102.0	101.0	100.0	103.5	103.0	103.0	103.0	102.5	102.5	102.0	102.0	102.0	101.0	100.5	100.5
EFPH	hr	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.9	1.0	1.0	0.9	1.0	1.0	1.0	1.0	0.9	1.0	1.0	0.9	1.0	1.0	1.0
ROD POSITION NO. 21	IN.	37.47	37.72	37.81	37.81	37.90	38.01	38.09	38.15	38.30	38.43	38.56	38.78	38.73	38.78	38.78	38.78	38.83	38.94	39.10	39.10	39.23	39.23	39.23
22	IN.	37.39	37.64	37.73	37.73	37.82	37.93	38.01	38.07	38.23	38.35	38.48	38.72	38.65	38.70	38.70	38.70	38.85	38.86	39.02	39.02	39.15	39.15	39.15
23	IN.	37.46	37.70	37.80	37.80	37.89	38.00	38.08	38.13	38.29	38.41	38.54	38.77	38.71	38.76	38.76	38.76	38.91	38.92	39.09	39.09	39.21	39.21	39.21
24	IN.	37.58	37.83	37.92	37.92	38.01	38.12	38.20	38.26	38.42	38.54	38.68	38.90	38.64	38.89	38.89	38.89	39.05	39.06	39.22	39.22	39.35	39.35	39.35
ROD POSITION NO. 61	IN.	37.54	37.79	37.88	37.88	38.04	38.09	38.16	38.23	38.38	38.50	38.63	38.87	38.80	38.86	38.86	38.86	39.00	39.01	39.17	39.17	39.30	39.30	39.30
62	IN.	37.45	37.69	37.79	37.79	37.94	37.99	38.07	38.14	38.28	38.40	38.53	38.77	38.70	38.76	38.76	38.76	38.91	38.91	39.07	39.07	39.20	39.20	39.20
63	IN.	37.54	37.79	37.88	37.88	38.04	38.08	38.16	38.22	38.38	38.50	38.63	38.86	38.79	38.85	38.85	38.85	39.00	39.00	39.17	39.17	39.30	39.30	39.30
64	IN.	37.44	37.69	37.78	37.78	37.93	37.98	38.06	38.13	38.28	38.40	38.53	38.76	38.69	38.75	38.75	38.75	38.90	38.90	39.07	39.07	39.20	39.20	39.20

SUBJECT DL-S-225 19

DUQUESNE LIGHT COMPANY REACTIVITY LIFE TIME

POWER STATIONS

SHIPPING PORT APS. Test Group.

8/2/58 - 8/3/58

TABLE I C

DATE		6/2/58	7/2/58	8/2/58	9/2/58	10/2/58	11/2/58	12/2/58	13/2/58	14/2/58	15/2/58	16/2/58	17/2/58	18/2/58	19/2/58	20/2/58	21/2/58	22/2/58	23/2/58	24/2/58					
TIME		0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1730	1750	1800	1815	1830	1845	1900	1915	1930	1945	2000	
MAIN GENERATOR OUTPUT MW		64.5	63.9	63.6	65.9	65.0	65.0	64.5	0	0	0		27.7	-	-	45.7	-	-	-	49.2	-	-	-	49.0	
NET STATION OUTPUT MW		57.5	56.7	56.4	56.7	58.0	57.6	57.1	0	0	0	0	31.5	44.0	44.0	44.0	X	X	-	44.0	-	-	-	44	
CHA. A LINEAR LEVEL %		102.5	102.5	102.0	104.0	103.5	103.0	102.3	0	0	0	0	12.0	45	68.0	64.0	63.0	63.0	(59.0)	70.0	70.0	72.0	73.0	73.0	75.0
CHA. B LINEAR LEVEL %		100	100	100	103.5	102.5	102.5	100.5	0	0	0	0	11.0	42	57.5	62.0	62.5	65.0	61.0	67.0	67.0	66.0	67.0	69.0	69.0
CHA. C LINEAR LEVEL %		100	100	100	103.0	102.5	102.5	0	0	0	0	0	12.0	47.5	65.0	68.0	70.0	68.0	68.0	69.0	73.0	75.0	77.0	77.0	79.0
CHA. D LINEAR LEVEL %		99	99	99	101.5	101.0	101.5	0	0	0	0	0	12.5	46	58.0	62.0	70.0	70.0	71.0	70.0	73.0	75.0	76.0	78.0	75.0
EFPH hr.		0.9	1.0	1.0	1.0	1.0	1.0	-	0	0	0	0	0.4	-	-	-	-	-	-	-	-	-	-	-	1418.6
ROD POSITION NO. 21		IN.	39.23	39.39	39.44	39.48	39.43	39.31	0	0	0	0	69.52	60.26	56.68	54.25	53.24	51.49	50.51	49.10	47.65	46.93	45.97	45.08	44.02
22		IN.	39.15	39.32	39.36	39.41	39.36	39.23	0	0	0	0	69.44	60.19	56.60	54.18	53.20	51.42	50.44	49.03	47.58	46.95	45.29	45.01	43.94
23		IN.	39.21	39.38	39.42	39.47	39.42	39.29	0	0	0	0	69.50	60.25	56.67	54.24	53.26	51.47	50.51	49.09	47.64	46.92	45.95	45.07	43.88
24		IN.	39.35	39.51	39.55	39.60	39.55	39.42	0	0	0	0	69.51	60.26	56.67	54.25	53.26	51.48	50.51	49.10	47.66	46.93	45.96	45.07	43.88
ROD POSITION NO. 61		IN.	39.30	39.46	39.51	39.55	39.50	39.36	0	0	0	0	69.13	59.92	56.34	54.21	53.24	51.46	50.47	49.08	47.63	46.80	45.92	45.05	43.91
62		IN.	39.20	39.37	39.41	39.45	39.40	39.27	0	0	0	0	69.16	59.95	56.37	54.24	53.23	51.49	50.49	49.11	47.66	46.83	45.96	45.09	43.91
63		IN.	39.30	39.46	39.51	39.55	39.49	39.36	0	0	0	0	69.13	59.92	56.34	54.21	53.24	51.46	50.46	49.08	47.63	46.80	45.92	45.05	43.87
64		IN.	39.20	39.37	39.41	39.45	39.40	39.27	0	0	0	0	69.16	59.95	56.37	54.23	53.21	51.47	50.49	49.11	47.65	46.82	45.94	45.07	43.89

[illegible]

REACTIVITY LIFETIME

DUQUESNE LIGHT COMPANY
POWER STATIONS DEPARTMENT
SHIPPINGPORT A.P.S. DIVISION

COPILED BY TEST GROUP CHECKED BY _____ DATE 8/3/58-8/5/58

TABLE I.C

[illegible][illegible]

Duquesne Light COMPANY
Power Stations DEPARTMENT
Shippingport A.P.S. DIVISION

REACTIVITY LIFETIME

BY Test Group CHECKED BY _____ DATE 8-5-58 to 8-7-58

TABLE I C

Date				8/5/58	9/5/58	10/5/58	11/5/58	12/5/58	1/5/59	2/5/59	3/5/59	4/5/59	5/5/59	6/5/59	7/5/59	8/5/59	9/5/59	10/5/59	11/5/59	12/5/59	1/6/60	2/6/60	3/6/60	4/6/60	5/6/60	6/6/60	7/6/60	8/6/60	9/6/60	10/6/60	11/6/60	12/6/60	
Time				1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000							
Main Generator Output		Output	MW	64.5	64.1	64.9	64.4	64.8	65.4	64.7	64.6	64.3	64.5	64.5	64.0	64.3	64.4	64.5	64.3	64.2	64.3	64.5	64.5	64.6	64.9	65.1							
Net Station Output			MW	56.8	57.1	57.4	56.9	57.5	57.6	57.5	57.4	57.1	57.1	57.2	57.0	56.2	57.6	57.5	56.6	57.2	57.0	57.3	56.9	57.6	57.4	57.7							
Ch A Linear Level			%	99.0	101.0	100.5	100.0	102.0	102.5	101.5	101.0	101.5	102.0	102.5	102.5	102.0	102.5	102.5	102.5	102.5	102.5	103.0	103.0	103.0	103.0	102.5							
Ch B Linear Level			%	97.0	99.0	98.0	97.5	99.5	99.0	98.0	98.0	98.0	100.0	98.0	100.0	100.0	100.5	100.5	101.0	101.0	100.5	101.0	102.0	101.0	101.0	100.0							
Ch C Linear Level			%	100.0	101.5	101.5	100.5	102.5	102.5	102.0	101.5	101.5	102.5	101.0	100.0	100.5	101.0	100.5	100.5	100.5	100.0	100.5	101.0	101.5	102.0	101.5							
Ch D Linear Level			%	100.0	102.0	101.5	101.5	103.5	103.5	101.5	100.0	100.0	101.0	101.0	100.0	100.0	100.0	100.0	99.5	99.5	99.5	100.0	100.5	100.5	102.0	101.5							
EFPH			hr	1.0	0.9	0.9	1.0	0.9	1.0	0.9	1.0	0.9	1.0	.9	1.0	1.0	0.9	1.0	1.0	1.0	0.9	1.0	0.9	1.0	1.0	1.0							
Rod Position	No.	21	m.	40.28	40.40	40.35	40.35	40.35	40.31	40.31	40.43	40.48	40.52	40.52	40.59	40.59	40.59	40.59	40.59	40.59	40.59	40.59	40.64	40.64	40.64	40.60							
		22	m.	40.21	40.33	40.27	40.27	40.27	40.23	40.23	40.36	40.40	40.44	40.44	40.51	40.51	40.51	40.51	40.51	40.51	40.51	40.51	40.56	40.56	40.56	40.53							
		23	m.	40.27	40.39	40.33	40.33	40.33	40.30	40.30	40.42	40.46	40.50	40.50	40.58	40.58	40.58	40.58	40.58	40.58	40.58	40.63	40.63	40.63	40.63	40.59							
		24	m.	40.27	40.39	40.34	40.34	40.34	40.30	40.30	40.33	40.37	40.50	40.50	40.58	40.59	40.59	40.59	40.59	40.59	40.59	40.63	40.63	40.63	40.63	40.59							
Rod Position	No.	61	m.	40.18	40.31	40.25	40.25	40.25	40.21	40.21	40.33	40.38	40.42	40.42	40.50	40.50	40.50	40.50	40.50	40.50	40.50	40.50	40.54	40.54	40.54	40.50							
		62	m.	40.21	40.34	40.28	40.28	40.28	40.24	40.24	40.36	40.42	40.45	40.46	40.53	40.52	40.52	40.52	40.52	40.52	40.52	40.52	40.54	40.54	40.54	40.50							
		63	m.	40.18	40.31	40.25	40.25	40.25	40.21	40.21	40.34	40.39	40.41	40.41	40.50	40.50	40.50	40.50	40.50	40.50	40.50	40.54	40.54	40.54	40.54	40.50							
		64	m.	40.20	40.33	40.27	40.27	40.27	40.24	40.24	40.36	40.41	40.44	40.44	40.51	40.52	40.52	40.52	40.52	40.52	40.52	40.56	40.56	40.56	40.56	40.53							

Date					8/1/58	8/1/58	8/1/58	8/6/58	8/6/58	8/6/58	8/6/58	8/6/58	8/6/58	8/6/58	8/6/58	8/6/58	8/6/58	8/6/58	8/7/58	8/7/58	8/7/58	8/7/58	8/7/58	8/7/58	8/7/58	8/7/58	8/7/58
Time					1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	0100	0200	0300	0400	0500	0600	0700	0800	0900
Main Generator Output			MW		65.2	65.3	65.4	65.1	64.4	64.5	64.4	64.6	65.1	64.6	64.9	65.9	63.6	64.5	65.0	64.9	64.9	65.0	64.5	64.6	64.9	64.5	64.4
Net Station Output			MW		58.1	57.9	58.1	57.6	57.1	56.8	57.2	57.4	57.7	57.3	57.5	58.0	56.4	57.3	57.3	58.0	58.1	57.5	57.2	57.5	57.3	57.2	56.9
Ch A linear Level			%		103.0	103.0	102.5	101.5	100.5	100.5	102.0	102.5	102.5	102.5	102.5	102.5	102.5	103.5	103.0	103.0	103.5	104.0	103.0	104.0	103.0	102.5	103.5
Ch B linear Level			%		100.0	100.0	100.0	98.5	97.5	98.0	98.5	99.0	97.5	100.0	100.0	100.0	101.0	102.0	100.5	102.0	102.5	102.0	102.0	102.0	101.5	100.0	101.0
Ch C linear Level			%		102.5	102.5	102.5	102.0	101.5	101.0	102.0	102.5	102.5	102.0	102.0	102.0	102.0	102.0	102.0	102.0	102.0	102.0	101.5	102.0	102.0	101.0	102.0
Ch D linear Level			%		102.5	103.0	103.0	102.5	102.5	102.0	102.5	103.0	102.5	102.5	102.5	102.0	101.0	101.5	100.0	100.0	101.0	101.0	100.5	101.0	100.5	100.5	102.0
EFPH			hr		1.0	1.0	1.0	1.0	0.9	1.0	0.9	1.0	1.0	.9	.9	1.1	.9	1.0	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Rad Position	No.	21	m.		40.60	40.59	40.56	40.56	40.65	40.69	40.77	40.82	40.77	40.77	40.77	40.82	40.89	40.93	40.81	40.81	40.81	40.81	40.95	40.85	40.93	40.99	
		22	m.		40.53	40.52	40.48	40.48	40.57	40.61	40.69	40.73	40.69	40.69	40.69	40.74	40.82	40.85	40.73	40.73	40.73	40.73	40.87	40.78	40.85	40.91	
		23	m.		40.59	40.58	40.54	40.54	40.63	40.67	40.75	40.80	40.75	40.75	40.75	40.80	40.89	40.92	40.80	40.80	40.80	40.80	40.93	40.83	40.91	40.97	
		24	m.		40.59	40.57	40.55	40.55	40.64	40.68	40.76	40.80	40.76	40.76	40.76	40.81	40.89	40.93	40.80	40.80	40.80	40.80	40.94	40.84	40.92	40.98	
Rad Position	No.	61	m.		40.50	40.49	40.46	40.46	40.55	40.59	40.67	40.72	40.66	40.66	40.66	40.71	40.79	40.80	40.71	40.71	40.71	40.71	40.84	40.72	40.88	40.88	
		62	m.		40.53	40.52	40.48	40.48	40.58	40.62	40.70	40.74	40.70	40.70	40.70	40.79	40.82	40.83	40.74	40.74	40.74	40.74	40.87	40.75	40.91	40.91	
		63	m.		40.50	40.51	40.45	40.45	40.55	40.59	40.67	40.71	40.66	40.66	40.66	40.71	40.79	40.80	40.71	40.71	40.71	40.71	40.83	40.72	40.88	40.88	
		64	m.		40.53	40.51	40.48	40.48	40.57	40.61	40.69	40.73	40.68	40.68	40.68	40.73	40.81	40.82	40.73	40.73	40.73	40.73	40.86	40.74	40.90	40.90	

SHEET NO. 23

REACTIVITY LIFE TIME

COMPILED BY Test Group CHECKED BY _____

DATE 8-9-58 to 8-11-58

TABLE IC

[illegible]

SUBJECT: DL-S-225 SHEET NO. 25

DUQUESNE LIGHT COMPANY Reactivity LIFE TIME

POWER STATION DEPARTMENT

SHIPPING PORTAPS DIVISION COMPILED BY Test Group CHECKED BY: DATE 8/13/58 To 8/14/58

TABLE IC

DATE	TIME	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
MAIN GEN. OUTPUT MW		64.9	65.0	65.1	65.0	64.9	65.1	65.1	64.5	63.7	64.5	64.0	64.0	65.0	64.5	64.8	64.5	64.6	63.9	63.7	63.9	63.9	63.7	64.2
NET STATION OUTPUT MW		56.9	57.8	58.0	57.6	57.7	57.9	57.5	57.5	56.7	57.2	57.4	58.1	57.2	57.3	57.5	57.1	57.8	56.4	56.3	57.0	56.3	54.3	57.3
CH A LINEAR LEVEL %		103.5	104.0	103.0	103.0	104.0	103.5	104.0	102.5	103.0	102.5	102.5	102.5	103.0	104.0	103.0	103.0	102.5	103.0	102.5	102.5	102.5	102.5	102.5
CH B " " " "		101.0	101.0	100.0	100.0	100.5	100.5	102.0	100.0	100.0	100.0	99.0	100.0	100.0	102.5	100.0	101.0	100.0	100.5	99.5	99.5	99.0	99.0	99.5
CH C " " " "		102.5	102.5	102.5	102.0	103.0	102.5	103.5	102.0	102.0	101.0	101.5	102.0	102.5	103.0	102.5	102.5	102.0	102.5	101.5	102.0	101.5	102.0	102.0
CH D " " " "		100.0	101.0	100.0	100.0	99.0	101.0	101.0	100.5	101.0	100.0	100.0	100.5	100.0	103.0	100.0	100.0	99.5	100.0	99.5	99.5	99.5	100.0	100.0
EFPH HRS.		1.0	1.0	1.0	.9	1.0	1.0	1.0	.9	.9	1.0	1.0	0.9	1.0	1.0	.9	1.0	1.0	0.9	1.1	0.9	1.0	.9	1.0
ROD POSITION No. 21 IN.		43.39	43.29	43.24	43.24	43.31	43.31	43.38	43.38	43.65	43.60	43.57	43.57	43.59	43.57	43.50	43.50	43.50	43.52	43.56	43.67	43.72	43.77	43.77
22 "		43.16	43.16	43.16	43.16	43.23	43.23	43.31	43.40	43.52	43.52	43.49	43.49	43.51	43.49	43.43	43.43	43.43	43.45	43.49	43.59	43.65	43.69	43.69
23 "		43.22	43.22	43.22	43.22	43.30	43.30	43.37	43.36	43.62	43.58	43.55	43.55	43.58	43.53	43.48	43.48	43.48	43.51	43.55	43.65	43.70	43.76	43.75
24 "		43.23	43.23	43.23	43.23	43.30	43.30	43.38	43.47	43.64	43.59	43.55	43.55	43.57	43.55	43.49	43.49	43.49	43.51	43.55	43.66	43.71	43.76	43.76
ROD POSITION No. 61 "		43.05	43.05	43.05	43.05	43.12	43.12	43.17	43.28	43.49	43.38	43.31	43.31	43.38	43.37	43.30	43.30	43.30	43.33	43.36	43.46	43.50	43.55	43.55
62 "		43.08	43.08	43.08	43.08	43.16	43.16	43.20	43.31	43.48	43.41	43.45	43.45	43.41	43.41	43.33	43.33	43.33	43.36	43.37	43.49	43.54	43.58	43.58
63 "		43.05	43.05	43.05	43.05	43.12	43.12	43.17	43.28	43.49	43.38	43.41	43.41	43.38	43.38	43.30	43.30	43.30	43.33	43.36	43.46	43.50	43.55	43.55
64 "		43.07	43.07	43.07	43.07	43.15	43.15	43.20	43.31	43.47	43.40	43.43	43.43	43.40	43.40	43.32	43.32	43.32	43.36	43.38	43.48	43.52	43.58	43.58

DATE	TIME	8/14/58	8/14/58	8/14/58	8/14/58	8/14/58	8/14/58	8/14/58	8/14/58	8/14/58	8/14/58	8/14/58	8/14/58	8/14/58	8/14/58	8/14/58	8/14/58	8/14/58	8/14/58	8/14/58	8/14/58	8/14/58	8/14/58	8/14/58
MAIN GEN. OUTPUT MW		64.1	64.6	64.8	-	64.9	64.9	64.9	65.0	65.0	64.9	65.1	65.1	64.7	64.7									
NET STATION OUTPUT MW		56.4	57.6	57.3	-	57.7	57.8	57.3	57.6	57.8	57.7	57.3	58.1	57.8	57.5									
CH A LINEAR LEVEL %		102.5	102.5	102.0	103.5	103.0	103.0	104.0	103.5	103.0	103.0	103.5	102.5	104.0	105.0									
CH B " " " "		99.5	100	ADJUST CHANNEL	101.0	100.5	100.0	101.0	100.5	100.5	100.5	101.0	100.0	102.0	102.0									
CH C " " " "		102.0	102	102.5	103.0	103.0	102.5	103.0	102.5	103.0	103.0	102.5	101.0	-	103.5									
CH D " " " "		100.0	100	101.0	102.0	102.0	102.5	102.5	101.5	101.5	101.5	101.5	100.0	100.5	100.0									
EFPH HRS.		1.0	0.9	1.0	0.9	1.0	1.0	1.0	0.9	1.0	1.0	1.0	1.0	.9	1.0									
ROD POSITION No. 81 IN.		43.73	43.73	43.68	43.68	43.68	43.68	43.69	43.72	43.73	43.76	43.77	43.77	43.82	43.86									
22 "		43.65	43.65	43.60	43.60	43.60	43.60	43.61	43.69	43.65	43.68	43.70	43.70	43.74	43.78									
23 "		43.71	43.71	43.66	43.66	43.66	43.66	43.67	43.70	43.71	43.74	43.76	43.76	43.80	43.84									
24 "		43.72	43.72	43.67	43.67	43.67	43.67	43.67	43.70	43.72	43.75	43.76	43.76	43.80	43.84									
ROD POSITION No. 61 "		43.51	43.51	43.46	43.46	43.46	43.46	43.47	43.50	43.53	43.55	43.57	43.57	43.60	43.60									
62 "		43.51	43.51	43.49	43.49	43.49	43.49	43.49	43.54	43.57	43.57	43.57	43.60	43.60	43.65	43.70								
63 "		43.50	43.50	43.46	43.46	43.46	43.46	43.47	43.50	43.53	43.54	43.58	43.58	43.61	43.66									
64 "		43.53	43.53	43.48	43.48	43.48	43.48	43.49	43.52	43.55	43.57	43.59	43.59	43.63	43.68									

DL-5-225
 SUBJECT: REACTIVITY LIFETIME SHEET NO. 1
 DLC COMPANY
 PS DEPT DEPARTMENT
 SHIPPINGPORT DIVISION
 COMPILED BY TEST GROUP CHECKED BY DATE 7-1 THRU 7-5 58

TABLE II

DATE			7/1	7/1	7/1	7/2	7/2	7/2	7/2	7/2	7/2	7/3	7/3	7/3	7/3	7/3	7/3	7/4	7/4	7/4	7/4	7/4	7/5	7/5	7/5	
TIME			1730	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100
T _H	1A LOOP	OF	534.2	534.4	534.5	534.0	533.7	535.0	535.0	535.3	535.6	535.0	534.05	534.3	535.05	536.5	535.3	535.8	536.1	536.1	535.0	535.5	536.0	535.8	536.1	
	1B LOOP	OF	534.9	535.3	534.8	534.5	534.0	535.0	536.0	536.1	536.3	535.5	535.0	535.0	536.05	537.2	536.4	536.5	536.5	536.9	535.9	536.0	537.0	537.2	536.2	537
	1C LOOP	OF	534.2	535.0	534.3	534.0	533.5	535.0	535.0	535.3	535.5	535.0	534.0	534.0	535.0	536.9	536.0	536.5	536.0	536.5	536.5	535.0	536.0	536.3	535.2	536
	1D LOOP	OF	LOOP OUT OF SERVICE																							
T _C	1A LOOP	OF	507.9	508.3	509.4	509.3	509.1	509.0	509.0	509.3	509.7	509.0	508.5	509.0	509.4	509.5	508.6	509	509	509	509.3	509	509	509	509	509.0
	1B LOOP	OF	511.1	511.0	511.0	510.7	510.5	510.5	510.0	510.9	510.9	510.0	510.0	510.2	510.7	511.0	510.0	510.5	510.5	510.5	510.9	510	511	511	510.0	510.6
	1C LOOP	OF	508.8	508.9	510.0	510.0	510.0	510.0	510.0	509.6	509.9	509.7	510.0	510.0	510.2	510.0	509.0	509.0	509.5	509.6	509.8	509	510	510	509.1	509.5
	1D LOOP	OF	LOOP OUT OF SERVICE																							
FLOW	1A LOOP	LB/HR x10 ³	7.67	7.68	7.67	7.67	7.67	7.67	7.65	7.67	7.68	7.65	7.65	7.65	7.65	7.65	7.68	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65
	1B LOOP	"	7.32	7.32	7.31	7.31	7.31	7.31	7.31	7.33	7.32	7.32	7.32	7.32	7.32	7.31	7.22	7.32	7.32	7.32	7.32	7.32	7.33	7.33	7.33	7.32
	1C LOOP	"	7.53	7.53	7.52	7.52	7.50	7.50	7.50	7.52	7.52	7.52	7.52	7.50	7.50	7.53	7.52	7.52	7.52	7.52	7.52	7.52	7.52	7.52	7.52	7.52
PRESSURE	1A LOOP	PSIG	2020	2020	2020	2020	2050	2020	2020	2020	2020	2010	2010	2000	2000	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	
	1B "	"	2030	2025	2025	2025	2075	2050	2025	2030	2030	2025	2025	2025	2025	2030	2025	2025	2025	2025	2025	2025	2025	2025	2025	
	1C "	"	2010	2005	2000	2000	2050	2000	2000	2005	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	
	1D "	"	LOOP OUT OF SERVICE																							
AVERAGE COOLANT TEMP °F			521.9	522.0	522.2	522.3	522.5	522.5	522.5	522.7	523.1	522.5	522.0	522.4	523.0	523.5	522.4	522.7	522.7	523.0	523.3	522.3	523.0	523.3	522.5	523.0
SEED AT FOR D-10 °F			27.9	27.8	31.0	33.8	33.4	37.0	39.1	37.0	38.5	38.2	39.4	38.1	38.2	40.6	40.5	40.2	41.1	40.6	40.7	40.3	40.3	41.4	41.1	41.1
"	"	"	32.1	31.9	32.0	31.8	31.4	31.5	33.1	30.0	30.0	30.7	30.6	39.6	30.2	31.3	31.5	31.7	32.6	32.0	31.7	30.9	31.2	31.4	31.1	30.6
"	"	"	30.3	30.3	30.9	32.8	32.4	34.0	34.6	32.3	32.3	33.7	32.9	33.6	33.2	35.6	34.8	35.7	35.6	37.1	37.7	37.3	35.8	35.4	35.6	35.6
"	"	"	26.6	27.1	27.8	30.1	30.0	33.2	33.8	32.4	32.8	32.9	33.4	33.2	32.9	35.5	34.6	35.3	35.0	35.4	37.7	34.9	34.2	35.1	35.0	35.0
"	"	"	27.3	26.6	25.5	26.1	25.0	26.7	28.8	26.3	26.4	26.4	26.4	26.2	26.9	28.0	27.8	28.8	28.7	28.4	28.7	27.9	28.2	28.6	28.5	28.0
"	"	"	21.1	21.0	24.9	28.1	29.0	33.2	30.8	26.6	25.0	19.9	18.4	17.2	15.9	17.0	16.8	17.3	18.7	18.9	21.1	22.9	24.2	25.1	25.4	26.5
"	"	"	30.9	31.4	32.9	35.0	35.1	37.7	39.3	38.0	39.0	38.4	38.5	37.2	37.9	40.8	39.8	40.0	35.4	40.8	40.2	38.7	40.0	41.0	40.3	40.3
"	"	"	26.6	25.9	25.1	25.5	25.1	26.7	26.8	24.9	26.0	25.4	25.5	25.2	25.4	27.3	26.8	27.0	26.4	27.3	26.7	25.7	27.0	27.0	26.2	26.8
"	"	"	28.5	28.6	30.7	30.0	33.1	35.7	36.8	35.2	36.8	36.4	36.5	36.2	36.9	38.8	38.8	38.5	39.4	38.8	38.2	37.7	38.0	39.0	37.8	38.2
"	"	"	26.3	26.3	27.4	30.7	30.8	31.8	34.2	32.2	34.2	34.2	33.2	33.0	33.6	35.3	34.4	34.9	35.4	35.4	34.4	40.2	34.4	35.9	34.9	34.2
"	"	"	25.6	24.9	23.7	24.7	24.8	26.8	27.7	24.7	25.9	26.2	25.2	25.0	25.6	26.4	26.3	26.4	26.9	26.9	25.8	33.2	26.4	26.9	26.4	26.3
"	"	"	26.8	27.0	28.7	31.7	31.8	34.8	36.2	34.9	36.4	36.2	35.2	35.0	35.6	37.4	37.4	37.4	37.9	38.4	41.9	42.2	37.4	38.4	38.4	37.8

SUBJECT DL-5-225 SHEET NO. 2

DLC COMPANY

RS DEPT _____ DEPARTMENT _____

SHIPPING PORT CIVILIAN

COMPILED BY Test Group CHECKED BY _____ DATE 7-5 thru - 7-6-58

TABLE II (CON'T)

[illegible]

D.L.C. COMPANY: REACTIVITY LIFETIME
 P.S. DEPT DEPARTMENT:
 SHIPPING PORT DIVISION: COMPLETION # TEST GROUP CHECKED BY: DATE 7/9/58-7/13/58

TABLE II (CON'T)

DATE			7-9	7-9	7-9	7-10	7-10	7-10	7-10	7-10	7-11	7-11	7-11	7-11	7-11	7-11	7-12	7-12	7-12	7-12	7-12	7-12	7-13	7-13	7-13	
TIME			1500	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100
TH	1A LOOP	°F	535.9	535.2	535.5	535.5	535.1	535.0	534.8	535.5	535.5	535.5	536	535	534.0	535.8	535.2	535.0	535.1	535.1	535.1	535.1	535.2	534.9	534	
	1B LOOP	°F	536.8	536.4	536.6	536.0	536.1	536.4	536.7	537	536.5	536.4	537	537	536.0	537.0	536.0	536.5	535.5	536.6	537.0	535.9	536.0	536.2	536.3	536
	1C LOOP	°F	535.8	535.9	536.0	535.8	535.5	535.3	535.2	535.5	535.5	536.0	536.8	535.5	535.0	536.5	535.2	536	536.0	536.4	536.3	535.1	535.0	535.8	535.8	535.5
	1D LOOP	°F																								
TC	1A LOOP	°F	508.9	509.1	509.0	509.0	508.9	508.3	508.3	509	508.5	508.6	509	508.5	508.5	508.9	508.3	508.8	508.5	509	508.8	508.2	508.8	508.6	508.3	508
	1B LOOP	°F	510.8	511.2	511.0	511.0	510.2	510.5	511.0	511.5	511.5	510.5	511	511.0	510.5	511.0	510.0	510.8	511.5	511.2	510.1	510.0	510.5	510.5	510	
	1C LOOP	°F	510.0	510.0	510.0	510.0	509.8	509.9	509.9	510.0	510	509.4	509.8	509.9	509.5	509.5	509.2	509.8	509.9	510.0	509.9	509.3	509.5	509.3	509.5	509.2
	1D LOOP	°F																								525
FLOW																										
	1A LOOP	LB/HR X10 ³	7.65	7.68	7.68	7.68	7.68	7.68	7.68	7.68	7.68	7.68	7.68	7.68	7.70	7.70	7.70	7.68	7.68	7.68	7.68	7.68	7.65	7.68	7.68	7.65
	1B LOOP	"	7.32	7.30	7.30	7.30	7.32	7.32	7.32	7.32	7.32	7.31	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30
	1C LOOP	"	7.53	7.53	7.53	7.53	7.53	7.53	7.53	7.53	7.53	7.53	7.53	7.53	7.52	7.52	7.52	7.52	7.53	7.53	7.53	7.53	7.52	7.52	7.52	7.55
PRESSURE	1A LOOP	PSIG	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010
	1B LOOP	"	2030	2030	2030	2030	2030	2025	2025	2025	2025	2025	2030	2030	2030	2030	2030	2030	2030	2030	2030	2030	2030	2030	2030	2025
	1C LOOP	"	2005	2000	2000	2000	2010	2000	1990	1995	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
	1D LOOP	"																								
AVERAGE COOLANT TEMP	°F		523.3	523.1	523.2	523.0	522.9	523.0	523.1	523.1	523.0	523	523.2	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0	523.0
SEET OUT FOR D-10	°F		41.3	40.5	40.6	40.2	41.5	40.4	39.3	40.9	41.3	42.2	40.5	39.7	38.0	41.68	41.7	42.5	40.1	39.6	40.48	41.66	42.10	41.96	39.3	38.6
"	"	E-11	33.8	31.0	32.1	33.2	33.5	33.4	32.3	31.4	31.3	30.2	32.0	30.7	28.0	30.68	30.0	31.0	30.6	30.1	30.68	30.66	31.60	30.96	29.3	30.6
"	"	F-12	34.8	36.1	37.6	34.7	34.5	34.9	33.3	34.4	33.3	33.3	33.5	32.2	29.5	32.68	33.0	33.1	32.6	31.6	32.28	32.66	33.10	32.46	31.8	31.6
"	"	J-12	37.1	35.6	35.4	36.4	36.5	35.9	35.3	36.6	37.1	36.6	36.9	35.8	35.1	36.44	36.5	36.7	35.9	35.6	35.88	35.99	36.42	36.25	35.5	35.4
"	"	K-11	29.1	28.6	28.4	29.4	28.9	27.9	27.8	27.6	28.1	29.1	27.4	26.8	26.6	28.44	28.0	28.2	27.9	27.9	27.88	27.99	27.92	28.75	29.0	27.9
"	"	L-10	66.6	41.7	61.4	61.6																				
"	"	L-6	40.1	40.7	37.4	39.0	41.0	40.9	39.9	41.6	42.1	41.2	40.4	40.7	40.9	41.95	40.5	40.1	40.9	41.9	42.38	40.49	39.95	40.28	40.10	42.4
"	"	K-5	27.1	26.7	26.8	26.0	26.5	25.9	26.2	26.6	26.6	26.5	26.4	26.2	26.4	26.45	26.0	26.4	25.4	26.4	27.38	26.49	25.45	25.78	27.10	27.9
"	"	J-4	39.6	38.2	38.9	38.7	39.1	38.9	39.2	40.6	39.6	39.8	39.4	38.7	38.4	39.45	39.0	39.0	39.9	40.4	40.38	38.49	37.95	38.28	40.10	40.4
"	"	F-4	37.4	35.3	36.2	35.1	36.5	35.4	35.1	36.9	36.9	36.3	36.7	35.5	36.1	37.18	36.3	36.6	36.7	35.1	36.35	36.25	35.79	36.12	36.40	37.0
"	"	E-5	28.9	27.3	27.7	27.6	27.9	26.4	34.9	27.9	27.4	27.8	27.3	25.5	27.1	27.18	27.3	27.1	27.7	26.1	27.85	27.25	26.79	27.12	26.40	27.5
"	"	D-6	39.4	38.3	38.7	39.1	39.5	37.9	38.6	39.9	39.4	39.8	39.3	37.6	38.1	40.18	38.8	39.6	39.7	38.6	39.55	38.75	39.71	39.62	39.40	38.5
"	"	40-1							39.3	39.3	40.2	39.7	40.1	40.0	38.7	38.9	40.6	39.9	31.5	38.9	39.41	39.04	38.97	39.79	39.20	39.4

Reactivity Lifetime

Test Group:

7/13/58- 7-14-58

TABLE II (CON'T)

[illegible]

SEED AT FOR	°F			
D-10	"	33.3	38.3	37.1
E-11	"	24.6	30.7	30.1
F-12	"	27.2	31.2	31.1
J-12	"	31.6	33.8	32.1
K-11	"	23.1	29.9	26.1
L-10	"	—	—	—
L-6	"	29.8	37.9	37.0
K-5	"	16.9	25.4	27.0
J-4	"	34.3	36.9	35.5
F-4	"	31.8	34.5	33.2
E-5	"	21.3	26.5	24.7
D-6	"	33.8	37.6	35.7
D-10-1	"	32.6	35.4	36.1

Reactivity Lifetime

PS

CAPS

Test Group

7-14-58 to 7-16-58

TABLE II (CONT'D)

DATE		7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-15	7-15	7-15	7-15	7-15	7-15	7-16	7-16	7-16	7-16
TIME		1100	1130	1200	1230	1300	1330	1400	1430	1500	1530	1600	1630	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500
T _H	1A	OF	534.3	535.9	535.0	535.5	534.3	535.9	535.2	536.8	537.2	—	536.9	536.6	536.1	535.3	536.0	536.0	535.8	535.8	536.2	536.1	536.2	535.2	536.5
	1B	"	535.1	536.3	535.5	536.3	535.2	536.5	536.0	537.2	538.3	—	537.2	537.2	537.0	536.1	537.0	537.0	536.7	536.5	536.5	536.8	536.5	536.8	536.2
	1C	"																							
	1D	"	539.7	535.9	535.0	535.8	534.9	536.2	535.7	537.5	538.0	—	537.0	537.0	537.1	536.0	536.5	536.0	536.3	536.5	537	537	536.2	536.2	535.7
T _E	1A	"	508.9	509.9	509.2	509.2	508.9	510.0	509.4	510.0	510.2	—	509.5	509.5	509.2	508.9	509.0	509.0	508.9	508.9	506.9	509.2	509.0	508.9	508.9
	1B	"	510.6	511.3	511.0	511.2	510.5	511.7	511.2	512.0	512.2	—	511.2	511.3	511.0	510.2	511.0	511.0	510.9	510.8	511.0	511.1	511.0	511.1	511.0
	1C	"																							
	1D		508.6	509.5	509.0	509.5	508.8	508.9	509.4	510.0	510.2	—	509.5	509.5	509.3	508.8	509.0	509.0	508.9	508.9	509.0	509.2	509.0	508.9	508.8
Flow																									
	1A	LPM	7.66	7.66	7.66	7.66	7.67	7.66	7.66	7.66	7.66	—	7.68	7.68	7.65	7.68	7.65	7.65	7.68	7.65	7.68	7.67	7.66	7.67	7.66
	1B	"	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.32	7.32	—	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.31	7.31	7.31	7.32	7.32
	1D	"	7.31	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.29	—	7.32	7.30	7.29	7.30	7.30	7.30	7.31	7.31	7.31	7.30	7.30	7.31	7.30
PRESSURE	1A	PSIG													2005	2000	2010	2010	2010	2010	2000	2010	2010	2010	2000
	1B	"													2025	2025	2025	2025	2025	2020	2030	2040	2025	2025	2025
	1C	"													1940	1940	1950	1950	1940	1930	1940	1950	1940	1940	1930
	1D	"													2040	2040	2040	2040	2040	2040	2040	2050	2040	2040	2050
AVERAGE	Coolant Temp OF		522.2	523.1	523.5	523.0	522.3	522.4	522.8	524.0	524.1	—	523.4	523.3	523.1	522.6	523.0	522.8	522.9	522.8	522.8	523	523.0	522.9	522.6

[illegible]

DLI COMPANY RACTIVITY LIFETIME
PS DEPT DEPARTMENT
SHIPPING ART DIVISION COMPILED BY TEST GROUP CHECKED BY DATE

COMPILED BY TEST GROUP CHECKED BY _____ DATE 7-16-58 TO 7-19-58

TABLE II (CONT'D)

[illegible]

SUBJECT DL-S-225 PAGE 7
 COMPANY Duquesne Light
 DEPARTMENT Power Station
 DIVISION Shipping Port
 COMPILED BY Test Group DATE 7-19-58 To 7-21-58

TABLE II (CONT'D)

Date	Time	TH	IB Loop	ID Loop	Te	IA Loop	IB Loop	ID Loop	Flow	IA Loop	IB Loop	ID Loop	Pressure	IA Loop	IB Loop	ID Loop	Average
7-19	1200	534.8	535.5	536.5	508.4	510.4	508.8	508.8	7.66	7.31	7.30	7.30	2010	2020	2030	523.0	
7-19	1230	534.4	535.1	536.1	508.0	510.0	508.8	508.8	7.66	7.31	7.30	7.30	2010	2020	2030	523.0	
7-19	1300	534.7	535.1	536.1	508.4	510.2	508.8	508.8	7.66	7.31	7.30	7.30	2010	2020	2030	523.0	
7-19	1330	534.4	535.3	536.1	508.2	510.1	508.8	508.8	7.66	7.31	7.30	7.30	2010	2020	2030	523.0	
7-19	1400	534.8	535.3	536.1	508.3	510.8	508.8	508.8	7.66	7.31	7.30	7.30	2010	2020	2030	523.0	
7-19	1500	535.1	536.1	537.0	508.8	511.1	508.8	508.8	7.66	7.31	7.30	7.30	2010	2020	2030	523.0	
7-19	1600	536	536.9	537.3	509	511.1	508.8	508.8	7.67	7.32	7.30	7.30	2010	2020	2030	523.0	
7-19	1700	536	536.9	537.3	509	511.3	508.8	508.8	7.67	7.32	7.30	7.30	2010	2020	2030	523.0	
7-19	1800	535.4	536.5	537.0	509.0	511.0	508.8	508.8	7.65	7.31	7.30	7.30	2010	2020	2030	523.0	
7-19	1900	535.8	536.3	537.2	509.8	511.0	508.8	508.8	7.67	7.31	7.30	7.30	2010	2020	2030	523.0	
7-19	2000	535.7	536.2	537.2	509.9	511.0	508.8	508.8	7.67	7.31	7.30	7.30	2010	2020	2030	523.0	
7-19	2100	536.7	536.5	537.2	509.9	511.3	508.8	508.8	7.65	7.31	7.30	7.30	2010	2020	2030	523.0	
7-19	2200	535.8	536.0	537.2	509.9	511.0	508.8	508.8	7.65	7.31	7.30	7.30	2010	2020	2030	523.0	
7-19	2300	535.8	536.5	537.2	509.9	511.0	508.8	508.8	7.65	7.31	7.30	7.30	2010	2020	2030	523.0	
7-20	0000	535.4	536.5	537.2	509.9	511.0	508.8	508.8	7.65	7.31	7.30	7.30	2010	2020	2030	523.0	
7-20	0100	536.7	536.5	537.2	509.9	511.0	508.8	508.8	7.65	7.31	7.30	7.30	2010	2020	2030	523.0	
7-20	0200	535.8	536.5	537.2	509.9	511.0	508.8	508.8	7.65	7.31	7.30	7.30	2010	2020	2030	523.0	
7-20	0300	535.3	536.5	537.2	509.9	511.0	508.8	508.8	7.65	7.31	7.30	7.30	2010	2020	2030	523.0	
7-20	0400	536.2	536.5	537.2	509.9	511.0	508.8	508.8	7.65	7.31	7.30	7.30	2010	2020	2030	523.0	
7-20	0500	536.2	536.5	537.2	509.9	511.0	508.8	508.8	7.65	7.31	7.30	7.30	2010	2020	2030	523.0	

Date	Time	TH	IB Loop	ID Loop	Te	IA Loop	IB Loop	ID Loop	Flow	IA Loop	IB Loop	ID Loop	Pressure	IA Loop	IB Loop	ID Loop	Average
7-20	0530	536.9	537.2	537.0	509.6	511.5	509.2	509.2	7.67	7.32	7.30	7.30	2010	2020	2030	523.5	
7-20	0600	536.0	536.5	536.0	509.0	511.5	509.2	509.2	7.67	7.32	7.30	7.30	2010	2020	2030	523.5	
7-20	0630	536.0	536.5	536.0	509.2	511.5	509.2	509.2	7.67	7.32	7.30	7.30	2010	2020	2030	523.5	
7-20	0700	536.0	536.5	536.0	509.5	511.5	509.2	509.2	7.67	7.32	7.30	7.30	2010	2020	2030	523.5	
7-20	0730	536.2	536.8	536.2	509.3	511.7	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-20	0800	536.2	536.8	536.2	509.5	511.7	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-20	0830	536.5	537.0	536.5	509.8	512.0	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-20	0900	536.0	536.5	536.0	509.4	511.5	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-20	0930	535.5	536.0	535.5	509.0	511.2	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-20	1000	535.5	536.0	535.5	509.0	511.2	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-20	1030	535.2	536.3	535.2	508.8	511.0	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-20	1100	535.2	536.3	535.2	509.0	511.0	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-20	1130	535.2	536.3	535.2	509.0	511.0	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-20	1200	535.2	536.3	535.2	509.0	511.0	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-20	1230	535.2	536.3	535.2	509.0	511.0	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-20	1300	535.2	536.3	535.2	509.0	511.0	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-20	1330	535.2	536.3	535.2	509.0	511.0	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-20	1400	535.2	536.3	535.2	509.0	511.0	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-20	1500	535.2	536.3	535.2	509.0	511.0	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-20	1600	535.2	536.3	535.2	509.0	511.0	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-20	1700	535.2	536.3	535.2	509.0	511.0	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-20	1800	535.2	536.3	535.2	509.0	511.0	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-20	1900	535.2	536.3	535.2	509.0	511.0	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-20	2000	535.2	536.3	535.2	509.0	511.0	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-20	2100	535.2	536.3	535.2	509.0	511.0	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-20	2200	535.2	536.3	535.2	509.0	511.0	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-20	2300	535.2	536.3	535.2	509.0	511.0	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-21	0000	535.2	536.3	535.2	509.0	511.0	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-21	0100	535.2	536.3	535.2	509.0	511.0	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-21	0200	535.2	536.3	535.2	509.0	511.0	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-21	0300	535.2	536.3	535.2	509.0	511.0	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-21	0400	535.2	536.3	535.2	509.0	511.0	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	
7-21	0500	535.2	536.3	535.2	509.0	511.0	509.2	509.2	7.65	7.32	7.30	7.30	2010	2020	2030	523.5	

8

7/21/ - 7/24/58

Table II (cont'd)

[illegible][illegible]

9

TABLE II (CONT'D)

DATE			7-24	7-25	7-25	7-25	7-25	7-25	7-25	7-26	7-26	7-26	7-26	7-26	7-26	7-27	7-27	7-27	7-27	7-27	7-27	7-28	7-28	7-28	7-28	7-28	7-28
TIME			2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1530	1730
T _H	1A LOOP	°F	535.9	535.9	535.5	535.9	536.0	536.2	535.8	535.4	535.8	535.5	536.0	535.5	535	535.8	535.9	536.0	536	536	536.3	535.6	535.0	535.9	535.8	539.5	536.0
	1B "	°F	536.3	536.8	536.9	536.6	536.5	536.9	536.7	536.9	536.9	536.0	536.2	536.5	536.5	537.0	536.9	536.1	536.1	536.5	536.5	537.1	536.0	536.3	536.5	536.8	536.8
	1D "	°F	535.9	536.1	536.5	536.3	536.3	536.3	536.0	536.3	537.0	536.2	536.0	536	535.9	537.0	537.1	536.2	536	536	536	537.1	536.5	536.0	535.7	535.7	536.0
T _L	1A "	°F	509.1	509.0	509.0	508.8	509.2	509.1	509.0	508.8	509.0	509.0	509.0	509.1	509.0	509.2	509.3	509.0	508.9	508.8	508.8	509.1	509.0	509.2	509.0	509.0	509.0
	1B "	°F	511.3	511.6	511.5	511.3	511.9	511.6	511.2	511.2	511.5	511.3	511.0	511.5	511.5	511.9	511.8	511.1	511.0	511	511.4	511.8	511.5	511.9	511.2	511.3	511.3
	1C "	°F	508.6	508.9	509.0	508.5	508.9	508.9	508.5	508.4	508.6	508.9	508.4	508.4	508.5	509.2	509.3	508.8	508	509	508.3	509.0	509.0	508.7	508.0	508.2	508.2
FLOW	1A "	% _{max} 10	7.65	7.65	7.65	7.65	7.65	7.63	7.63	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65
	1B "	"	7.32	7.32	7.31	7.31	7.31	7.31	7.31	7.32	7.32	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.31
	1D "	"	7.31	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.31	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.31	7.31	7.31	7.31
FREQ.	1A "	PSIG	2000	2000	2000	2000	2000	2000	2010	2000	2000	2000	2000	2000	2010	2010	2010	2010	2010	2000	2000	2000	2000	2010	2000	2000	2000
	1B "	"	2020	2030	2020	2030	2030	2020	2040	2020	2030	2030	2030	2030	2030	2025	2025	2025	2020	2030	2025	2025	2030	2020	2020	2020	2020
	1D "	"	2040	2030	2040	2040	2040	2040	2050	2040	2040	2040	2040	2040	2040	2040	2040	2040	2030	2040	2040	2040	2040	2040	2040	2040	2040
Avg COOLANT TEMP	'F		522.9	523.0	523.0	522.8	523.0	523.0	522.9	522.9	522.8	522.8	522.8	522.8	522.8	522.3	522.3	522.3	522.7	522.9	522.9	523.2	523.0	523.0	522.8	522.9	523.0

DATE		7-28						7-29																			
TIME		1800	1900	2230	2300	0230	0300	0330	0400	0430	0500	0530	0600	0630	0700	0730	0800	0830	0900	0930	1000	1030	1100	1130	1200	1230	
T _H	A LOOP	'F	536.6	535.8	535.8	535.5	535.0	535.2	535.2	535.4	535.5	535.5	536.0	536.0	536.4	536.2	536.2	535.9	535.8	536.0	536.1	536.0	536.0	535.8	535.5	535.7	535.1
	IB "	"	536.8	536.5	536.5	536.4	536.5	535.9	535.0	535.8	536.0	536.0	536.0	536.8	536.5	536.5	536.4	535.9	535.9	536.1	536.2	536.2	536.2	536.2	536.2	536.2	535.9
	ID "	"	536.0	536.0	536.2	536.5	536.5	536.0	535.5	535.5	535.5	535.5	536.0	536.0	536.0	536.3	536.1	535.8	535.8	535.9	536.3	536.2	536.1	535.9	535.9	536.0	535.9
T _C	IA	"	509.0	509.0	508.7	508.8	508.8	508.3	508.5	508.3	508.3	508.5	508.5	508.0	509.0	509.2	509.2	508.9	508.2	508.6	508.8	508.9	509.0	508.8	508.5	508.9	508.8
	IB	"	511.5	511.2	511.0	511.2	511.0	510.8	511.0	510.5	511.0	510.8	511.0	511.0	510.5	511.2	511.4	510.9	510.9	510.9	511.1	511.1	511.2	511.0	510.9	511.2	511.2
	ID	"	508.9	508.2	508.5	508.5	508.5	508.1	508.2	508.0	508.0	508.0	508.0	508.0	508.5	508.8	508.8	508.0	507.8	507.9	508.2	508.9	508.6	508.1	508.0	508.2	508.0
FLOW	IA	"	*A ₁₀ 7.65	7.65	7.63	7.63	7.70	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.67	7.67	7.67	7.67	7.67	7.67	7.68	7.68	7.68	7.66
	IB	"	" 7.31	7.31	7.31	7.31	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32
	ID	"	" 7.31	7.31	7.31	7.31	7.30	7.31	7.31	7.32	7.32	7.32	7.32	7.32	7.30	7.32	7.30	7.30	7.30	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.31
PRESS.	IA	"	2000	2000	2005	2005	2005	2005	2005	2005	2005	2005	2005	2005	2010	2000	2000	2000	2000	2000	2000	2000	2000	2010	2000	2000	2000
	IB	"	" 2020	2026	2030	2030	2030	2030	2038	2038	2030	2030	2030	2020	2020	2030	2030	2030	2030	2030	2030	2030	2030	2030	2030	2030	2020
	ID	"	" 2040	2040	2040	2040	1990	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040
Avg. Coolant Temp.		'F	523.0	523.0	522.8	522.8	522.4	522.2	522.2	522.2	522.2	522.2	522.4	522.5	523.0	523.0	523.0	522.8	522.2	522.5	522.9	523.0	522.9	522.5	522.4	522.7	522.3

4h

SUBJECT DL-S-225 10

Duquesne Light COMPANY REACTIVITY LIFE TIME

Power Stations DEPARTMENT

Shipping port APS. Test Group DATE 7/29-7/31/58

TABLE II (CONT'D)

DATE			7/29	7-30	7/31/58
TIME			1300	1330 1400 1430 1500 1530 1600 1630 1700 1730 1800 1830 1900 2300 0300 0700 1100 1500 1600 1630 1700 1900 2300 0300 0700	
T _h	1A Loop	°F	535.1	535.6 535.9 535.4 535.2 535.5 535.5 535.5 535.5 535.2 535.0 535.2 535.2 535.8 535.5 535.9 535.4 535.0 535.0 535.3 535.0 535.0 536.2 506.0 525.2	
	1B "	"	536.0	536.7 536.8 536.9 536.8 536.9 537.0 537.0 536.9 536.8 536.5 536.8 536.6 536.8 535.9 536.4 536.5 536.0 537.0 537.0 537.0 536.3 536.9 507.0 526.0	
	1D "	"	535.9	536.2 536.4 536.5 536.5 536.6 536.8 536.8 536.8 536.5 536.2 536.5 536.3 536.5 535.9 536.1 536.1 536.5 536.5 536.8 536.5 536.1 536.9 506.5 526.0	
T _c	1A "	"	508.8	508.8 508.8 508.8 508.9 508.9 508.9 508.9 508.8 508.5 508.5 508.5 508.8 508.8 508.7 508.7 508.8 508.9 508.9 508.9 508.9 508.9 508.9 508.9 508.9 508.9	
	1B "	"	511.0	511.2 511.3 511.5 511.4 511.3 511.2 511.2 511.3 511.1 511.2 511.2 511.2 511.2 510.9 511.0 511.0 511.5 511.3 511.5 511.5 511.0 511.5 507.5 523.9	
	1D "	"	508.2	508.3 508.6 508.7 508.7 508.6 508.5 508.5 508.5 508.2 508.3 508.3 508.4 508.5 508.2 508.1 508.1 508.5 508.5 508.8 508.5 508.3 508.6 507.0 522.0	
Flow	1A "	%	7.67	7.66 7.66 7.66 7.66 7.66 7.66 7.66 7.65 7.66 7.65 7.65 7.65 7.65 7.65 7.66 7.66 7.66 7.66 7.66 7.66 7.65 7.70 7.63	
	1B "	"	7.32	7.32 7.32 7.32 7.32 7.32 7.32 7.32 7.32 7.32 7.32 7.32 7.32 7.32 7.32 7.32 7.32 7.32 7.32 7.31 7.31 7.31 7.25 7.20	
	1D "	"	7.31	7.31 7.30 7.32 7.28	
Press	1A "	psig	2000	2010 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2005 2000 2010 2010 2000 2000 2000 2000 2000 2000 2000	
	1B "	"	2025	2030 2020 2025 2030 2030 2030 2030 2030 2030 2030 2030 2030 2030 2030 2025 2025 2025 2025 2025 2020 2026 2025 2015 2020	
	1D "	"	2040	2050 2090 2090 2090 2095 2095 2095 2095 2095 2095 2095 2095 2095 2040 2040 2040 2040 2045 2050 2050 2040 2040 2090 2090 2040	
Avg. Coolant Temp		°F	522.8	522.8 522.9 523.0 523.0 523.0 523.0 523.0 523.0 523.0 522.9 522.9 523.0 523.0 523.0 522.5 522.8 523.0 523.0 523.0 523.1 523.0 522.9 523.0 502.0 523.9	

Date	Time		7-31-58		
T _h	1A Loop	°F	533.4	532.8	532.0 534.6
	1B "	"	533.8	533.1	532.0 534.7
	1D "	"	534.0	533.5	532.5 534.5
T _c	1A "	"	513.0	512.2	511.6 513.0
	1B "	"	514.1	513.5	513.0 514.3
	1D "	"	513.0	512.4	512.0 514.0
Flow	1A "	%	7.62	7.65	7.62 7.63
	1B "	"	7.28	7.30	7.29 7.29
	1D "	"	7.30	7.30	7.30 7.29

Primary Calorimet. % 72.19 72.61 70.89 73.90 ← Plotted in CURVE II

DL-S-225
Duquesne Light Reactivity Lifetime

Power Stations
Shipping port. A.P.S.

Test Group

7/31/58 - 8/2/58 TABLE II (CONT'D)

ERROR READING FOR 2000 OUT OF PLACE

Date	Time	Th	IA	Loop	F	7/31/58	8/1/58	8/2/58	8/3/58	8/4/58	8/5/58	8/6/58	8/7/58	8/8/58	8/9/58	8/10/58	8/11/58	8/12/58	8/13/58	8/14/58	8/15/58	8/16/58	8/17/58	8/18/58	8/19/58	8/20/58	8/21/58	8/22/58	8/23/58	8/24/58	8/25/58	8/26/58	8/27/58	8/28/58	8/29/58	8/30/58	8/31/58
						1100	1200	1230	1300	1330	1400	1430	1500	1530	1600	1630	1700	1730	1800	1830	1900	1930	2030	2100	2130	2200	2230	2300	2000	2330							
						533.5	535.2	537.4	535.9	535.1	535.7	535.6	535.2	535.2	535.6	534.7	534.1	533.5	534.0	533.5	533.6	533.4	533.5	533.8	533.8	534.6	535.2	534.8	533.5	534.8							
						532.8	534.2	536.5	535.9	534.6	536.1	536.3	536.2	536.8	537.0	535.8	535.6	535.0	535.6	535.0	535.6	535.0	534.9	535.0	535.0	536.1	537.0	536.0	535.4	535.8							
						533.8	535.2	537.7	536.0	534.4	536.5	535.9	535.7	535.8	536.1	535.0	535.0	534.4	535.0	534.8	535.3	534.8	534.8	535.0	535.0	536.4	537.1	536.1	535.1	536.0							
						513.0	511.0	512.7	511.4	510.5	510.6	510.4	510.1	510.1	510.4	509.8	509.3	509.1	509.9	509.2	509.5	509.1	509.2	509.4	509.2	508.5	509.0	508.9	509.0	508.8							
						514.4	511.9	514.0	512.0	511.8	512.2	512.2	512.0	512.2	512.4	511.8	511.5	511.0	511.9	511.0	511.5	511.0	510.0	511.2	511.0	510.5	511.0	510.9	511.1	510.5							
						513.4	511.0	512.7	511.7	510.3	512.7	510.7	510.1	510.1	510.8	510.0	510.0	509.6	510.0	509.9	510.0	509.8	509.6	510.0	509.0	509.0	509.9	509.1	509.3	509.0							
						7.66	7.67	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.66	7.65	7.68	7.65	7.65	7.65	7.65	7.65							
						7.29	7.30	7.30	7.30	7.31	7.30	7.30	7.30	7.31	7.32	7.31	7.31	7.31	7.31	7.31	7.31	7.32	7.31	7.32	7.32	7.31	7.31	7.31	7.31	7.32							
						7.31	7.30	7.30	7.30	7.30	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.32	7.31	7.31	7.31	7.31	7.31	7.31	7.32								
						2015	2010	2020	2015	2020	2010	2010	2005	2000	2010	2005	2005	2005	2005	2005	2000	2005	2000	2000	2005	2005	2000	2005	2000	2000							
						2020	2030	2040	2040	2040	2025	2035	2035	2010	2025	2020	2020	2020	2025	2025	2030	2025	2025	2020	2025	2025	2025	2020	2030	2025							
						2045	2045	2050	2045	2045	2045	2040	2025	2030	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040							
						522.9	523.3	525.0	523.6	523.6	522.2	523.2	523.3	522.7	523.8	523.0	523.0	522.3	523.0	522.5	522.8	522.5	522.4	522.8	522.7	522.8	523.3	523.0	522.8	522.5							

DATE	TIME	TH	IA	Loop	F	7/31/58	8/1/58	8/2/58	8/3/58	8/4/58	8/5/58	8/6/58	8/7/58	8/8/58	8/9/58	8/10/58	8/11/58	8/12/58	8/13/58	8/14/58	8/15/58	8/16/58	8/17/58	8/18/58	8/19/58	8/20/58	8/21/58	8/22/58	8/23/58	8/24/58	8/25/58	8/26/58	8/27/58	8/28/58	8/29/58	8/30/58	8/31/58
						2400	0030	0100	0130	0200	0230	0300	0330	0400	0430	0500	0530	0600	1100	1500	1900	2300	0300	0700	1100	1730	1800	1830	1900	1930							
						534.5	535.3	534.5	535.0	534.0	534.8	535.3	535.5	535.5	535.5	536.0	535.2	536.0	535.0	535.5	535.2	535.5	536.1	535.6	536.0	532.0	531.9	531.0	532.0	531.5							
						535.5	536.4	535.1	535.7	534.5	535.2	536.2	535.8	536.0	535.6	536.0	535.4	536.2	535.9	536.6	536.5	536.6	536.5	536.0	536.9	533.0	532.9	532.9	532.0	533.5							
						536.0	536.8	535.6	536.3	535.1	535.6	536.8	536.3	536.4	536.3	536.5	535.9	536.2	535.3	536.1	536.5	536.8	536.8	535.9	536.4	533.0	532.5	533.0	534.0	533.4							
						508.2	509.1	508.5	508.5	507.9	508.4	509.0	509.0	509.0	509.0	509.1	508.6	509.1	508.3	508.8	508.9	508.9	509.0	509.0	509.1	511.5	511.0	511.0	511.5	511.5							
						510.0	511.1	510.1	510.0	509.6	510.0	511.0	510.6	510.8	510.7	510.9	510.0	511.0	510.2	510.8	511.0	511.0	511.0	510.0	511.1	513.5	512.7	513.5	514.0	513.9							
						508.8	509.5	508.8	508.7	508.5	508.7	509.5	509.4	509.5	509.5	509.5	509.0	509.4	508.2	508.9	509.0	509.0	509.3	509.0	509.0	512.0	511.3	512.0	512.0	512.0							
						7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.66	7.65	7.65	7.65	7.65	7.65	7.65	7.65							
						7.32	7.32	7.32	7.31	7.31	7.31	7.31	7.31	7.31	7.31	7.32	7.31	7.32	7.31	7.31	7.31	7.32	7.31	7.32	7.31	7.31	7.30	7.30	7.30	7.30							
						7.31	7.31	7.31	7.30	7.31	7.31	7.30	7.30	7.31	7.31	7.31	7.30	7.31	7.30	7.30	7.31	7.30	7.31	7.30	7.31	7.30	7.29	7.29	7.30	7.30							
						2000	2000	2000	2010	2005	2005	2010	2010	2010	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000							
						2025	2025	2020	2030	2025	2010	2030	2025	2025	2025	2025	2025	2025	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020							
						2040	2040	2040	2050	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040	2040							
						522.5	523.1	522.4	522.6	521.9	522.3	523.0	523.0	522.9	523.1	522.5	522.9	522.4	522.8	523.0	522.9	522.7	522.9	523.1	523.0	523.4	521.9	522.8	523.0								

22 23 24

SHEET NO 13

Reactivity Lifetime

COMPANY

PARTNERS:

DIVISION

COMPILED BY Leif C. Crew

D BY 1st Crew CHECKED BY

DATE 8/10/58 - 8/14/58

TABLE II (CONT'D)

Date				8/10/58	9/10/58	8/11/58	9/11/58	8/12/58	9/12/58	8/13/58	9/13/58	8/14/58	9/14/58	8/15/58	9/15/58	8/16/58	9/16/58	8/17/58	9/17/58	8/18/58	9/18/58	8/19/58	9/19/58	8/20/58	9/20/58	8/21/58	9/21/58	8/22/58	9/22/58	8/23/58	9/23/58	8/24/58	9/24/58	8/25/58	9/25/58	8/26/58	9/26/58	8/27/58	9/27/58	8/28/58	9/28/58	8/29/58	9/29/58	8/30/58	9/30/58	8/31/58	9/31/58	8/32/58	9/32/58	8/33/58	9/33/58	8/34/58	9/34/58	8/35/58	9/35/58	8/36/58	9/36/58	8/37/58	9/37/58	8/38/58	9/38/58	8/39/58	9/39/58	8/40/58	9/40/58	8/41/58	9/41/58	8/42/58	9/42/58	8/43/58	9/43/58	8/44/58	9/44/58	8/45/58	9/45/58	8/46/58	9/46/58	8/47/58	9/47/58	8/48/58	9/48/58	8/49/58	9/49/58	8/50/58	9/50/58	8/51/58	9/51/58	8/52/58	9/52/58	8/53/58	9/53/58	8/54/58	9/54/58	8/55/58	9/55/58	8/56/58	9/56/58	8/57/58	9/57/58	8/58/58	9/58/58	8/59/58	9/59/58	8/60/58	9/60/58	8/61/58	9/61/58	8/62/58	9/62/58	8/63/58	9/63/58	8/64/58	9/64/58	8/65/58	9/65/58	8/66/58	9/66/58	8/67/58	9/67/58	8/68/58	9/68/58	8/69/58	9/69/58	8/70/58	9/70/58	8/71/58	9/71/58	8/72/58	9/72/58	8/73/58	9/73/58	8/74/58	9/74/58	8/75/58	9/75/58	8/76/58	9/76/58	8/77/58	9/77/58	8/78/58	9/78/58	8/79/58	9/79/58	8/80/58	9/80/58	8/81/58	9/81/58	8/82/58	9/82/58	8/83/58	9/83/58	8/84/58	9/84/58	8/85/58	9/85/58	8/86/58	9/86/58	8/87/58	9/87/58	8/88/58	9/88/58	8/89/58	9/89/58	8/90/58	9/90/58	8/91/58	9/91/58	8/92/58	9/92/58	8/93/58	9/93/58	8/94/58	9/94/58	8/95/58	9/95/58	8/96/58	9/96/58	8/97/58	9/97/58	8/98/58	9/98/58	8/99/58	9/99/58	8/100/58	9/100/58	8/101/58	9/101/58	8/102/58	9/102/58	8/103/58	9/103/58	8/104/58	9/104/58	8/105/58	9/105/58	8/106/58	9/106/58	8/107/58	9/107/58	8/108/58	9/108/58	8/109/58	9/109/58	8/110/58	9/110/58	8/111/58	9/111/58	8/112/58	9/112/58	8/113/58	9/113/58	8/114/58	9/114/58	8/115/58	9/115/58	8/116/58	9/116/58	8/117/58	9/117/58	8/118/58	9/118/58	8/119/58	9/119/58	8/120/58	9/120/58	8/121/58	9/121/58	8/122/58	9/122/58	8/123/58	9/123/58	8/124/58	9/124/58	8/125/58	9/125/58	8/126/58	9/126/58	8/127/58	9/127/58	8/128/58	9/128/58	8/129/58	9/129/58	8/130/58	9/130/58	8/131/58	9/131/58	8/132/58	9/132/58	8/133/58	9/133/58	8/134/58	9/134/58	8/135/58	9/135/58	8/136/58	9/136/58	8/137/58	9/137/58	8/138/58	9/138/58	8/139/58	9/139/58	8/140/58	9/140/58	8/141/58	9/141/58	8/142/58	9/142/58	8/143/58	9/143/58	8/144/58	9/144/58	8/145/58	9/145/58	8/146/58	9/146/58	8/147/58	9/147/58	8/148/58	9/148/58	8/149/58	9/149/58	8/150/58	9/150/58	8/151/58	9/151/58	8/152/58	9/152/58	8/153/58	9/153/58	8/154/58	9/154/58	8/155/58	9/155/58	8/156/58	9/156/58	8/157/58	9/157/58	8/158/58	9/158/58	8/159/58	9/159/58	8/160/58	9/160/58	8/161/58	9/161/58	8/162/58	9/162/58	8/163/58	9/163/58	8/164/58	9/164/58	8/165/58	9/165/58	8/166/58	9/166/58	8/167/58	9/167/58	8/168/58	9/168/58	8/169/58	9/169/58	8/170/58	9/170/58	8/171/58	9/171/58	8/172/58	9/172/58	8/173/5
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SUBJECT: DL-5-225 SHEET NO. 1
 COMPANY: DLC
 DEPARTMENT: REACTIVITY LIFETIME
 SHIPPING POINT: TEST GROUP CHECKED BY: DATE 7-1 THRU 7-6-58

TABLE III

DATE	TIME	LB/HR*	7/1	7/1	7/1	7/2	7/2	7/2	7/3	7/3	7/3	7/4	7/4	7/4	7/5	7/5	7/5	7/6	7/6	7/6	7/7	7/7	7/7	7/8	7/8	7/8	
TOTAL FEEDWATER FLOW		X 10 ³	1730	1900	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	
IA BLR	"	"	**	270.1	267.0	258.9	270.1	275.2	273.0	272.5	282.8	280.6	284.2	280.6	280.3	282.3	283.7	280.1	281.2	280	280	280	280	280	280	280	
IB	"	"	**	229.6	231.3	221.8	241.7	247.5	245.6	245.1	253.7	254.5	256.0	252.8	252.8	254.9	255.8	253.0	253.3	253	250	255	250	250	250	254	
IC	"	"	**	251.5	249.6	243.8	256.3	262.4	261.3	260.8	270.1	270.0	273.3	269.5	270.2	271.9	273.2	269.7	271.2	275	278	277	278	270	270	275	
ID	"	"	**	LOOP OUT OF SERVICE																							
IA THROTTLE STM TEMP	OF		495	495	497	497	495	497	497	497	495	496	497	497	496	496	496	497	497	497	497	496	497	497	497	497	
IB	"	"		496	497	499	498	497	498	497	497	497	497	497	496	497	497	497	497	497	497	497	497	497	497	497	
IA	"	"	PRESS	R16	625	628	640	640	630	640	630	634	627	630	634	635	630	635	635	635	633	630	634	638	630	634	
IB	"	"	"	"	625	628	640	638	630	636	631	632	627	630	634	635	630	630	635	635	633	630	634	638	635	630	
IA BLR STEAM PRESS	R16		640	640	660	660	655	660	658	660	660	660	660	660	660	660	655	660	660	660	660	658	659	660	660	660	
IB	"	"	"	"	650	650	670	670	660	660	660	665	660	630	662	664	660	660	660	660	660	660	660	660	660	660	
IC	"	"	"	"	640	640	660	660	658	658	655	660	660	630	660	660	655	660	647	658	660	660	660	660	660	660	
ID	"	"	"	"	LOOP OUT OF SERVICE																						
IC HEATER FW TEMP	OF		310	310	309	308	314	313	312	313	314	315	312	313	315	314	315	315	315	315	315	315	315	315	315	315	
FEEDWATER PRESS	R16		980	975	980	980	970	970	970	—	960	960	960	—	960	—	—	960	—	960	960	960	960	960	960	960	
IA STM LEAD CAL TEMP	OF		292	288	286	289.5	294	283	285	288	283	285	283	284	285	286	284	287	284	289	284	283	281	282	282	282	
TURB EXH VACUUM	IN HG		27.88	27.84	27.93	27.91	27.79	27.73	27.77	27.70	27.66	27.80	27.54	27.59	27.80	27.80	27.40	27.56	27.48	27.55	27.57	27.47	27.49	27.45	27.55	27.63	
BAROMETER	"		29.45	29.43	29.46	29.45	29.43	29.41	29.40	29.39	29.39	29.39	29.33	29.32	29.38	—	—	29.38	29.36	29.43	29.43	29.35	29.37	29.40	29.40	29.51	
IA C PURIF LOOP FLOW	LB/HR	X 10 ³	20.2	20.2	20.2	20.2	20.2	20.0	20.1	20.1	20.1	20.2	20.1	20.1	20.1	20.1	20.0	20.0	20.0	20.0	20.0	20.0	19.9	19.7	19.8	19.7	
IBD	"	"	"	"	21.1	21.0	21.0	21.0	21.1	21.0	21.0	21.1	21.1	21.1	21.0	21.0	21.0	20.9	21.0	21.1	21.0	0	0	0	0	0	
IA C NON REB HX IN TEMP	OF		155	155	154	154	158	154	154	154	154	153	154	150	155	148	155	152	156	156	152.0	155.0	155.0	155.5	156	155	
IA C	"	"	"	"	90	89	89	88	91	87	87	86	88	88	88	89	89	90	90	91	91	82.0	85.0	88.0	88.0	89	
IBD	"	"	"	"	156	157	156	156	159	156	155	153	155	154	156	157	156	148	157	157	153	158	158.0	158.0	109.0	112	
IBD	"	"	"	"	90	90	89	88	97	97	97	87	88	88	88	90	89	90	92	91	91	82.0	109.0	116.0	116	112	
CHARGING PUMP FLOW	FT ³		—	13.6	26.7	60.5	113.4	186.2	217.9	285.3	327.2	408.1	444.0	472.7	495.7	532.0	567.0	585.7	628.9	634.7	669.6	699.7	713.9	730.9	750.7	799.6	
IB	"	"	"	"	487	486	490	—	488	489	490	490	489	489	488.5	489	488	486	488	489	487	487	485.0	486.8	486.7	480.0	487.6
IC	"	"	"	"	491	490	493	—	493	493	493	494	493.1	493.1	493.5	492.5	492	491.5	492	491	491	490	490.05	490.06	490.0	490.0	
ID	"	"	"	"	492	491	493	—	491	493	492	493	491.6	491.7	492.5	492.0	491	489	491	492	491	494	490.05	490.0	490.5	490.6	
CHA CURRENT FOR 100%	MA		—	89.7	—	89.1	—	—	88.5	—	—	—	—	93.3	—	—	93.0	—	—	91.8	—	94.5	—	94.5	—	94.5	
CHB	"	"	"	"	—	108.0	—	108.6	—	—	108.0	—	—	—	112.5	—	—	111.6	—	—	115.0	—	113.1	—	112.8	—	
CHC	"	"	"	"	—	114.0	—	113.1	—	—	112.5	—	—	—	116.1	—	—	116.4	—	—	117.3	—	116.9	—	116.7	—	
CHD	"	"	"	"	—	95.1	—	94.5	—	—	94.2	—	—	—	98.7	—	—	101.7	—	—	99.5	—	100.2	—	100.9	—	
CALORIMETRIC (SECONDARY)	%		—	95.4	93.4	94.3	99	96.4	97.6	101.8	101.1	101.3	101.9	101.0	100.8	101.2	100.1	99.3	100.6	101.0	100.5	100.8	100.32	101.7	100.16	100.8	
TOTAL STEAM FLOW	LB/HR	X 10 ³	800	800	760	770	860	820	830	820	840	850	850	840	850	840	860	855	840	845	860	840	860	860	850	850	

* INTEGRATOR CORRECTED

** INTEGRATOR NOT CORRECTED

SUBJECT DL-S-225 SHEET NO. 2DLC COMPANY REACTIVITY LIFETIME

P.S. DEPT. DEPARTMENT

SHIPPINGPORT DIVISION COMPILED BY TEST GROUP CHECKED BY DATE 7-9-58 To 7-16-58 TABLE III (CON'T)

DATE	7-9	7-9	7-9	7-10	7-10	7-10	7-11	7-11	7-11	7-12	7-12	7-12	7-13	7-13	7-13	7-14	7-14	7-14	7-15	7-15	7-15	7-16	7-16	7-16
TIME	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300
TOTAL FEEDWATER FLOW ^{LB/HR}	949.1	844.6	838.4	836.9	848.5	856.0	849.9	839.6	849.0	843.5	829.7	843.0	839.6	801.8	809.2	848.6	851.8	845.7	855.2	853.1	843.6	844.4	842.9	
1A BLR " " " "	280	280	275	280	280	278	282	283	280	278	273	240	275	280	265	270	280	280	281	279	215	275	274	
1B " " " "	255	255	250	252	255	248	255	250	250	250	252	248	250	230	240	255	250	255	250	250	249	248	245	
1C " " " "	225	273	270	275	275	273	275	270	270	275	270	270	270	250	265	278	278	279	278	271	270	275	272	
1D " " " "	LOOP OUT OF SERVICE																							
1A THROTTLE STYM TEMP °F	495	497	497	497	497	496	497	496.0	496.0	497	497	497	496	500	496.5	498.0	498.0	495.0	496.0	496.0	496.0	495.0	496	
1B " " " "	497	498	498	497	497	497	498	497.0	497.0	497	497	497	497	501	497.5	500.0	498.0	496.0	497.0	497.0	497.0	495.0	498.0	
1A " " " PRESS. PSIG	639	639	640	633	633	635	640	635.0	632	635	635	636	635	643	640	641.0	640.0	629.0	630.0	630.0	639	639	640.0	
1B " " " "	630	637	638	630	633	634	640	639.0	633.0	635	635	635	637	645	640	641.0	638.0	629.0	630.0	630.0	635	634	636.0	
1A BLR STEAM PRESS. PSIG	598	598	660	660	660	660	660	658	660	660	660	660	660	705	660	660	630	655	660	660	660	660	665	
1B " " " "	598	660	665	660	660	660	660	660	660	662	660	660	660	710	663	660	630	660	660	660	660	660	665	
1C " " " "	598	660	668	658	660	660	660	660	660	660	660	658	655	650	720	—	—	—	—	—	—	—	—	
1D " " " "	LOOP OUT OF SERVICE																							
1C HEATER FW TEMP °F	315	315	314	315	315	314	315	315	315	315	314	313	315	310	310.0	310.0	316.0	315.0	315.0	315	315	314	315	
FEEDWATER PRESS. PSIG	960	960	960	970	970	970	970	960	960	970	970	970	970	1080	970	977	950	960	960	955	950	960	960	
1A STIM LEAD CAL TEMP °F	2725	2850	2820	2827	2820	2805	2790	2820	2790	2795	2790	2840	2640	283.0	281.0	279.0	2820	280.0	280.0	285	283	280	281.0	
TURB EXH. VACUUM ^{IN. HG}	27.90	27.82	27.85	27.80	27.66	27.63	27.56	27.59	27.70	27.64	27.65	27.69	27.68	28.51	27.67	27.66	27.99	27.70	27.67	27.63	27.68	27.65	27.88	
BAROMETER ^{IN. HG}	29.57	29.57	29.55	29.51	29.46	29.41	29.30	29.40	29.29	29.21	29.28	29.34	29.42	29.41	29.40	29.44	29.42	29.39	29.39	29.37	29.32	29.31	29.42	
1A C. PURIF. LOOP FLOW ^{LB/HR}	20.0	20.0	20.0	20.0	19.8	19.8	19.9	19.8	19.9	19.8	19.8	19.8	19.8	20.9	19.9	19.9	19.9	20.2	19.9	19.9	20.0	19.9	20.0	
1B D " " " "	0	21.0	21.1	21.1	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.2	21.3	24.8	20.8	20.7	20.7	20.6	20.6	20.6	20.6	20.4	20.5	
1A C. NOV. REG. HX IN TEMP °F	154.0	154.0	153.0	153.0	155.7	154.0	153.5	154.0	152.5	151	152.75	152	151	140	134	152.5	152.5	152.2	152.0	152	151	151	149	
1A C " " " OUT " "	88	88	88	88	89	87	86	87	85	83	84.5	84	84	90	84	84.5	85.5	85.0	89.0	85.5	82.0	83.0	82.0	
1B D " " " IN " "	114.0	158.0	158.0	158.0	156.1	154.0	154.0	155.0	153.0	152	153	152.5	152.0	162.0	146	152	153.6	156.0	153	153	150	152	150	
1B D " " " OUT " "	135	90	89	88	90	87	87	89	85.5	84	85	84.5	84.0	90	85	85	85.5	85.0	85.0	85.5	84.0	84.0	83.0	
CHARGING PUMP FLOW ^{FT³}	18029.3	18066.0	18100.1	18128.3	18164.4	18199.8	18230.4	18261.0	18281.1	18316.5	18349.3	18383.7	18418.1	18453.1	18488.5	18523.2	18557.8	18592.9	18627.9	18663.9	18699.0	18734.3	18769.8	
1A LOOP °F	456.5	456.3	455.2	458.0	456.0	451.6	451.0	471.0	471.0	499	490.0	495.6	490	—	490.0	495.0	490.0	490.0	490.0	490.0	490.0	490.0	490.0	
1B " " " "	491.0	492.0	491.8	496.0	470.0	480.6	483.9	475.0	475.0	479.8	494.0	499.8	—	379	379	499.0	493.1	498.5	491.3	491.6	497.6	491.0	493.5	
1C " " " "	490.5	490.9	491.2	491.0	470.0	482.8	484.0	471.6	471.6	493	490.0	490	492	—	—	—	—	—	—	—	—	—	—	
1D " " " "	OUT OF SERVICE																							
CH. B. Current	92.1	92.4	90.15	92.4	92.4	91.8	94.5	92.7	91.6	91.8	92.4	92.4	92.1	—	88.5	—	94.5	93.0	92.7	93.6	93.0	93.0	91.8	
CH. B. " "	115.5	115.2	114.0	115.5	114.3	115.8	117.0	117.0	117.0	117	112.8	119.7	111.3	—	120	—	117.9	114.6	118.2	115.8	115.2	118.2	114.9	
CH. C. " "	117.0	117.5	117.6	116.1	117.9	117.9	118.5	117.6	117.0	117	117.9	117.0	116.4	—	111.9	—	119.9	118.5	119.1	117.0	117.6	119.1	117.3	
CH. D. " "	98.4	100.5	99.0	98.1	100.8	111.7	99.9	98.4	97.5	97.5	101.4	96.0	101.4	—	88.2	—	111.7	102.0	99.9	103.8	100.8	101.5	99.3	
CALORIMETRIC (SECONDARY) %	101.24	100.6	99.9	99.73	101.1	101.5	101.2	100.05	101.17	100.5	99.99	100.69	100.06	—	96.09	97.89	103.9	103.9	101.91	103.35	102.8	100.55	100.73	
TOTAL STEAM FLOW ^{LB/HR}	850	850	830	850	850	845	860	840	85	84	84.5	85.0	5	770	780	85.0	82.5	82.5	82.4	82.0	82.0	82	81.0	

* INTEGRATOR CORRECTED

5a

SUBJECT DL-S-225 3
 COMPANY DLG
 DEPARTMENT P.S.
 SHIPPINGPORT REACTIVITY LIFE TIME

TEST GROUP 7-16-58 TO 7-24-58 TABLE III (CONT.)

DATE	TIME	7/16	7/17	7/17	7/18	7/18	7/18	7/19	7/19	7/19	7/20	7/20	7-20	7-21	7-21	7-21	7-22	7-22	7-23	7-23	7-23	7-24	7-24	
		0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500
TOTAL FEEDWATER FLOW	lb/hr	835.9	839.0	843.8	838.2	839.7	843.5	833.8	843.1	844.5	834.4	832.6	841.1	839.25	840.6	841.8	845.4	838.31	840.73	849.65	860.56	830.54	832.62	831.47
1A BLR.	"	276	275	277	280	275	270	280	270	278	280	273	273	274	274	272	278	273.47	275.46	275.75	278.31	276.62	276.04	276.63
1B	"	255	245	248	250	245	245	259	245	245	250	256	261	270	265	260	267	265.38	263.72	265.00	264.41	267.08	266.36	264.51
1C	"	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1D	"	270	275	274	275	275	270	280	279	271	278	273	275	275	270	270	276	276.31	275.03	273.08	276.02	275.18	275.64	275.54
1A THROTTLE STM. TEMP.	°F	497.0	497	497	497	498	497	497	497	496	495	497	497	497	497	497	497	497	496	496	496	496	496	496
1B	"	498.0	497	497	497	498	498	498	497	497	497	498	498	498	498	498	498	498	498	498	497	497	497	497
1A	"	PFSS	PSIG	640.0	632	635	635	634	637	638	637	636	635	640	640	636	635	635	635	635	635	637	640	637
1B	"	638.0	632	633	634	634	637	635	637	636	637	640	640	636	635	635	635	635	635	635	635	637	640	637
1A BLR. STEAM PRESS.	"	665	660	660	662	661	660	660	660	665	665	665	665	665	660	660	670	660	660	660	660	660	660	660
1B	"	665	660	660	660	661	665	665	665	662	663	663	665	660	660	670	660	670	670	670	670	670	665	670
1C	"	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1D	"	580	580	580	580	580	585	585	580	580	580	580	520	515	520	560	560	620	625	620	620	620	625	620
1C HEATER F.W. TEMP.	°F	317.0	314	314	314	315	316	315	315	315	315	315	315	315	315	315	314	315	316	314	315	316	315	315
FEEDWATER PRESS.	PSIG	960	960	960	960	970	965	980	980	980	980	980	980	980	980	970	980	975	970	960	975	---	980	980
1A STM. LEAK CAL. TEMP.	°F	279	282.5	280	282.5	280.0	278.0	281	285	282	278	279.5	272.0	283.0	282.0	281.0	278.0	278	276	283	279	278	278	279.5
TURB. EXH. VACUUM	IN. HG.	25.03	28.04	27.89	27.93	27.98	27.75	27.70	27.73	27.80	27.86	27.91	27.90	27.90	27.89	27.95	27.76	27.89	27.89	28.10	27.82	27.79	27.79	27.79
BAROMETER	IN. HG.	29.50	29.51	29.46	29.40	29.27	29.20	29.21	29.20	29.26	29.34	29.34	29.35	29.35	29.34	29.34	29.30	29.26	29.30	29.32	29.32	29.32	29.32	29.21
1A C. PURIF. LOOP FLOW	lb/hr	19.9	19.9	19.9	19.8	19.8	19.8	19.8	19.8	19.7	19.6	19.7	19.7	19.6	19.6	19.5	19.5	19.5	19.3	19.5	19.5	19.8	19.5	19.3
1B	"	20.6	20.5	20.5	20.4	20.4	20.4	20.7	20.3	20.3	20.3	20.3	20.3	20.3	20.4	20.3	20.2	20.3	20.6	20.3	20.2	20.2	20.2	20.2
1A C. NON REG. HX IN TEMP.	°F	147.0	147.0	147.0	146.5	146.5	146.5	147.5	146	146	146	146	145.5	140.0	146	145.5	145.8	147	144.5	145	146.0	145	146	146.5
1A C.	"	85.0	80	80.0	81.0	79.0	82	80	80	80	78	80	77	78	79	78	76	77	77	76	76.0	77	76	77
1B C.	"	139.5	148.0	148.0	147.8	147.8	147.0	146	147.0	147.3	147	147.5	146.5	147	148	146.5	146.2	147	121	146	146.0	146	148	146
1B D.	"	85.0	81.0	81.0	81.0	80.0	82.0	80	80	80	78	80	79	79	79	79	76	79	76	76	77	77	77	77
CHARGING PUMP FLOW	TOTAL F.	1889.4	1883.6	1887.0	1890.7	1891.5	1894.6	1897.9	1899.2	1903.7	1902.1	1910.7	1915.0	1918.6	1920.5	0.05	---	---	---	---	---	---	---	---
1A LOOP	°F	493.5	488.2	487	486.5	484.5	485	485.1	485	1895	1885	488.5	485.0	484.1	483.5	---	485.0	484.0	481.0	484.0	481.7	484	481	487.0
1B	"	494.5	482.6	493	494.5	492.5	493.0	493.3	493	493	493.5	508.8	493.2	493.2	493.0	493.0	493.0	493.0	492.5	493.0	494.0	494.1	494	493.0
1C	"	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1D	"	497.0	496.5	497	497.2	497.0	497.0	497.1	497.2	497.2	497.5	510.1	497.5	497.6	498.0	497.5	498.0	498.0	497.5	497.5	497.0	497	496.5	496.5
CHA CURRENT	UA	90.9	93.6	91.2	92.1	93.9	00.5	96.0	96.5	94.8	92.0	90.7	96.0	91.0	90.7	93.87	92.0	90.4	90.9	92.0	93.5	82.3	82.0	96.5
CH.B	"	115.8	111.6	115.8	117.6	104.5	00.5	120.0	110.0	120.0	117.5	117.5	113.3	117.5	113.5	117.3	117.2	113.5	114.6	117.5	114.8	104.0	104.0	117.5
CH.C	"	117.0	114.0	117.9	118.5	112.8	00.5	123.0	114.0	121.6	119.0	123	113.3	120.0	117.5	117.3	119.0	117.5	114.4	121.5	118.0	103.9	105.0	118.5
CH.D	"	96.9	101.1	98.4	100.2	102.3	00.5	103.0	104.8	104.3	100.0	105	100.0	98.7	100.0	100.77	101.0	102.5	96.8	101.5	101.5	87.8	98.0	101.5
CALORIMETRIC (SECONDARY)	%	99.58	99.98	100.67	100.0	100.05	100.40	99.36	100.42	100.61	99.67	99.21	100.22	100.01	100.17	100.43	100.14	99.78	100.30	101.45	102.44	98.78	99.23	98.25
TOTAL STEAM FLOW	lb/hr	81	82	82	82	82	79	83	81	81	82	81	82	82	81.0	82.0	82.0	82.0	82.0	83.0	82.0	81.0	82.0	81.0

* INTEGRATOR CORRECTED.

56

*** INTEGRATOR CORRECTED

SUBJECT DL-S-225 SHEET NO. 4
 COMPANY REACTIVITY LIFETIME
 DEPARTMENT PS
 DIVISION SAPS COMPILED BY TET GROUP CHECKED BY DATE 7/24/53-7/

TABLE III (CON-)

DATE	TIME	LOTR	7/24	7/25	7/25	7/25	7/26	7/26	7/26	7/27	7/27	7/27	7/28	7/28	7/28	7/29	7/29	7/29	7/30	7/30	7/30	7/31	7/31	7/31	7/31	
			2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1700	2300	0700	
TOTAL FEEDWATER FLOW		10.0	851.137	861.896	874.31	866.978	866.447	864.338	864.354	861.231	865.295	870.596	865.535	868.391	875.133	854.036	869.838	877.115	882.847	876.897	878.214	—	193.177	821.844	954.946	
1A BLR.			277.621	274.718	274.968	278.39	274.949	275.486	277.574	272.686	277.793	279.350	273.044	278.442	279.240	277.214	278.392	276.382	282.139	279.889	276.950	—	261.333	259.790	275.131	
1B "			264.934	266.122	269.05	265.65	267.381	264.957	265.802	265.726	266.418	270.450	265.996	265.720	268.990	267.259	265.350	267.324	267.309	268.447	271.650	—	253.158	253.060	263.352	
1C "			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
1D "			276.383	274.831	278.771	275.37	276.75	277.267	274.881	276.853	278.589	275.500	278.571	277.167	277.819	278.472	276.366	281.170	278.070	280.311	279.300	—	255.523	258.789	273.581	
1A THROTTLE STIM. TEMP.	°F		498	497	497	497	497	497	498	498	499	497	497	497	497	497	498	497	498	497	498	517	479	495	496	
1B "	"		497	498	498	498	497	497	497	499	495	499	498	498	498	498	498	498	498	498	498	518	498	495	497	
1A " " PRESS	PSIG		640	640	640	640	635	635	634	644	639	635	638	638	636	638	638	637	640	638	643	755	640	630	639	
1B " " " "	"		638	638	640	640	635	635	635	640	636	635	637	637	637	637	636	636	640	637	642	761	640	630	639	
1A BLR. STIM. PRESS.	"		666	665	660	670	660	645	631	665	660	660	662	660	660	665	665	664	660	666	665	820	660	660	660	
1B " " " "	"		675	676	670	670	670	640	635	670	665	655	668	665	663	668	660	670	670	668	666	820	670	660	660	
1C " " " "	"		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
1D " " " "	"		621	620	620	620	620	645	610	620	620	620	622	630	622	620	620	620	620	620	630	620	779	690	635	615
1C HYP. FLOW TEMP.	°F		313	315	315	314	315	314	314	314	315	315	315	317	316	315	315	317.5	316.0	316.6	315.0	260.0	310.8	312.0	315.0	
FEED WATER PRESS.	PSIG		970	970	970	970	970	970	970	970	970	965	970	960	963	970	970	965	96.5	970	960	—	980	970	970	
1A STIM. LEAD CAL. TEMP.	°F		281	283	279.5	280	279	279.5	279.0	287	292	280	259	259	279.5	266.5	282.0	271.0	268.0	252.0	286.0	245.0	281.0	269.0	276.0	
TURB. EXH. VACUUM	IN. HG.		27.76	27.69	27.76	28.00	27.78	27.88	27.80	27.86	27.75	27.77	27.79	27.80	27.66	27.79	27.80	27.58	27.75	—	27.59	28.17	27.69	27.77		
BAROMETER	IN. HG.		29.24	29.20	29.18	29.18	29.26	29.32	29.32	29.42	29.35	29.31	29.34	29.29	29.33	29.32	29.31	29.38	29.31	29.32	29.32	29.32	29.32	29.32	29.38	
1A C. PURE. LOOP FLOW	10.0 GPM		19.4	19.5	19.4	19.3	19.3	19.4	19.5	19.4	19.4	19.3	19.2	19.3	19.4	19.3	19.4	19.4	19.3	19.3	19.2	19.0	19.3	19.3	19.3	
1B D " " " "	"		20.3	20.3	20.3	20.2	20.2	20.3	20.2	20.2	20.1	20.2	20.1	20.1	20.1	20.1	20.2	20.1	20.0	20.0	20.0	19.9	20.1	20.0	20.1	
1A C. HIGH PRES. HYD. TEMP.	°F		146.0	146.0	146.0	146.5	146.0	147.0	147.0	146	147	147	146.5	146.3	146.5	146.6	148.4	147.8	146.5	148.0	148.0	149.0	148.0	147.0	146.0	
1A C " " " OUT "	"		77.0	76.0	76.0	76.0	76.0	78.0	76.0	76	77	77	76	78	78	78	78	79	77	81	80	80	80	80	76.0	
1B D " " " IN "	"		146.6	146.0	146.0	144.0	146.0	147.0	147.0	146	146	147	146	147.7	147.8	148	148.9	148.2	148.0	149.5	149.0	150.0	149.0	148	147	
1B D " " " OUT "	"		76.0	77.0	77.0	77.0	76.0	78.0	76.0	76	76	78	77	79	78	80	79	79	79	81	80.5	80	80	80	77.0	
CHARGING PUMP FLOW	TOTAL FT ³		METER BY PASSED	DUE TO BRASS EROSION																						
1A LOOP	°F		489.0	486.5	488.0	488	488	488	486.5	489.0	489	489.0	489.0	492.0	489.0	489.5	489.0	488.0	487.7	487.5	487.2	506.5	486.7	486.7	488.0	
1B "	"		495.0	493.0	493.0	493	493	492	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.0	493.5	493.5	493.5	493.5	492.5	492.5	517.0	490.9	490.7	491.0
1C "	"		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
1D "	"		496.0	496.5	496.5	496.5	496.5	496.5	496.5	497.4	496.0	497.0	497.0	497.5	496.5	497.2	496.7	496.3	496.3	496.5	497.5	517.5	496.3	496.0	496.0	
CH. A CURRENT	MA		90.6	93.5	95.0	92.4	95.0	96.5	91.20	95.0	96.5	91.0	96.1	94.0	92.1	96.1	92.7	95.5	96.1	94.0	96.5	10.7	85.5	93.9	93.45	
CH. B "	"		114.6	115.0	117.5	117.3	116.0	118.6	114.6	115.0	117.5	114.0	119.8	120.0	119.8	118.8	113.3	117.5	120.1	118.6	120.0	13.9	112.0	113.5	117.5	
CH. C "	"		119.6	120.0	117.5	116.1	120.0	117.4	117.8	117.5	117.5	117.8	117.5	119.6	117.5	117.3	121.5	117.5	120.0	123.0	10.9	116.5	117.5	116.25		
CH. D "	"		96.0	103.0	37.5	99.2	104	100	98.6	103.0	101.5	101.8	102.8	97.0	102.0	98.8	101.3	103.0	101.2	102.8	103.0	10.7	96.5	101.5	98.79	
CALORIMETER RIG (SECONDARY)	%		102.37	102.7	104.18	97.8	98.5	98.3	98.4	98.0	98.8	99.8	98.16	98.52	99.06	98.82	98.52	98.97	98.96	99.38	99.1	—	93.19	93.07	97.5	
TOTAL STEAM FLOW	10.0 GPM		81	83	82	82	83	82	82	82	82	82.5	82.5	82.5	82	82	83	83	83	82.0	84.0	13.5	77.0	80.0	82.0	

5C

*Based on TOTAL OF 1A, 1B, & 1D FEEDWATER FLOWMETER INTEGRATORS

DL-5-225

SHEET NO.

D.L.

COMPANY

REACTIVITY LIFETIME

P.S.

DEPARTMENT

S.A.P.S.

DIVISION

TEST GROUP

DATE

8/1/58 - 8/8/58

TABLE III (CON'T.)

FORM GSA-7112

DATE	TIME	8/1/58	8/1/58	8/2/58	8/2/58	8/2/58	8/3/58	8/3/58	8/3/58	8/4/58	8/4/58	8/4/58	8/4/58	8/5/58	8/5/58	8/5/58	8/6/58	8/6/58	8/6/58	8/7/58	8/7/58	8/7/58	8/8/58	8/8/58	8/8/58
TOTAL FEEDWATER FLOW	lb/hr. x 10 ³	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	
IA BLZ.	"	279.48	278.332	278.741	279.48	278.332	278.741	279.48	278.332	278.741	279.48	278.332	278.741	279.48	278.332	278.741	279.48	278.332	278.741	279.48	278.332	278.741	279.48	278.332	
IB "	"	269.69	268.001	266.225	269.69	268.001	266.225	269.69	268.001	266.225	269.69	268.001	266.225	269.69	268.001	266.225	269.69	268.001	266.225	269.69	268.001	266.225	269.69	268.001	
IC "	"	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
ID "	"	274.61	278.008	276.765	274.61	278.008	276.765	274.61	278.008	276.765	274.61	278.008	276.765	274.61	278.008	276.765	274.61	278.008	276.765	274.61	278.008	276.765	274.61	278.008	
IA THZOTYLE STM. TEMP.	°F	495	495	497	495	495	497	496	495	497	495	497	495	497	495	497	495	497	495	497	495	497	495	497	
IB "	"	497	497	497	497	497	497	497.5	495	497	497	497	497	497	497	497	497	497	497	497	497	497	497	497	
IA " " PRESS	PSIG	625	627	630	625	627	630	625	630	625	632	635	632	635	630.0	638.0	635	630	633	630	630	630	630	630	
IB " " " "	"	625	627	630	625	627	630	625	630	625	630	634	630	635	630.0	638.0	635	630	630	630	630	630	630	630	
IA BLZ. STM. PRESS.	"	655	660	660	655	660	660	660	630	660	660	660	660	660	660	660	660	660	660	660	660	660	660	660	
IB " " " "	"	660	660	662	660	660	662	662	630	665	665	665	665	665	664	665	667	665	665	670	660	660	660	660	
IC " " " "	"	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
ID " " " "	"	625	620	621	625	620	620	610	630	615	615	615	615	615	615	615	615	610	610	610	610	610	610	600	
IC HTR. F.W. TEMP.	°F	315	315	315	315	315	315	315	315	314	314	314	314	314	315	313	313	315	315	315	315	316	315	315	
FEED WATER PRESS.	PSIG	97	96	97	97	96	97	96	96	96	97.5	96	97	97	96.5	97.0	97	96.0	96.0	97.0	96.0	96.0	96.0	96.0	
IA STM. LEAD CAL. TEMP.	°F	287.5	280.0	284.1	287.5	280.0	284.1	279	279	279	284	280	282	284	289.0	282	276	280	276	278	279	280	280	280	
TURB. EXH. VACUUM	IN. HG.	27.78	27.72	27.71	27.82	27.70	27.73	27.54	27.60	27.67	27.76	27.85	27.76	27.10	27.77	27.68	27.63	27.62	27.45	27.50	27.45	27.41	27.70	27.70	
BAROMETER	IN. HG.	29.42	29.39	29.38	29.24	29.28	29.17	29.20	29.23	29.30	29.38	29.45	29.40	29.38	29.43	29.36	29.34	29.37	29.27	29.24	29.25	29.26	29.38	29.38	
IAC PURF. LOOP FLOW	lb/hr. x 10 ³	19.3	19.2	19.2	19.2	19.3	19.3	19.3	19.1	19.2	19.2	19.4	19.1	19.0	19.1	19.0	19.0	19.1	19.0	19.0	19.0	19.0	19.1	19.1	
IBD " " " "	"	20.1	20.0	20.1	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.1	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
IAC NON REG. HX IN. TEMP.	°F	146.0	147.0	146.7	147	147.0	146.5	146.0	146.0	145.8	145.0	144.5	143.1	146.0	146.5	147.0	147.0	147.5	146.5	146.5	147.7	147.5	147.5	147.5	
IAC " " " OUT "	"	77	78	77.5	77.0	78.0	79.0	78.0	76.0	77.0	76.0	76.0	76.0	75.0	76.0	77.5	76.0	78.0	79.0	77.0	77.0	79.0	79.0	79.0	
IBD " " " IN "	"	147.5	148.0	147.5	149.0	148.0	147.5	147.0	147.0	146.0	146.0	146.5	147.4	146.0	146.5	146.0	147.0	147.5	146.5	146.5	147.7	147.5	147.5	147.5	
IBD " " " OUT "	"	77	79	77.5	80.0	80	80	79.0	77.0	78.0	76.0	76.0	77.0	76.0	76.0	77.5	77.0	78.0	79.0	77.0	77.0	80.0	77.0	77.0	
CHARGING PUMP FLOW	TOTAL FT. ³	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
TB IA LOOP	°F	487.0	487.5	486.0	494	487	484.6	487.0	487.0	487.0	487.5	488.5	487.0	487.5	488.5	488.0	489.0	489.0	487.0	495.4	487.0	487.0	487.3	487.3	
IB "	"	490.8	492.5	490.0	492	489	490.0	490.0	490.0	490.0	491.2	491.0	489.9	491.0	490.5	490.5	490.2	490.5	489.0	490.0	489.0	489.7	489.0	489.0	
IC "	"	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
ID "	"	495.0	496.2	495.5	500	495	495	496.0	496.0	495.0	495.5	496.0	494.5	496.5	496.0	496.0	496.0	496.0	494.5	496.0	496.5	496.0	496.3	496.3	
CH A CURRENT	4A	95.0	96.1	93.5	68.09	93.4	104.4	90.78	96.1	94.8	92.8	96.1	92.9	90.8	95.0	93.5	90.7	94.5	94.8	93.9	93.9	93.3	93.9	93.9	
CH B "	"	119.0	116.2	117.5	84.11	118.2	102.8	114.8	120.2	116.9	116.8	120.2	114.8	113.4	117.5	112.7	114.8	116.9	114.8	116.1	116.1	114.6	116.7	116.7	
CH C "	"	120.0	117.5	116.1	92.11	116.9	101.5	117.5	119.6	120.2	117.9	117.5	117.5	114.8	117.5	117.5	114.8	117.7	117.6	116.4	117.3	117.6	116.1	116.1	
CH D "	"	101.5	101.5	98.8	80.10	96.4	100.1	101.46	101.5	102.8	100.7	101.2	101.5	96.1	100.0	101.5	98.8	101.5	104.1	99.0	100.2	101.1	99.3	99.3	
CALORIMETRIC (SECONDARY)	%	98.9	98.98	98.67	79.57	97.54	97.16	99.95	98.14	99.17	98.51	99.42	98.84	99.15	98.41	99.39	99.12	99.69	99.09	99.27	99.72	99.51	101.45	101.45	
TOTAL STEAM FLOW	lb/hr. x 10 ³	83.0	84.0	82.0	62.5	82.0	84.0	84.0	83.0	83.0	83.0	83.0	82.0	83.0	83.0	83.0	82.0	84.0	84.0	83.0	85.0	84.0	84.0	84.0	

5d

* STARTED TAKING READINGS WITH NEW WESTON METER

REACTIVITY LIFETIME

DEPARTMENT

2015038

COMPILED BY TEST GROUP CHECKED BY _____

D&

B-9 to 8/19/58

TABLE III (CONT'D)

52

DATE 7/1/58-7/19/58

TABLE IV A

[illegible]

DL-S-225

SHEET NO. 2

COMPANY

REACTIVITY LIFETIME

DEPARTMENT

DIVISION

COMPILED BY Test Group CHECKED BY

DATE 01/1/58 - 8/19/58

TABLE IV A

FORM C22-7112

SEED FLOW

[illegible]

SUBJECT DL-S-225 SHEET NO. 2D.L.C. COMPANY REACTIVITY LIFETIME

P.S. DEPT. DEPARTMENT

SHIPPING PORT. DATE 7/1/58-7/10/58COMPLETED BY TEST GROUP CHECKED BY

TABLE IV 8 (CONT)

BLANKET FLOW																											
DATE	7-1-58	7-1-58	7-1-58	7-1-58	7-2	7-2	7-3	7-3	7-3	7-4	7-4	7-5	7-5	7-6	7-6	7-6	7-7	7-7	7-7	7-8	7-8	7-8	7-9	7-9	7-9	7-10	7-10
TIME	1730	1900	2200	725	1520	2300	0725	1520	2322	1520	2300	0700	2300	0715	1515	2300	0720	1515	2315	0700	1500	2315	1700	1500	2300	0700	1500
1	73	72.8	72.6	72.9	72.8	72.6	73.0	72.9	72.8	72.8	72.7	72.8	72.6	72.6	72.8	72.8	72.8	72.8	72.8	72.7	72.7						73.0
2	85.8	86.7	86.4	86.2	87.0	87.2	87.5	86.9	86.4	86.6	86.7	87.2	86.2	87.1	87.0	86.4	88.0	86.8	86.8	86.8	86.8	86.5					87.0
3	72.2	72.3	72.3	72.6	72.5	72.3	72.6	72.4	72.4	72.1	72.3	72.5	72.0	72.3	72.5	72.0	82.3	72.3	70.5	72.3	72.4						72.6
4	79.2	78.9	78.9	80.0	79.4	79.0	80.1	79.9	78.0	77.5	79.0	79.0	78.6	78.7	79.8	77.8	79.5	79.6	79.6	80.0	79.4						80.3
5	72.5	73.0	72.9	72.4	73.1	73.2	73.1	73.1	73.1	73.2	73.0	73.2	73.0	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1						73.2
6	86.3	86.4	85.9	86.4	86.4	86.4	86.4	86.3	86.4	86.2	86.4	86.5	86.3	86.2	86.4	86.4	86.4	86.4	86.4	86.5	86.5	86.4					86.7
7	72.4	72.2	71.8	72.6	72.3	72.0	72.5	72.1	72.4	72.8	72.2	72.7	72.4	72.5	72.5	72.4	72.7	72.1	72.5	72.5	72.5						73.4
8	79.2	78.8	79.3	79.4	78.9	79.6	79.3	79.2	79.2	79.2	79.1	79.6	79.0	79.1	79.0	79.5	79.3	79.6	78.7	79.3	78.8						79.0
9	80.0	79.7	79.5	79.8	79.5	80.2	80.5	79.6	80.0	80.0	80.0	80.5	79.8	79.7	79.7	80.0	80.3	79.9	79.9	80.1	79.9						80.3
10	77.0	76.7	76.9	77.2	76.9	77.2	77.4	77.2	77.3	76.9	76.9	77.1	76.8	76.9	77.0	77.3	77.0	77.3	77.3	77.3	77.3						77.3
11	78.7	78.7	79.0	78.1	78.8	79.0	79.2	78.8	78.8	78.6	79.2	79.1	78.5	78.9	78.5	78.9	79.1	78.9	78.9	79.0	79.0						79.2
12	78.7	78.7	78.5	78.1	78.2	78.1	79.2	78.0	78.8	78.6	79.2	79.1	78.5	78.9	78.5	78.9	79.0	79.0	78.8	78.8	78.8						79.3
13	77.5	77.6	77.5	77.9	77.9	77.7	77.9	77.6	77.6	77.4	77.5	77.6	77.4	77.5	77.4	77.5	77.8	77.7	77.4	77.1	77.6						77.9
14	77.6	77.0	76.8	77.2	77.1	77.2	77.1	76.9	77.0	77.0	77.0	77.1	76.9	76.9	77.0	77.0	77.0	76.8	77.0	76.7	77.0						77.5
15	75.0	74.6	74.6	74.6	74.6	74.5	74.6	75.5	74.7	74.9	74.7	75.0	74.3	74.4	74.4	75.1	75.0	74.3	74.5	74.5	74.4						74.9
16	76.4	76.4	76.6	76.7	76.5	76.7	76.5	76.7	76.2	76.5	76.5	76.5	76.2	76.7	76.7	77.0	76.7	76.4	75.9	76.2	76.8						76.5
17	75.5	76.4	78.2	78.5	78.6	78.5	78.7	78.7	78.5	78.6	78.4	79.7	78.6	79.3	78.2	78.7	79.7	78.7	78.5	78.8	78.5						78.7
18	82.7	82.2	82.6	82.6	82.6	82.9	82.9	82.4	82.8	82.6	82.7	82.6	82.9	82.4	82.7	82.7	82.9	82.7	82.8	82.8	82.8						77.9
19	73.6	73.5	73.4	73.7	73.7	73.5	73.7	73.6	73.6	73.5	73.4	73.6	73.4	73.6	73.5	73.5	73.6	73.5	73.5	73.4	73.4						74.0
20	71.3	71.3	71.3	71.5	71.4	71.4	71.4	71.4	71.3	71.1	71.2	71.1	71.2	71.1	71.1	71.4	71.4	71.2	71.2	71.4	71.4						71.8
21	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.4	81.6	81.4	81.4	81.5	81.1	81.3	81.4	81.4	81.8	81.5	81.5	81.7	81.7						82.2
22	81.7	81.7	81.6	81.7	81.6	81.9	81.8	81.8	81.6	81.4	81.4	81.5	81.3	81.3	81.4	81.6	81.9	81.5	81.6	81.7	81.8						82.2
23	81.8	81.7	81.6	81.8	81.6	81.8	81.8	81.8	81.9	81.6	81.5	81.9	81.3	81.3	81.4	81.6	81.9	81.6	81.6	81.8	81.8						82.2
24	81.8	81.7	81.6	81.8	81.6	82.0	82.2	81.8	81.8	81.6	81.6	81.9	81.5	81.5	81.6	81.8	82.0	81.9	81.9	81.8	81.8						82.4

RECORDED 005

Duquesne Light Company
Power Stations
Shipping Port

DL-S-225
REACTIVITY LIFE TIME
TEST GROUP CHECKED BY
DATE 7/11/58-7/13/58

Table IVB (cont)

BLANKET FLOW																														
DATE	7/11	7/11	7/11	7-12	7-12	7-12	7-13	7-13	7-13	7-14	7-14	7-14	7-15	7-15	7-15	7-16	7-16	7-16	7-17	7-17	7-17	7-18	7-18	7-18	7-19	7-19	7-19	7-20		
TIME	0700	1519	2336	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700		
↓ PT.																														
1	73.0	73.0	73.0	73.0	73.1	73.2	73.0	74.4	74.4	74.0	73.8	74.3	74.3	74.0	74.0	74.0	74.1	74.0	74.1	74.9	74.2	74.6	74.4	74.3	74.6		74.8	74.6		
2	87.1	87.2	87.4	86.9	87.5	87.3	87.3	86.6	87.0	87.4	87.5	87.5	87.8	87.8	87.6	87.6	87.5	87.6	88.0	87.9	87.3	87.1	88.0	87.8	87.6		88.1	88.9		
3	72.5	72.6	72.7	72.5	72.5	72.6	72.6	72.0	72.6	72.8	72.5	72.8	72.7	72.5	72.8	72.7	72.6	72.7	72.8	72.7	72.6	72.7	72.5	72.6	73.0		72.8	72.8		
4	79.8	80.3	79.6	79.4	80.5	79.8	80.5	79.6	79.2	79.7	79.4	79.5	79.2	79.5	79.3	79.3	79.3	79.3	79.2	79.3	79.6	79.7	79.0	79.6	79.4		79.6	79.9		
5	73.2	73.1	73.3	73.1	73.3	73.4	73.6	72.1	72.1	72.2	72.1	72.2	72.3	72.3	72.0	72.0	72.1	72.0	72.5	72.5	72.2	72.4	72.3	72.1	72.2		72.4	72.5		
6	86.5	86.8	86.8	86.8	86.7	86.8	86.8	87.4	86.8	86.7	86.8	86.9	87.3	87.3	87.0	87.0	87.3	87.0	86.9	87.2	86.8	86.9	86.9	87.1		87.4	87.0			
7	72.6	72.8	72.9	72.5	72.5	72.5	72.9	74.6	74.5	74.4	73.9	73.6	74.6	74.0	74.0	74.0	74.1	74.0	74.6	74.5	74.4	74.6	74.3	74.0	74.2		74.5	74.5		
8	79.6	79.5	79.7	79.9	79.5	79.8	79.8	76.5	78.0	77.0	76.6	77.0	75.9	77.0	76.7	76.7	76.8	76.7	76.8	77.4	77.3	76.9	77.0	77.0	76.9		77.5	77.3		
9	80.2	80.5	80.5	80.5	80.7	80.6	80.8	78.1	77.5	77.2	77.9	77.1	77.8	77.9	77.9	77.9	77.8	77.9	77.6	78.5	77.8	78.1	77.9	77.7		77.6	78.3			
10	77.2	77.5	77.6	77.5	77.5	77.6	77.6	77.3	77.1	77.0	77.0	77.3	77.6	76.9	76.9	76.9	77.0	76.9	77.6	77.3	76.9	77.6	77.0	77.2	77.5		77.7	77.3		
11	79.0	79.4	79.2	79.5	79.3	79.6	79.4	78.6	78.6	78.6	78.5	78.5	79.0	78.5	78.4	78.4	79.0	78.4	79.0	79.0	78.9	78.6	79.0	78.0	78.3		79.0	78.8		
12	79.0	79.4	79.2	79.5	79.9	79.7	79.4	79.0	79.0	79.9	78.9	78.5	79.1	78.7	78.8	78.8	79.0	78.8	79.3	79.3	79.0	79.2	78.9	78.9	79.0	79.1		79.1	79.0	
13	77.8	78.1	77.9	78.0	78.1	78.2	78.2	78.0	78.7	78.1	77.3	77.3	78.4	78.1	78.1	78.1	78.8	78.1	78.8	78.5	78.4	78.4	78.2	78.0	78.4	78.0		78.0	78.5	
14	77.4	77.6	77.0	77.2	77.3	77.1	77.2	81.0	81.4	81.1	80.8	81.2	81.0	80.5	81.2	81.2	81.8	81.2	81.2	81.5	81.5	81.1	81.6	81.0	80.8	81.0		81.0	81.9	
15	75.0	75.2	74.9	75.0	75.0	74.8	75.5	78.2	77.8	77.9	77.5	77.7	77.6	77.9	77.9	77.9	77.6	77.9	78.4	78.1	77.6	78.1	78.0	77.9	78.3	78.0		78.0	78.5	
16	76.5	76.7	77.0	77.0	77.0	77.2	77.0	78.2	78.0	77.9	77.6	77.7	77.7	77.9	77.9	77.9	77.7	77.9	78.5	77.7	77.6	78.1	78.0	77.9	77.9	78.1		78.1	78.2	
17	78.7	79.1	79.3	79.1	79.5	78.8	79.3	79.3	79.4	79.3	79.2	79.1	79.3	79.3	79.3	79.3	79.3	79.3	79.6	79.6	79.3	78.3	79.6	79.2	79.3	79.5		79.5	79.9	
18	83.6	82.9	83.0	83.0	82.8	83.0	83.6	83.7	83.8	84.0	83.9	83.5	84.0	83.7	83.5	83.5	83.9	83.5	83.7	83.8	84.0	83.2	84.0	84.0	84.2	84.1		84.1	84.1	
19	73.9	74.0	74.0	73.7	74.0	74.0	74.4	74.3	74.6	74.5	74.3	74.3	74.3	74.5	74.5	74.5	74.3	74.5	74.6	74.5	74.6	74.5	74.6	74.3	74.6	74.5		74.5	74.8	
20	71.6	71.8	71.7	71.7	71.5	71.8	72.0	72.1	72.5	72.5	72.4	72.5	72.5	72.5	72.3	72.3	72.2	72.3	72.6	72.5	72.4	72.5	72.5	72.3	72.5	72.4		72.4	72.7	
21	82.1	82.1	81.9	81.9	82.2	82.2	82.2	82.7	82.7	83.0	82.9	82.9	82.9	82.9	82.9	82.9	82.6	82.6	82.9	82.6	82.8	83.0	82.9	82.8	83.0	82.6		82.6	83.0	
22	82.1	82.4	82.2	82.1	82.0	82.2	82.2	82.4	82.8	82.9	83.0	82.9	83.0	83.0	82.7	82.7	82.7	82.9	82.7	82.9	83.2	82.9	82.9	83.0	82.7	82.9	82.8		82.8	83.0
23	82.1	82.4	82.2	82.1	82.1	82.2	82.2	82.7	83.0	83.0	83.0	82.9	83.0	83.0	82.8	82.8	82.9	82.8	82.9	83.2	82.9	82.9	83.2	82.7	82.9	82.7		82.7	83.2	
24	82.3	82.6	82.2	82.1	82.1	82.2	82.2	82.7	83.1	83.0	83.0	82.9	83.0	83.0	82.8	82.8	83.0	82.8	83.0	83.0	83.0	83.3	83.3	83.0	82.8	82.8		82.8	83.3	

DL-S-225
Duquesne Light Company
Power Stations
Shippensburg

REACTIVITY LIFE TIME

4

Test Group

7/20/58 - 7/29/58

TABLE IVB (CONT'D)

BLANKET FLOW

DATE	7-20	7-20	7-21	7-21	7-21	7-22	7-22	7-22	7-23	7-23	7-23	7-24	7-24	7-24	7-25	7-25	7-26	7-26	7-26	7-27	7-27	7-27	7-28	7-28	7-28	7-29	7-29	
TIME	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	
↓PT																												
1	74.5	74.5	75.0	74.5	74.5	74.3	74.5	74.6	74.5	74.1	74.5	74.5	74.4	74.6	74.4	74.9	74.3	74.0	74.0	74.4	74.7	74.4	74.4	74.8	74.5	74.5	74.9	74.9
2	87.4	88.2	88.8	88.2	88.0	88.0	88.0	87.7	87.7	88.0	87.5	87.8	87.7	89.1	87.3	86.9	86.6	87.2	86.5	88.0	88.5	88.2	88.3	88.6	87.2	88.2	88.2	88.0
3	73.0	73.0	70.3	73.0	72.9	73.0	70.1	70.1	72.7	72.7	72.8	73.6	72.6	72.7	72.9	72.8	72.9	73.0	72.5	72.3	72.7	72.5	72.7	73.0	72.5	72.9	72.9	72.5
4	79.7	79.6	79.9	79.5	80.2	79.6	79.6	79.2	79.3	79.6	79.4	80.0	79.3	79.8	79.2	79.6	78.7	79.8	78.5	79.1	79.5	79.5	79.4	79.9	79.9	79.0	79.6	79.9
5	71.8	72.5	72.5	72.3	72.5	72.0	72.2	72.4	72.2	72.1	72.3	71.8	72.0	72.3	72.0	72.3	72.3	72.1	72.1	72.5	72.4	72.0	72.2	72.5	72.5	72.5	72.9	72.2
6	87.8	87.2	86.9	87.2	87.2	86.6	87.2	86.8	86.7	87.0	87.3	87.2	86.7	87.2	87.0	87.0	86.9	87.0	87.0	86.6	86.6	86.7	86.7	87.0	87.0	87.0	87.5	87.0
7	75.2	74.8	75.0	75.0	74.5	74.3	74.2	74.5	74.2	74.5	74.9	74.9	74.2	74.6	73.9	74.2	74.2	74.0	74.2	74.0	74.1	74.4	74.3	74.2	74.5	74.2	74.6	74.5
8	77.9	77.2	77.3	77.2	76.9	76.7	77.1	76.8	76.7	77.1	76.8	76.7	77.0	77.0	76.9	76.9	76.7	77.0	76.8	77.2	76.6	76.5	76.8	77.0	77.0	77.3	77.2	77.0
9	78.4	78.0	78.3	78.6	77.9	77.8	78.1	78.1	77.9	78.0	77.6	78.0	77.9	77.6	77.8	78.2	77.9	77.6	77.6	77.4	77.8	77.5	77.4	78.1	77.6	77.8	78.1	78.1
10	78.0	77.1	77.4	77.6	77.1	77.0	77.0	77.0	77.2	77.1	77.0	77.6	77.2	77.3	77.0	77.2	77.0	77.3	77.0	77.5	77.3	76.8	76.8	77.1	76.8	77.3	77.6	77.0
11	79.0	78.5	79.3	78.8	78.7	78.3	78.9	78.6	78.6	78.6	78.6	78.8	78.4	78.3	79.0	78.8	78.2	78.5	78.0	78.5	78.4	78.1	78.4	78.7	78.6	78.9	78.9	78.8
12	79.9	79.2	79.3	79.1	78.8	78.5	79.0	79.1	78.8	79.0	78.8	79.0	78.8	79.0	79.0	78.9	78.7	78.9	78.5	78.5	78.8	78.5	78.7	79.0	78.8	79.2	79.9	79.0
13	78.5	78.8	78.2	78.3	78.0	78.3	78.5	78.5	78.4	78.4	78.0	78.8	78.6	78.1	78.3	78.4	78.1	78.0	77.9	78.0	78.2	78.0	77.9	78.7	78.7	78.3	79.0	78.1
14	81.2	81.0	82.2	81.8	81.0	80.9	81.6	81.4	81.7	80.8	80.9	81.0	80.5	80.9	81.0	81.3	80.5	80.5	80.4	81.2	80.5	80.8	81.1	81.1	80.8	81.2	81.0	81.2
15	79.0	78.2	78.8	78.0	77.9	77.8	78.0	78.0	77.8	77.6	77.9	78.0	77.9	77.6	77.8	78.0	77.6	78.0	78.0	78.0	77.9	77.4	78.0	78.1	78.0	78.4	78.3	78.0
16	78.2	78.0	78.3	78.0	77.9	77.8	78.0	78.0	77.8	77.6	77.9	77.7	77.6	77.6	77.8	77.9	77.6	77.9	77.9	78.0	77.9	77.5	77.6	77.9	78.0	78.2	78.1	78.0
17	79.9	79.3	79.7	79.6	79.1	79.3	79.5	79.2	79.0	79.4	79.4	79.2	79.0	79.2	79.4	79.3	79.1	79.0	79.0	79.0	79.1	79.2	79.1	79.3	79.3	79.2	79.6	79.4
18	84.2	84.0	83.9	83.8	84.2	83.4	85.0	83.5	84.0	83.7	84.1	83.7	83.3	83.5	84.0	83.8	83.7	83.8	83.8	83.2	83.8	83.8	83.3	83.3	84.0	84.0	83.4	83.8
19	75.2	74.6	74.5	74.3	74.9	74.5	73.6	73.5	74.5	74.3	74.4	74.5	74.3	74.4	74.6	74.5	74.3	74.5	74.2	74.4	74.5	74.4	74.4	74.6	74.3	74.3	74.7	74.4
20	0	72.8	72.8	72.5	72.3	72.5	72.5	72.2	72.1	72.4	72.5	72.2	72.3	72.3	72.3	72.5	72.2	82.4	72.2	72.3	72.4	72.3	72.2	72.5	72.5	72.5	72.6	72.5
21	0	82.9	83.4	83.0	82.9	82.6	82.9	82.6	82.6	82.6	82.9	82.7	82.6	82.8	82.8	82.7	82.4	82.4	82.4	82.4	82.4	82.4	82.5	82.8	82.7	82.5	83.1	83.0
22	0	82.8	83.4	83.0	82.9	82.6	82.9	82.6	82.6	82.9	82.7	82.6	82.8	82.8	82.8	82.7	82.4	82.4	82.4	82.4	82.4	82.5	82.8	82.7	82.5	83.1	83.0	83.0
23	0	82.9	83.4	83.0	82.9	82.6	82.9	82.6	82.6	82.9	82.7	82.6	82.8	82.8	82.8	82.7	82.4	82.4	82.4	82.4	82.4	82.5	82.8	82.7	82.5	83.1	83.0	83.0
24	0	82.9	83.6	84.0	84.0	83.9	84.0	84.0	84.0	83.9	83.9	83.9	83.8	83.8	83.8	83.8	84.0	84.0	83.8	83.7	83.9	83.9	83.8	84.3	84.0	84.0	84.3	84.0

SUBJECT DL-S-225SHEET NO. 5Duguesne Light

COMPANY

REACTIVITY LIFE TIMEPower Stations

DEPARTMENT

Shippingport A.P.S.

DIVISION

COMPILED BY Test Group CHECKED BYDATE 7/29/58 - 8/7/58

TABLE IV B (CONT'D)

FORM GSB-7113

BLANKET FLOW

DATE	7/29	7/30	7/30	7/30	7/31	7/31	7/31	8/1/58	8/1/58	8/1/58	8-2	8/2/58	8/2/58	8/3/58	8-3-58	8/3	8/4/58	8/4/58	8/4/58	8/5/58	8-5-58	8-5-58	8-6-58	8-6-58	8-6-58	8-7-58	8-7-58	8-7-58
TIME	2300	0700	1500	2300	0723	1700	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	0950	2100
PE																												
1	74.6	74.9	74.5	74.9			74.8	74.7	74.8	74.7	74.8	↑	74.5	74.6	74.5	75.0	74.9	74.8	74.5	75.2	75.1	75.0	75.2	75.2	75.1	75.2	75.0	75.1
2	88.0	88.0*	87.7	88.1			88.9	88.1	88.6	88.2	88.9	↑	88.0	88.5	88.3	88.3	87.8	88.9	88.0	87.0	88.5	88.3	87.7	88.9	88.0	87.5	87.7	88.2
3	72.8	73.0	72.8	72.8			73.0	72.9	72.8	73.1	72.9	↑	73.0	72.7	72.6	72.6	73.0	72.9	73.0	73.2	72.5	73.0	72.6	72.8	72.8	72.6	72.7	
4	79.0	79.7	80.3	79.5			80.0	79.5	80.1	79.9	79.9	↑	79.2	79.4	79.4	79.7	80.2	79.9	79.2	79.5	80.2	79.6	79.6	79.6	79.6	79.5	79.0	79.4
5	72.5	72.5	72.3	72.3			72.3	72.3	72.4	72.3	72.5	↑	72.2	72.6	72.5	72.5	72.5	72.5	72.2	72.2	72.2	72.2	72.4	72.2	72.4	72.1	72.1	72.1
6	86.9	87.2	87.1	86.9			87.0	86.6	87.2	87.0	87.0	↑	87.0	86.7	86.4	87.3	86.8	87.0	87.0	87.5	87.3	86.8	87.5	86.9	86.6	86.8	86.8	86.6
7	74.1	74.6	74.3	74.7			74.3	74.5	74.3	74.3	74.6	↑	74.4	74.3	74.3	74.4	74.4	74.6	74.4	74.5	74.5	74.5	74.4	74.2	74.6	74.1	74.4	
8	77.0	77.0	77.1	76.7			77.3	77.1	77.0	77.0	77.3	↑	76.8	77.1	77.1	77.0	77.2	77.3	76.8	77.1	77.1	77.1	77.2	76.7	77.0	76.6	77.2	77.2
9	78.1	78.0	78.0	78.2			78.3	77.8	78.0	78.2	77.8	↑	78.0	77.5	77.5	77.9	78.2	77.8	78.0	77.9	78.2	78.0	78.2	78.0	77.9	78.0	77.9	77.8
10	77.0	77.3	77.2	77.4			77.3	77.4	77.1	77.3	77.3	↑	77.0	77.0	77.0	77.2	77.4	77.3	77.0	77.2	77.0	77.2	77.2	77.0	77.2	76.8	77.1	77.1
11	78.6	78.9	78.8	78.4			78.4	78.6	78.6	78.8	79.1	↑	78.4	78.7	78.7	78.5	78.8	79.1	78.4	79.0	78.8	78.6	78.6	78.8	78.5	79.0	78.4	78.6
12	79.0	79.0	79.0	79.0			79.2	79.0	79.2	79.1	79.1	↑	78.8	78.9	78.8	79.0	79.2	79.1	78.8	79.2	79.2	79.1	79.1	79.0	78.7	79.0	78.8	79.0
13	78.5	78.7	78.1	78.7			78.6	78.3	78.3	78.2	78.1	↑	78.2	78.0	78.1	78.5	78.5	78.1	78.2	78.5	78.6	78.6	78.4	78.1	78.0	78.4	78.1	79.4
14	81.0	81.4	80.9	81.0			81.4	81.0	81.5	81.3	81.5	↑	81.0	80.0	80.1	81.3	81.5	81.5	81.0	81.3	81.5	81.4	81.5	81.4	81.0	81.2	80.9	81.2
15	77.9	77.9	78.0	78.0			78.1	77.8	78.0	77.8	77.8	↑	78.0	78.0	78.0	77.9	78.1	77.8	78.0	78.5	78.9	78.8	77.8	77.8	77.8	78.2	77.3	77.5
16	77.9	77.9	78.0	78.0			78.1	77.6	78.0	77.9	77.8	↑	78.0	78.0	78.0	77.9	78.1	77.8	78.0	78.4	78.1	77.9	78.0	77.8	77.9	78.2	77.5	77.7
17	77.5	77.5	77.4	77.3			77.5	77.4	77.4	77.3	77.4	↑	77.2	77.2	77.1	77.4	77.5	77.4	77.2	77.7	77.7	77.7	77.4	77.4	77.4	77.1	77.2	
18	83.6	84.3	83.6	83.6			84.3	83.8	84.0	84.1	84.0	↑	83.9	83.3	83.4	83.6	84.0	84.0	83.9	83.8	84.0	84.0	84.0	84.3	83.8	83.7	84.0	84.1
19	74.6	74.9	74.5	74.6			74.5	74.5	74.6	74.6	74.6	↑	74.5	74.5	74.6	74.6	74.9	74.6	74.5	74.7	74.6	74.6	74.6	74.5	74.6	74.3	74.3	
20	72.4	72.7	72.5	72.7			72.5	72.5	72.5	72.5	72.6	↑	72.3	72.5	72.4	72.5	72.6	72.6	72.3	72.6	72.5	72.5	72.5	72.4	72.5	72.4	72.3	72.5
21	82.9	83.0	82.9	82.8			82.8	82.8	82.8	82.9	82.7	↑	82.4	82.4	82.3	82.5	83.2	82.7	82.4	82.9	83.0	82.6	82.7	82.8	82.6	82.7	82.7	83.0
22	86.0	86.0	86.2	85.9			86.2	85.9	86.1	86.1	86.0	↑	85.6	85.8	85.8	85.9	86.3	86.0	85.6	86.9	86.4	86.0	86.0	86.0	86.3	85.9	86.2	85.8
23	84.0	84.5	84.0	84.2			84.0	83.9	84.0	84.0	84.0	↑	83.7	84.0	83.7	84.0	84.0	84.0	83.7	84.2	84.0	84.0	84.2	83.9	83.7	84.0	83.8	84.0
24	84.0	84.2	82.0	84.0			84.0	83.9	84.0	84.0	84.0	↑	83.7	84.0	84.0	83.8	84.0	84.0	83.7	84.2	84.0	84.0	84.1	83.9	83.6	84.0	83.8	84.0

PLANT SHUTDOWN

PLANT SHUT DOWN

SHEET NO. 6

Reactivity. Lifetime

DEPARTMENT

DIVISION

COMPLETED - Test Group

CHECKED BY

DATE _____

8-8-58 To 8/14/58

Table IV: B (CONT'D)

PO 24 623-7112

BUREAU		Flood																				
Date	8-8	8-8	8-8	8-9	8-9	8-9	8-10	8-10	8-10	8-10	8-11	8-11	8-11	8-11	8-11	8-11	8-11	8-11	8-11	8-11	8-11	
Time	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	
R.																						
1	75.1	75.1	75.2	75.3	75.5	75.4	75.3	75.2	75.2	75.2	75.7	75.3	75.5	75.3	75.5	75.7	75.3	75.7	75.6	75.2		
2	88.2	88.4	88.8	88.1	88.8	88.0	88.6	88.1	88.0	87.8	88.8	87.6	88.7	87.4	87.6	88.5	87.4	88.3	88.0	87.9		
3	72.9	72.6	72.9	73.0	72.6	72.8	73.0	72.8	72.7	72.8	72.8	73.0	72.8	72.5	72.7	72.9	72.6	72.8	72.8	72.6		
4	79.4	79.9	79.9	79.6	80.1	79.8	80.0	79.8	79.7	79.2	79.7	79.3	79.5	79.3	79.9	80.3	79.5	79.6	79.7	79.6		
5	72.4	72.1	72.4	72.5	72.4	72.5	72.4	72.3	72.5	72.3	72.2	72.2	72.4	72.0	72.2	72.8	72.2	72.2	72.2	72.1		
6	87.3	87.2	86.7	87.2	87.2	87.0	87.0	76.7	87.0	86.8	87.1	86.8	87.0	87.3	86.9	87.2	87.2	87.1	86.6	86.5		
7	74.6	74.5	74.0	74.6	74.6	74.4	74.4	74.3	74.2	74.3	74.0	74.3	74.2	74.1	74.4	74.9	74.5	74.3	74.5	74.3		
8	77.2	77.0	77.3	77.0	77.1	77.1	77.2	76.7	76.9	76.9	77.2	76.8	77.2	77.0	77.0	77.3	76.8	77.4	77.4	77.0		
9	78.1	78.4	78.2	78.2	77.9	78.3	77.9	77.9	78.2	77.8	78.0	77.4	78.2	78.0	77.7	77.8	77.9	77.9	78.0	77.3		
10	77.2	77.0	77.4	77.4	77.3	77.1	77.4	76.8	77.2	77.1	77.0	77.0	77.0	77.0	77.2	77.4	77.0	77.0	77.0	77.0		
11	78.4	78.6	78.7	79.1	78.9	78.5	78.8	78.6	78.4	78.5	78.5	78.3	78.6	78.5	78.8	78.3	78.6	78.8	79.0	78.4		
12	79.0	79.0	79.1	79.5	79.1	78.9	79.0	78.9	78.9	79.0	79.1	78.9	79.0	78.6	79.1	79.1	79.0	78.9	79.0	79.0		
13	78.4	78.2	78.2	78.5	78.8	78.7	78.5	78.3	78.5	78.3	78.2	78.0	78.5	78.2	78.4	78.4	78.2	77.3	78.2	78.1		
14	81.6	81.0	81.0	81.2	81.3	81.0	81.1	80.8	80.9	80.7	81.0	80.8	81.5	80.9	81.0	80.1	80.8	81.0	81.1	80.7		
15	77.9	78.0	78.1	78.3	78.3	78.0	78.2	77.3	77.9	77.8	77.5	78.0	78.1	77.9	77.7	78.2	77.9	78.1	78.2	77.7		
16	77.5	78.1	78.0	78.9	78.2	78.1	78.2	77.6	77.6	77.8	78.0	78.0	78.1	77.9	77.7	78.2	77.7	77.9	78.2	77.8		
17	79.5	79.5	79.4	79.5	79.6	79.4	79.4	79.3	79.2	79.2	79.3	79.1	79.5	79.4	79.3	79.4	79.3	79.4	79.4	79.3		
18	84.0	84.0	83.8	84.0	83.5	84.0	83.8	83.5	83.8	83.5	83.8	84.0	83.8	83.7	83.8	83.4	83.6	83.7	83.9	83.8		
19	74.6	74.6	74.6	74.8	74.7	74.6	74.7	74.7	74.5	74.6	74.6	74.6	74.8	74.8	74.6	74.7	74.7	74.8	74.8	74.6		
20	72.6	72.5	72.4	72.8	72.5	72.5	72.6	72.6	72.5	72.5	72.4	72.5	72.4	72.3	72.4	72.8	72.4	72.5	72.5	72.5		
21	82.8	83.0	82.8	83.0	82.8	83.0	82.9	82.7	82.6	82.8	82.9	82.8	82.9	82.7	82.8	83.0	82.7	82.6	82.8	82.7		
22	86.2	86.4	85.9	86.3	86.2	86.4	86.1	86.2	86.0	86.1	86.5	86.2	86.1	85.9	86.1	86.3	86.1	85.9	86.4	85.9		
23	84.0	84.0	83.8	84.1	84.0	84.0	84.3	84.1	84.0	84.1	84.0	84.2	84.2	83.8	84.0	84.0	83.9	84.2	84.1	84.0		
24	84.0	84.0	83.8	84.1	84.0	84.0	84.1	84.1	84.0	84.0	84.0	84.0	84.0	83.8	84.0	84.0	83.9	83.8	84.0	84.0		

7d

DL - S - 225

DLC COMPANY REACTIVITY LIFETIME

PS DEPT. DEPARTMENT

SHIPPING PORT. _____ DIVISION COLLECTED BY TEST GROUP OFFERED BY _____ DATE 7/1/58 - 7/4/58

TABLE IV.C

BLANKET EXIT AND INLET TEMPERATURES

DATE 7/1/80 7/1/80 7/1/80 7/1/80 7-2 7-2 7-2 7-2 7-2 7-3 7-3 7-3 7-3 7-3 7-3 7-3 7-3 7-3 7-3 7-4 7-4 7-4 7-4

TIME 1523 1900 2300 0300 0700 1100 1500 1900 2300 0300 0700 1000 1030 1100 1130 1200 1500 1900 2300 0300 0700 1100 1500

17

1 525 525.2 525.5 527.0 526.0 527.0 528 527 527.5 527.0 527 527 527 526.5 527 527 527 529 527.5 528 528 528.5 529

2 526 526.5 527.5 528.0 528.5 528.5 528.5 527.5 527.5 527.5 527 527.5 528 528 529 528 529 528.5 529 529.5

3 526 526.0 527.5 528.5 528.0 528.5 529 529 529 528 528 528.5 528 527.5 528.5 528.5 528 530 528 529 529.2 529.5 530

4 528 528.0 528.5 529.0 528.0 529.5 529.5 529.8 530 529.5 529 529.5 529 528.5 529.5 529.5 529.5 531 529 530 530.2 530.3 531

c 524 521.5 521.0 521.0 521.0 522 523 523 523 522 521 522 521.5 521 522 522 520.2 523 521 522.5 522.5 522.5 522

6 530 530 530.2 530.5 530.8 531.0 531.2 531.8 531.8 531.0 530 530.5 530 530 530.5 530.5 530.1 532 531 532.5 531.8 532 532.8

7	534	533.05	330	534.0	533.05	350	536	535.5	535.2	535.5	534.0	534.5	534.5	534	534.5	534.5	539	536	535	532	531.8	532	533.3
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8 531 530 529 530 528 530 531.5 531.2 530.8 530.0 529.0 530 529.5 529 530 530 530 531 530 530.5 530.6 531 531

9 546 546 544.8 545 543 545.5 546 545.2 545.8 545 545 544.5 544.5 544.5 545 545 545 545 547 545.5 546 546.1 546.5 546.8

10 535 536 534 534 532 534 535 535 535 534 534 534 533 534 534 536 535 535 535 535 535

11

12

13 525 524.6 524.5 525 524.5 525.5 527.5 527.0 526.0 526.5 526.5 526 527 526.5 526 528 527.5 527.5 527.5 527.5 527.5

14 513 512.5 512 513.5 512.5 513 515 515.2 515.5 515.0 514 515 515 514.5 515.5 515 515 516.5 515.5 515.5 515.2 516 515.5

15 520 520 519.5 520 519.5 520 522 521.8 522 521.5 521.0 521.5 521.5 521 521.5 521.5 523 523 522 522 522 522 522

11. 530 530 529 529 528 529 529.5 529 529.5 529 528.5 529 528.5 528 529 529 528 530 529.5 530 529.2 530 529.5

17 533.533 532.532 532.532 532.532 533.534 534.0533.0533.5533.532.5533.5533.5534 535 539.5 539.5 539.5 535 539.5

18	526	526	526	526	525	526	527	527	526	526	526	526	525	526	526	526	527	527	527	527	527	527	527
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19 457 462 462.5 461.5 461 462 464 464 463 463 463 463 463 463 463.5 464 465 469 463 463.2 4639 4650

20 528 528 528 528.5 528.329.5 529.5 529.5 529.5 529 529 529 528.5 528 529 529.5 528 529.5 529.5 530 530.1 530.1 530.5

21	523	522.5	522.8	523	523	523.5	524	524.5	523	522.5	523	522.5	522	523	523	520.6	524.5	523.5	524	523.8	523.7	524
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22 523 523 522.5 523 523.0 524 524 523.5 523.8 523.5 523 523.5 523.5 523 523.5 523.5 520.7 525 524.5 524.5 524.5 525 525

13. 507 507.5 507.2 508.5 508. 509 508 505.5 506.5 509.0 508.0 508.5 508.5 505.5 508 508.5 505.3 513.5 508 509 509 509.7 513.9

24 526 527.5 527.8 529.05 28.0 528 528.5 528 529 529 528 523.5 523.5 523 523.5 523.5 523.6 530 528.5 529 529 529.5 529.5

25 525 525.0 525 531 526 526 527 526 526.2 526 526 526 526 525.5 526.5 526.5 525.2 528 526.5 527 527.3 527.9 527.5

21. 529 529.5 529 530 530 529.5 530 529 530 530 529.0 530 529.5 529.5 530 530 530 531.5 530.5 531 531.0 531.5 531

:7 H57 H61 H62 HW5 H60 H60 H60 H60 H59 H59 H59 458 459 459 459 459 460 461 460 460 459E 460S 461S

28 507 506.5 508 509 508 508.5 507.5 507 508 508 507.5 509 508 507.5 508 508 508 508 507.5 508 508 507.5 508

29 506 5050 507 508 506 507.5 507 506 507 507 506.5 507 507 506.5 507 507 506 507.5 506.5 507 507 507 506

30 504 5035 502 506 505 505 5045 504 5048 5045 5040 5045 5045 504 5045 505 508 505 504 505 505 5043 505

31 507 506 507.5 508 507 507.5 507.5 506.5 506.5 507 507 507 507 506.5 507.5 507.5 507 507.5 506 507 507 506.9 507

72	509	508.5	510	511.5	510	510	509.5	509	510.0	509.5	510	510	509.5	510	510.5	510	510.5	510	510
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33	504	504.5	506	508.0	509	509	509.5	507.5	507.2	508	508	508	508	508	508	508.5	508	510	509	510	510	510.5	511
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SUBJECT DL-S-225

INLET NO. 5

DLC COMPANY REACTIVITY LIFETIME

P.S. DEPT. DEPARTMENT

SHIPPINGPORT. C.VISION TEST GROUP CHECKED BY DATE 7/1/58-7/4/58

TABLE IV C (CONT)

BLANKET EXIT AND INLET TEMPERATURES

DATE	7-1	7-1	7-1	7-2	7-2	7-2	7-2	7-2	7-2	7-3	7-3	7-3	7-3	7-3	7-3	7-3	7-3	7-3	7-3	7-4	7-4	7-4	7-4
TIME	1533	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1000	1030	1100	1130	1200	1500	1900	2300	0300	0700	1100	1500
34	467	487	486	486.5	486	487	488	484.5	482.8	482	482	482	481.5	481	483	483	483	483	483	485	482	486.5	486.5
35	523	524	525.2	528	527.5	530	530.5	529.5	531.5	530.5	530	531	530.5	530	530.5	531	532	533	531	532	532	531.5	533
36	490	490	490	490	490	491	491	488.8	489	488.5	499	490.5	490	489.5	490	488.5	493	496	493	496	496	496.5	497.5
37	501	502.2	503.8	505.5	505.0	506.5	507	506	507.5	506.0	506	506	506	505.5	506.5	506.5	509	507	508.5	508.5	508.5	508.5	508.5
38	533	534.5	536.5	539.5	539.0	542	543	541.5	544	543.0	543	543.5	543	542.5	543.5	543	544	545	542.5	545	545	546	546

SEED EXIT WATER TEMPERATURE

DATE	7/1/58	7/2/58	7/3/58	7/4/58
TIME	1500 2200 0200 0700 1100 1500 1900 2300 0300 0700 1100 1500			
1 FT.				
1	521.3 521.7 530 532.0 532 534.5 536 534.9 536.1 535 535 535 535 534 532 535 535 538 536 536.5 532 537.5 537.5			
2	527.6 527.2 527.2 527.5 527 528.5 528.5 526.6 528.1 527 527 527 527 527 526 526.5 527.5 529.5 528 528 528 529 529			
3	527.7 529.2 532.8 535 535 537.5 538.5 537.1 538.9 538 538 538 538 538 536 534 533 539 541 540 540 540 540.5 540.5			
4	479.6 479 477.7 477.5 477.5 479.5 479.5 476.5 477.2 476 476 476 476 476 476 476 477 479 478 473 474 478.5 519.3			
5	516.0 515.1 516.4 516.5 516.5 516.5 519 517.6 516 519 519 519 518.5 518 518 518 519 520.2 519 519 519 519.5 519.5			
6	529.1 529.2 533.3 536 536.5 539 541 539.2 541 540 541 541 540.5 540.5 543 542 542 543 541.5 543			
7	499.6 499.6 500.8 500.5 500 500 501.5 496.7 499 499 498.7 498 496.5 498 499 496 499 496			
8	500.0 500.2 501.7 502.5 503 504.5 505 503 503.3 504 503 503 504 504 504 504.5 504 506.5 504.8 506 506 507.5 507.5			
9	519.5 519.1 520.0 519.0 518.5 515 519 518 517.1 518 518 518 519 518 518 519 518.5 519 520 518 519 519 519 519.9			
10	521.5 522.3 523.6 526 526.5 529 529.5 528.1 528.6 528.5 529 529 529 528 527 529 529 531.5 529.7 530.5 530.5 531 531.5			
11	514.2 513.6 513.5 514 513.5 514.5 516.5 514 514.4 514 514 514 514 514 514 515 515 516 514.9 516 516.2 516 516.5			
12	457 457.2 461.9 465 466.5 470 467.5 463.3 462.0 466.5 465 453 454 454 453 454 453 454 452.9 453.5 455.2 455.5 457.9			
13	495 416.2 491.6 492 491 492.5 491.5 487.2 486.1 490 486 487 489 487 488 487.5 487.5 491.9 491 494 494.5 495.5 496.5			
14	521.5 521.5 523.0 526 526 527 529 527.7 529.6 529 528 528 528 528 529 529 529 530.9 529 530 530.5 530.5 530.7			
15	512.8 512.1 512.3 513 513 515 516.5 512.2 514.5 514 513 513 513 513 514 513 514 515 513.5 514.5 515 515 514.4			
16	532.0 533.2 535.3 538 538 541 542 541.4 543 542 541 542 541 541 542 542 542 544 543 543.5 544 544.5 544.5			
17	541.0 540.6 539.9 541.5 541 543 543 543.2 543.6 543 542 542 542 542 543 542.5 543 544.9 543 544 544 544.5 544.5			
18	528.0 528.6 529.5 531.5 531 533.5 534 533.3 532.9 534 533 533 533 533 533 533 533 533.5 535 534 534.5 535 535 535.4			
19	537.3 537.1 537.0 537.5 538.5 539 538.8 539 538.5 538 538 538 538 538 538 537 537 540.2 538.5 539.5 539 540 540.2			
20	522.0 523.6 525.3 527.0 527 528 528 527.7 528.8 528.5 527.5 528 528 528 528 528 528 528 530 529 529.5 530 530 530.5			
21	527.6 527.0 528.6 529 528			
22	536 536.9 538.2 539 539 541 542 541.8 542.1 542 541 541 540.5 540.5 541.5 541 541 544 542.5 543 543 543.5 543.5			
23	522.0 522.2 523.0 523 523 524.5 526 525.9 526 525.5 525 525 525 525 525 525 525 525 525 525 525 525 525 525			
24	528 528 528.0 528 527.5 529 529 529.4 529.7 528.5 529 529 528.5 528 529 528 529 528 529 528 529 528 529 528			

* INDICATE WHEN READING WERE STATED

SUBJECT DL-S-225 SHEET NO. 6

COMPANY

REACTIVITY LIFETIME

- DÉPARTEMENT

DIVISION

COMPILED BY

CHECKED BY

DATE 7/4/58-7 9/58

FORM OF A-7112

TABLE IV C (CON'T)

[illegible]

PC# 62-7112

BLANKET EXIT		INLET TEMP.		TEMPERATURE																											
DATE	7-4	7-4	7-5	7-5	7-5	7-5	7-5	7-6	7-6	7-6	7-6	7-6	7-6	7-6	7-7	7-7	7-7	7-7	7-7	7-7	7-7	7-8	7-8	7-8	7-8	7-8	7-8	7-8	7-9	7-9	
TIME	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900
PT																															
34	488.2	485.0	489.0	488.2	488.0	488.0	488.0	488.5	486.5	483.5	489.0	487.5	487.5	488	488.5	489	492	488.8	488	490.0	488.5	489.5	490	490.5	493	491.5	491.5	491.5	491		
35	531.6	531.6	532.5	531.5	532.5	531.0	533.0	533.0	531.5	533.5	533.0	532.0	532	532	532.5	532.2	532.2	530.6	532	532.5	532	533.5	533.5	533.5	533	534	532.5	532			
36	493.6	493.0	493.0	491.0	494.0	493.0	496.0	491.0	493.5	494.5	493.0	492.5	493.5	491.5	492.5	491.4	491	492	493	494.5	492	493.5	492.5	494	492.5	493	494	494			
37	508.6	508.5	509.5	508.5	508.5	508.0	510.0	510.0	508.0	510.0	510.0	509.5	509	509	509.5	509.3	509.5	510	509.5	510	509.5	510.5	510.5	511.5	511	511.5	510	510			
38	544.0	544.5	545.5	544.5	545.0	544.0	545.5	546.0	544.0	546.5	545.0	544.7	544.5	545	545.5	545.5	545	545.5	545	544	544.5	545.5	545.5	545.5	545.5	545	545	545	545		

DATE	7-4	7-4	7-4	7-5/58	7-5/58	7-5/58	7-6/58	7-6/58	7-6/58	7-7/58	7-7/58	7-7/58	7-8/58	7-8/58	7-8/58	7-9	7-9												
TIME	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	
1	535.0	537.0	538.0	536.5	537.0	536.5	537.5	538.0	537.0	538.0	537.5	537.5	537.0	538.5	537.0	537.0	537.0	537.5	538.0	538.5	536.5	538.0	537.5	536.5	535.0	536.0	535.5	535.0	
2	527.0	524.0	525.0	526.0	528.5	527.5	528.0	529.0	527.5	529.0	528.5	528.5	529.0	529.0	528.0	527.5	528.0	527.5	527.0	529.0	527.2	527.0	528.0	528.0	527.5	528.0	528.5	527.5	
3	539.0	540.0	541.0	538.5	540.5	539.5	541.0	541.0	539.5	541.0	540.5	540.0	539.5	541.0	539.0	539.5	540.0	540.5	540.0	541.5	539.2	540.5	540.5	540.5	540.5	540.0	541.0	540.0	539.0
4	479.0	473.0	479.0	476.0	453.0	453.0	454.0	480.0	479.0	480.0	480.0	479.5	478.8	479.0	478.0	478.3	478.5	479.0	478.0	478.5	479.0	478.0	478.5	478.5	478.0	480.0	479.5	480.0	479.0
5	519.0	519.0	520.0	518.5	519.0	518.5	519.5	520.0	518.5	520.0	519.0	519.5	518.5	519.5	518.0	518.5	518.5	518.5	518.5	518.5	519.0	520.0	518.5	518.5	519.0	519.0	518.5	519.0	518.5
6	542.0	542.0	543.5	542.5	543.0	541.5	543.0	543.5	541.5	543.0	541.5	542.5	542.0	543.0	541.0	542.5	542.5	542.0	542.0	542.5	542.0	542.5	543.0	542.5	543.0	542.5	541.5	542.0	542.5
7	499.0	500.0	500.5	499.0	499.0	498.5	500.0	500.0	499.0	500.5	500.5	500.5	499.0	500.0	500.0	500.0	499.5	500.0	500.5	500.0	500.5	501.0	500.5	502.0	502.0	502.0	502.0	502.5	502.5
8	507.5	506.0	506.5	505.5	506.0	506.5	506.0	506.0	505.5	506.0	506.0	505.5	506.1	506.0	504.5	505.9	506.5	506.5	506.5	506.5	507.0	507.5	506.5	506.0	506.0	506.0	506.0	506.0	506.0
9	519.0	518.0	519.0	518.5	519.0	518.5	519.5	519.5	518.0	520.0	519.5	518.5	518.5	519.0	518.0	518.5	518.5	519.0	519.0	521.5	518.1	520.0	519.0	519.0	518.0	519.0	519.5	519.5	519.0
10	530.0	530.0	531.0	530.0	530.5	530.0	532.0	532.0	529.7	532.0	531.5	531.0	530.9	531.5	530.0	530.5	531.0	531.0	530.0	530.5	530.5	532.0	532.0	532.0	531.0	531.0	531.0	531.0	531.0
11	515.0	516.0	516.5	515.5	515.5	515.0	516.5	517.0	515.5	518.0	516.5	516.5	515.9	516.5	515.5	515.5	516.5	515.5	515.0	517.5	515.7	517.0	516.0	516.0	515.5	516.0	516.0	516.0	516.0
12	459.0	461.0	462.0	461.5	463.0	464.5	468.0	468.5	470.0	471.0	475.0	477.0	478.0	479.0	478.0	480.0	484.0	487.5	486.0	493.5	495.5	497.0	498.0	499.0	500.5	501.0	501.0	501.0	502.5
13	498.0	498.0	499.0</																										

Reactivity Lifetime

COMPANY

PS _____ 11/17/41

5425

FORMED BY _____ CREATED BY _____

CREATED BY

7/9/50 - 7/13/50

3Q24 6240-247E

Table IV C (CON'T)

Blanket exit and Inlet Temperature

[illegible]

DL-S-225
DL-C Reactivity Lifetime

9

7/9/58-7/13/58

Table IEC (CONT)

Printed exit and Inlet Temperatures

Time	7-9	7-9	7-9	7-9	7-10	7-10	7-10	7-10	7-10	7-11	7-11	7-11	7-11	7-11	7-11	7-12	7-12	7-12	7-12	7-12	7-12	7-13	7-13	7-13	7-13	7-13	7-13	
Time	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300
34	491.5	491.5	491.5	491.5	491.5	500.5	500.5	500.5	500.5	502.5	496.5	498.5	501.5	500.0	496.5	497.5	501.0	499.5	502.0	502.5	504.5	505.0	501	502.0	504	498.5	507.0	505.0
35	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5	533.5
36	495.5	495.5	495.5	495.5	495.5	495.5	495.5	495.5	495.5	495.5	495.5	495.5	495.5	495.5	495.5	495.5	495.5	495.5	495.5	495.5	495.5	495.5	495.5	495.5	495.5	495.5	495.5	495.5
37	505.5	505.5	505.5	505.5	505.5	505.5	505.5	505.5	505.5	505.5	505.5	505.5	505.5	505.5	505.5	505.5	505.5	505.5	505.5	505.5	505.5	505.5	505.5	505.5	505.5	505.5	505.5	505.5
38	543.5	543.5	543.5	543.5	543.5	543.5	543.5	543.5	543.5	543.5	543.5	543.5	543.5	543.5	543.5	543.5	543.5	543.5	543.5	543.5	543.5	543.5	543.5	543.5	543.5	543.5	543.5	543.5

SEED, EXIT, WATER TEMPERATURE

Time	7-9-58	7-10-58	7-11-58	7-12-58	7-13-58																								
Time	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300							
1	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5		
2	526.5	526.5	526.5	526.5	526.5	526.5	526.5	526.5	526.5	526.5	526.5	526.5	526.5	526.5	526.5	526.5	526.5	526.5	526.5	526.5	526.5	526.5	526.5	526.5	526.5	526.5	526.5		
3	539	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5		
4	480.5	481	480.5	480.5	479.2	478.0	480.0	480.5	479	476.5	476.0	477	477	476	477.0	475.5	475.5	476	476	476.1	476.5	476.5	476.0	476.5	476.5	476.5	476.5		
5	511.5	519	519	519.5	519.5	518.0	518.5	520.5	520.5	519.5	519.5	519	518.5	518	519.0	518.5	519.0	519	519	519.2	518.5	519.0	519.0	518.5	518.5	518.5	518.5		
6	541.5	543	541.5	543	543.5	542.5	542.5	543	544	543	541.5	541.5	543.5	543	544.5	542	542	542.5	543	544.5	544	541.0	540	542.5	539.5	546	546		
7	502	502	501.5	501	502	501	501.5	501.5	500	499.5	498.5	501	499	498.0	499.0	498	499.5	499	499	499.4	498.6	498.6	500	499.5	498.5	498.5	498.5		
8	514.5	505	504.5	504.5	505	504	505.5	504.5	505	502.5	502.6	504.5	502.5	501.5	503	503.6	503	502.5	502.5	502.5	502.5	503.5	503.5	502.0	501.5	466	502	505.5	
9	511.5	518.5	517.5	518.5	519.5	519	518.5	518.0	518.5	518	519	519	518.5	518.0	519	518	519.3	519	518.5	518.5	518.5	519.0	518.5	518.0	518.0	492	518	519.5	
10	520.5	522	531.5	531.5	531.5	531.2	531.5	531	532	532	531.5	532.5	532.5	531.5	532.5	531.5	531.5	531.5	531.5	531.5	531.5	531.5	531.5	531.5	531.5	531.5	531.5		
11	515	516	515.5	516	516	515.6	515.5	515.5	515	515	516	515	514.5	514.0	515.5	514.5	515.3	515	515.5	515.2	514.5	515.0	516.0	515	514.5	452.5	514.5	514	
12	502	502.5	500.2	495	498	497.0	497	497	494	495	495	495	495	495.5	495.0	495.5	495	495	495	495	495	495	495	495	495	495	495	495	
13	501.5	509.5	509	509	509.2	508.4	509.5	513	510	512.5	509	509.5	510	510.0	510	508.5	509.2	510	510.2	510.5	510.0	510.5	509.5	511	510.5	462	511.0	509.5	
14	529.5	531	531	531.5	530.5	530.0	530.5	531.5	531	530.5	530	531.0	531	530.0	531	529.5	530.5	530.5	530.5	530.5	529.5	529.5	530	530	530.5	467	530	528	
15	514	515.5	515	515	515	514	514.5	512.5	515	514	514.5	514.0	514	513.5	514	514.5	514.5	515	513.5	513.5	514	515	514	514	480	512.5	513	513	
16	542.5	544	544	544	544.5	544	544	544	544	544	544.5	544.5	544	543.0	545	543	544.5	544.5	544	544.7	543.0	544.5	544.5	544	543	493.5	542	542.5	
17	542.5	544	542.5	542.5	544	542.6	542.5	543.5	544	544	544.5	542	542.5	544	543	544.5	544	543	543.3	542.5	544.5	544	543	542.1	476	538	543.5	543.5	
18	534	535.5	534.5	535	535.5	535.2	535.5	535	535.5	535	535.2	535.5	534.5	534.0	535	534	535.1	535	534.5	534.7	534.0	535.5	535	534.5	533.5	476	532	535.0	
19	538	539.5	539	539	539.2	539.2	539	539	539.5	539.5	539.0	540	539	532	539	539	539.5	539.5	539.5	539.5	539.5	539.5	540	539.5	538.0	537.5	444.5	535.5	539
20	529.5	520	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	
21	539.5	542.5	540.5	541	541	540	541	541	541	541.5	540.5	541	540.5	540.5	541	540	540.5	538.5	540.2	540.6	539.5	540.5	540.5	540	539.6	477.5	535	541	
22	542	542.5	543	543	542.5	542.5	542.5	544	543	542.5	544	543	542.5	542.5	543	542.5	542.5	542.5	542.5	542.5	542.5	542.5	542.5	542.5	542.5	542.5	542.5	542.5	
23	537.5	537.5	538.5	538	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	
24	539.5	541	540	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	

DL
PS
SAPS

SUBJECT DL-5-225 SHEET NO. 10
COMPANY REACTIVITY LIFETIME
DEPARTMENT
DIVISION
COMPILED BY
CHECKED BY
DATE 7/13/58 - 7/14/58

TABLE IV C (CONT)

	BLANKET EXIT AND INLET TEMPERATURE																											
DATE	7-13	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14
TIME	2400	0030	0100	0130	0200	0230	0300	0330	0400	0430	0500	0530	0600	0630	0700	0730	0800	0830	0900	0930	1000	1030	1100	1130	1200	1230	1300	1330
PT																												
1	528	528	529	530	529	529	529	528	528	528	528	528	528	528	528	528.5	528	528	528	528	528	528	528	528	528	528	528	528
2	528	528	530	530	530	530	530	529	529	529	528	528	528	529	529	530	528.5	528.5	530	529	528	529	528	529	528.5	528	528	529.5
3	527	527	530	531	530	530	530	529	529	529	529	529	529	530	530	530.5	529.5	529	530	529	528	528.5	528	529	529	529	529.5	529
4	527	528	529	532	531	531	531	530	530	530	530	531	531	531	531	531	530	530	530.5	530	529	529	528	529.5	528.4	530	530	530
5	518	520	521	522	522	522	522	521	521	522	522	522	522	522	522	522	521	521	522	520.5	520	521	519	520.5	521.2	520.9	520.5	521
6	527	529	530	531	531	531	531	530	531	531	531	531	531	531	531	530.5	530.5	530.5	531.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	531
7	537	533	534	535	535	535	535	534	535	535	535	535	535	534	534	534	534	534	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5	534.5
8	528	529	530	530	531	531	531	531	531	530	530	531	531	531	531	529.5	530	529.5	529.5	529.5	529.5	529.5	531	529	528.5	530.5	529.5	529
9	542	540	545	544	547	546	547	546	546	546	547	548	546	546	546	546.5	545.5	546	546.5	545	545.5	546	543	544	546.2	545	544	545.5
10	522	523	525	524	526	525	525	525	524	525	525	526	524	524	524	524.5	524	524	524.5	523.5	524	523	523	523	523	523	523	524.5
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	526	528	527	527	527	526	527	526	525	526	526	526	525	525	525	525.5	525.5	526	527.5	526	527	525.5	522	525	527.4	526.5	526	526.5
14	514	514	514	514	515	513	514	514	513	514	514	514	513	513	513	513	513	514	515	513.5	515	512.5	504	510	513.9	513.5	512.5	514
15	522	522	522	522	522	521	522	521	520	521	521	521	520	520	520	520.5	521	522	520.5	522	519.5	514	519	521.9	521	520	521	521
16	529	530	530	530	530	530	530	530	529	530	530	531	529	529	529	529.5	529.5	531	529.5	529.5	529.5	527	529	530.5	529.5	528.5	530	530
17	535	535	535	535	535	534	534	534	533	534	534	534	533	533	533	533.5	533.5	533.5	533.5	533.5	533	529	529.5	535	534	532.5	534	534
18	528	528	527	527	527	526	527	527	526	526	527	527	526	526	526	526	526	526	526.5	527.5	526.5	528	527	526	527	528	526.5	527
19	463	463	463	463	462	462	462	462	462	462	462	462	461	461	461	461.5	461	461	461.5	461.5	461	461	461.5	462	462	462	462	462
20	531	531	531	531	530	529	530	530	529	529	529	530	528	529	529	529	530	529.5	529.5	531	530	529	530	529.5	529.5	529	530	530
21	521	522	523	524	524	523	524	523	523	524	524	522	522	522	522	522.5	522.5	523	524	522.5	523.5	523	522	523	522	522.5	522	523
22	522	523	525	525	525	524	525	525	524	524	525	525	524	524	524	524.5	524	524	524.5	524	524	525	524	525	524.5	523.5	524.5	523.5
23	512	512	511	511	511	509	511	510	509	510	510	511	510	510	509	509.5	510	510	511	510	511	511	510	511	510	511	510	511
24	530	529	530	530	530	528	529	529	528	528	529	529	528	528	528	528.5	528.5	528.5	529.5	528.5	530	528.5	527.5	529	528	529.5	528	529
25	528	527	527	528	528	526	527	527	526	526	527	527	526	526	526	526	526	526	526.5	527.5	526.5	528.5	526.5	525	527	526.0	526.5	527
26	532	530	531	532	532	531	531	531	529	530	531	531	529	529	529	530	530	530	531.5	530.5	532	530	529	531	530.5	530.5	530	531.5
27	460	459	459	459	459	459	459	459	459	459	459	459	458	458	458	458.5	458.5	458.5	458.5	459	459	459	461	461	460.5	460	460	460
28	508	507	509	509	509	508	509	508	507	508	508	509	507	508	508	508	508	508	508	507.5	509	508	506.5	507	507	507.5	507	508
29	507	506	508	508	508	507	508	507	506	507	507	508	506	507	507	507	506.5	507	507	507.5	509	508	506.5	507	506	507	506	507
30	504	504	506	506	506	505	506	505	504	505	505	506	504	504	504	504.5	504.5	505	505	504.5	504.5	505	504	504.5	504	504.5	504	505
31	507	506	508	507	508	507	507	507	506	507	507	508	506	506	507	506.5	507	507	506.5	507	507	506.5	507	506	507	506	507	507
32	510	510	511	511	511	510	511	510	509	510	510	511	509	510	510	510	510	510	510.5	510	511	510	508.5	510	509.5	510	509.5	510
33	509	506	508	508	508	507	507	507	506	507	507	507	506	507	507	507.5	506	508	507.5	508	506	506	508	507.5	507.5	507	507.5	507.5

DL COMPANY

PS DEPARTMENT

SAPS DIVISION

COMPILED BY

CHECKED BY

DATE 7-14-58 TO 7-17-58

Table IV (con 4)

FORM 622-7112

BLANKET Exit & Inlet Temperature																							
DATE	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-15	7-15	7-15	7-15	7-15	7-16	7-16	7-16	7-16	7-16	7-16	7-17	7-17
TIME	1400	1430	1500	1530	1600	1630	1700	1730	1800	1830	0200	0230	0300	0330	0400	0700	0730	0800	0830	0900	0930	1000	1030
PT																							
1	528	530	530	530	529	528	528	530	529	530	524	529	528	529	529	530	529	528	529	529	529	529	529
2	529	530	531	530	530	530	528	530	532	530	529	529	530	530	530	530	530	530	530	530	530	530	530
3	528	530	530	530	530	530	529	530	530	530	529	529	530	530	530	530	530	530	530	530	530	530	530
4	528	530	530	530	530	530	529	530	530	530	529	529	530	530	530	530	530	530	530	530	530	530	530
5	528	530	530	530	530	530	529	530	530	530	529	529	530	530	530	530	530	530	530	530	530	530	530
6	528	530	530	530	530	530	529	530	530	530	529	529	530	530	530	530	530	530	530	530	530	530	530
7	528	530	530	530	530	530	529	530	530	530	529	529	530	530	530	530	530	530	530	530	530	530	530
8	528	530	530	530	530	530	529	530	530	530	529	529	530	530	530	530	530	530	530	530	530	530	530
9	528	530	530	530	530	530	529	530	530	530	529	529	530	530	530	530	530	530	530	530	530	530	530
10	528	530	530	530	530	530	529	530	530	530	529	529	530	530	530	530	530	530	530	530	530	530	530
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525
14	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525
15	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525
16	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525
17	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525
18	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525
19	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525
20	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525
21	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525
22	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525
23	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525
24	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525
25	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525
26	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525
27	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525
28	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525
29	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525
30	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525
31	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525
32	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525
33	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525	525

DL
PS
SAPS

SUBJECT PL-S-225 SHEET NO. 13
Reactivity Lifetime

COMPANY
DEPARTMENT
DIVISION COMPILED BY _____ CHECKED BY _____ DATE 7-14-68 to 7-17-68

TABLE IV C

	BLANKET				EXIT & INLET				TEMPERATURE																			
DATE	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-15	7-15	7-15	7-15	7-15	7-15	7-16	7-16	7-16	7-16	7-16	7-17	7-17	7-17	7-17	7-17	7-17			
TIME	1400	1430	1500	1530	1600	1630	1700	1730	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1700	1730	1800
PT																												
34	504.5	509.5	506	502.8	509.5	502	504.5	507.5	507.5	508	505.5	509.9	509.4	505.8	508.3	508.0	505.5	502.5	512.5	505	508	510.0	505.0	508.0	502.5	506.4	505.5	505.3
35	532	534.5	535	533.9	534	533.5	532.5	534.5	533	534	534	534	533.7	534.2	529.2	534.8	534.0	533.0	534.5	534	533.5	533.0	533.0	533.5	533.5	534.2	534.0	534.0
36	493.5	493	493	494	494	494.6	494	495	495	496	494	495	494.1	494.0	493.0	496.0	494.0	490.0	491.5	492	489.5	491.5	491.0	492.0	490.6	492.0	491.0	491.0
37	506.5	502.5	509.5	502.5	509.5	507	507.5	508.5	507.5	508	506	506	505.5	506.5	506.5	508.0	506.8	506.5	507.0	507	506	505.0	505.0	506.5	507.0	508.3	508.0	507.8
38	543.5	545.5	546	545	545	544.5	542.5	546	545.5	546	546	546	546.5	545.5	546.0	546.0	546.0	545.0	545.0	545	545.5	546.0	546.0	546.0	544.0	545.0	544.5	544.7
DATE	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-14	7-15	7-15	7-15	7-15	7-15	7-15	7-16	7-16	7-16	7-16	7-16	7-17	7-17	7-17	7-17	7-17	7-17	7-17	7-17	
TIME	1430	1500	1530	1600	1630	1700	1730	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1700	1730	1800	
1	537.5	538.0	537.0	537.0	536.5	535.5	536.7	536.5	536.5	537.0	537.0	536.9	538.0	537.5	536.5	536.4	535.9	536	539	538.3	538.0	536.5	538.0	537.3	538.2	538.2	537.5	
2	528.5	528.5	527.5	528.0	528.0	527.0	527.0	527.0	528.0	527.0	527.2	527.7	528.0	528.0	527.0	527.0	526.9	528	528	527.3	527.0	526.5	528.0	527.3	527.9	528.1	528.2	
3	540.5	541.2	540.0	540.0	540.0	538.5	539.5	539.5	540.0	539.5	539.6	540.0	541.0	541.0	540.0	539.5	539.3	541	540.3	540.0	538.0	538.5	541.0	539.8	540.5	540.7	540.8	
4	479.0	478.5	479.0	479.5	479.0	478.0	478.3	478.0	477.0	475.5	474.8	475.1	475.1	475.5	475.0	475.4	474.9	475	475.5	476.0	477.0	475.6	477.0	476.0	476.7	476.6	476.6	
5	519.9	520.9	519.0	519.5	519.5	518.5	518.0	519.2	520.0	519.0	519.3	518.9	519.0	519.5	519.0	519.2	518.9	519	518.5	519.0	519.0	519.0	519.0	518	518.3	518.4	518.6	
6	543.5	544.5	543.0	543.0	543.0	541.5	541.5	542.0	543.5	543.5	544.0	542.0	543.5	543.5	543.6	542.9	543	542.5	543.0	544.0	543.9	543.5	541.2	541.4	541.8	541.6	541.6	
7	502.0	502.5	501.0	501.5	501.5	500.5	500.0	500.5	500.0	498.0	498.7	498.0	498.5	498.0	498.4	497.3	499	497.5	496.0	499.0	499.0	499.0	499.3	497.6	498.2	498.0	498.0	
8	505.3	505.2	506.0	505.0	504.5	503.5	504.5	504.7	504.0	504.0	500.5	503.1	504.5	504.5	503.8	502.7	503.2	504	502.4	503.4	503.0	503.0	504.0	502.2	502.3	502.7	501.8	
9	520.9	521.0	520.0	520.0	519.5	519.0	519.0	519.0	519.5	519.0	546.4	518.3	519.0	518.0	519.0	519.0	519.4	520	519	518.5	519.0	519.0	519.5	519.2	518.8	518.9	519.0	
10	532.9	533.5	532.5	532.5	532.5	531.0	532.0	531.0	532.0	531.5	531.8	530.0	532.0	532.5	532.0	530.3	531.5	531	532	531.7	531.0	531.5	532.5	531.7	532.2	532.1	532.1	
11	517.3	517.5	516.5	516.5	516.5	515.0	515.5	515.0	515.5	514.5	515.5	515.1	516.0	516.0	515.5	514.6	515.4	516	515.5	515.5	515.0	515.0	516.0	515.1	515.9	516.0	515.5	
12	486.5	486.5	485.0	487.0	486.5	483.5	482.0	486.0	483.0	480.0	478.8	477.0	479.0	479.5	479.5	480.0	480	480.5	480.5	482.0	481.0	482.0	481.4	482.3	481.8	482.0	482.0	
13	502.5	513.5	511.5	511.5	511.5	511.0	512.5	511.0	513.0	511.0	511.3	502.6	512.0	510.0	511.0	510.4	509.6	506.5	511.0	511.0	510.0	510.8	511.5	510.0	511.2	511.3	511.9	
14	531.5	532.2	530.5	530.5	530.5	529.5	532.5	530.0	531.0	531.0	529.9	530.2	531.0	531.5	531.0	531.2	530.3	531	530.4	531.0	531.0	530.5	531.0	529.4	530.5	530.5	529.6	
15	516.0	516.5	515.0	515.0	515.0	513.5	516.5	515.0	515.5	514.5	514.4	514.5	514.5	514.5	514.5	514.2	514.4	515	514	514.7	514.0	515.0	515.0	513.5	514.5	514.1	515.0	
16	544.5	545.4	544.5	544.0	544.0	542.5	545.0	543.2	545.0	545.0	545.1	544.1	544.1	546.0	545.0	545.4	543.7	544	544	544.8	545.0	544.9	544.5	542.5	543.5	543.5	543.5	
17	545.5	545.9	545.0	544.5	544.5	543.0	545.5	543.2	544.0	544.0	541.0	543.9	544.5	544.5	544.0	544.1	543.6	544	544	543.8	543.0	543.2	545.0	543.5	544.1	544.3	544.0	
18	536.5	537.1	536.5	536.0	536.0	535.0	537.0	535.0	535.5	535.5	540.9	535.1	535.5	535.5	535.5	535.4	535.0	536	535.5	535.5	535.0	535.0	536.0	535.1	537.7	535.9	535.5	
19	540.9	541.5	540.5	540.5	540.0	538.5	541.0	539.0	540.0	540.0	538.8	539.3	540.0	540.0	539.5	539.8	539.1	540.6	539.3	539.3	539.0	539.5	540.0	538.8	539.6	539.6	539.4	
20	531.0	531.5	530.5	530.5	530.5	529.0	531.5	530.2	529.5	527.5	528.9	529.0	529.5	529.5	529.0	529.3	529.0	530	529.5	529.5	529.0	529.2	530.0	529.3	529.8	529.9	529.7	
21	542.9	543.5	542.5	542.5	542.0	541.5	543.0	541.5	542.5	541.5	541.3	541.5	541.8	541.5	541.0	541.1	540.6	542	541.5	541.0	540.0	540.2	542.0	541.0	541.6	541.7	541.5	
22	545.0	545.8	544.5	544.5	544.5	543.0	545.7	544.7	544.0	544.0	544.0	544.2	544.5	544.5	544.5	543.5	544.0	543.3	544.6	544.5	544.0	543.0	545.0	543.6	544.5	544.5	544.2	
23	539.5	540.0	539.0	539.0	538.0	539.8	539.0	540.5	539.0	539.0	538.9	539.7	539.5	539.0	539.1	538.7	540	539.8	539.3	538.0	538.7	542.0	539.0	539.8	539.9	539.7	539.7	
24	541.9	542.4	541.5	541.5	541.0	541.0	540.5	540.2	541.0	540.5	540.9	541.0	541.4	540.5	540.4	539.6	541.0	541	540.3	539.0	539.7	541.0	540.4	541.0	541.0	541.0	540.8	

82

DEPARTMENT

DATE 7-17-58 TO 7-19-58

TABLE IV (CONT.)

FROM G28-7112

BLANKET		EXIT AND INLET TEMPERATURES																																							
DATE	TIME	7-17	7-17	7-17	7-18	7-18	7-18	7-18	7-18	7-18	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19												
PT.		1830	1900	2300	0300	0700	1100	1500	1700	1800	1900	2300	0300	0700	1100	1300	1700	1300	1330	1400	1500	1900	2030	2100	2130	2200	2230	2230	2230	2230											
1		529.5	529.5	528.9	528.5	529.5	529.9	529.0	530.0	529.5	529.5	528.5	528.0	530.0	530.2	529.5	529.4	529.2	529.5	529.5	529.5	529.2	531.2	530.5	529.5	529.5	529.3	528.0	528.0	528.0											
2		530.5	530.5	529.5	529.0	530.0	530.9	531.0	531.5	530.5	530.5	529	529.0	531.0	531.5	531.0	530.5	530.1	530.5	530.5	530.3	530.8	533.0	532.0	530.8	530.5	530.0	528.5	528.5	528.5											
3		530.0	530	529.3	529.0	530.0	530.1	529.0	530.5	530	529	529.0	531.0	530.8	530.9	530.0	529.5	530.0	530.0	529.5	530.5	530.0	529.5	529.0	529.2	529.0	527.8	527.8	527.8	527.8											
4		531.0	531.5	530	529.5	530.5	531.2	531.2	531.5	531.5	531	530	529.5	530.0	531.9	531.5	531.2	531.2	530.9	531.5	531.0	530.9	530.9	529.8	530.0	528.5	528.5	528.5	528.5	528.5											
5		521.5	522	520.8	520.0	521.5	521.5	522.0	522.0	522	522	520.5	520.0	520.9	520.9	521.9	522.0	521.8	521.9	521.5	521.5	521.5	521.5	520.5	520.3	519.0	519.0	519.0	519.0	519.0											
6		532.2	532	531	530.5	531.5	532.1	532.9	533.0	533	532.5	531.5	530.5	532.0	532.8	532.5	532.0	532.0	532.0	532.0	532.0	532.0	532.0	532.0	532.0	532.0	532.0	532.0	532.0	532.0											
7		531.5	531.5	531.5	531.5	531.5	531.5	531.5	531.5	531	530	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5											
8		531.0	531.5	530.2	530.0	531.5	531.2	532.0	532.5	532.0	531.5	530.5	530.0	530.0	530.8	530.5	530.5	530.8	530.8	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5											
9		547.0	547	546	546.0	547.0	547	547	547.5	547.5	547	546.5	546.0	546.0	546.0	546.9	546.9	546.9	546.9	546.9	546.9	546.9	546.9	546.9	546.9	546.9	546.9	546.9	546.9	546.9											
10		535.5	536	535	534.5	535.5	535.6	536	536.5	536	537	537	537.0	537.0	537.0	537.0	537.0	537.0	537.0	537.0	537.0	537.0	537.0	537.0	537.0	537.0	537.0	537.0	537.0	537.0											
11																																									
12																																									
13		527.5	527.5	528	528.0	529.0	528.0	527.0	528	528	528.5	528	528.0	529.0	527.5																										

SUBJECT DL - S - 225 SHEET NO. 15

DLC. COMPANY

REACTIVITY LIFETIME

P.S. DEPARTMENT

SHIPPINGPORT DIVISION COMPILED BY TEST GROUP CHECKED BY _____

DATE 7-17-58 TO 7-19-58

FCRM G23-7112

TABLE IV (CONT.)

BLANKET EXIT AND INLET TEMPERATURES																											
DATE	7-17	7-17	7-17	7-18	7-18	7-18	7-18	7-18	7-18	7-18	7-18	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19
TIME	1830	1900	2300	0300	0700	1100	1500	1730	1800	1900	2300	0300	0700	1100	1130	1200	1230	1300	1330	1400	1500	1900	2030	2100	2130	2200	2230
34	503.0	504.5	509	507.0	507.0	509.4	504.5	507.5	507.5	509	509.5	507.0	510.0	508.0	508.5	508.2	509.5	508.2	509.0	508.8	507.2	510.5	509.0	508.0	506.5	508.8	507.0
35	539.0	534	533	532.5	533.5	534	533	535	534.5	534	533	532.0	535.0	535.2	534.2	534.0	533.8	534.0	534.2	534.2	533.2	533.0	532.5	532.3	532.5	531.0	
36	491.5	492.5	496.5	489.5	492.0	492.5	492	492	492	492	490	489.5	491.0	489.5	488.4	488.1	488.0	488.9	487.9	488.5	488.9	489.0	487.0	486.7	486.5	485.5	485.5
37	502.5	507	506.5	505.0	507.0	507	506	507.5	507	507	504.5	509.0	506.0	507.0	506.9	506.9	506.1	506.9	506.2	506.0	506.5	506.2	505.0	505.0	504.5	504.9	503.5
38	545.2	545.5	545.5	546.0	546.0	545	543	546	545.5	546	546	546.0	547.0	549.9	549.0	549.2	549.9	549.0	549.5	549.8	549.0	546.5	547.0	547.0	547.2	547.8	546.0
SEED EXIT WATER TEMPERATURES																											
DATE	7-17	7-17	7-17	7-18	7-18	7-18	7-18	7-18	7-18	7-18	7-18	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19	7-19
TIME	1830	1900	2300	0300	0700	1100	1500	1730	1800	1900	2300	0300	0700	1100	1130	1200	1230	1300	1330	1400	1500	1900	2030	2100	2130	2200	2230
PT.																											
1	531.0	538.0	536.0	536.0	537.0	538	538	538.0	539.0	538.0	536.0	535.5	537.5	539.3	538.6	535.1	538.0	536.3	539.0	535.0	536.9	537	536.0	535.5	535	535	539.5
2	528.2	528.2	526.5	526.0	527.0	528	528	528.5	528.5	527.5	526.2	525.5	527.5	528.5	528.2	527.5	527.3	527.5	528.0	527.5	528.3	527.8	526.2	526	525.5	525.5	525.0
3	541.0	541.2	539.0	539.0	539.5	540.5	540.5	541.0	541.0	540.5	537.6	538.0	540.2	541.1	540.5	539.9	540.3	540.2	540.6	540.5	541.2	540.0	539.2	538.5	538	538.0	537.5
4	476.7	476.5	476.0	477.0	477.0	477.5	476.5	476.0	476.0	475.5	475.0	474.5	476.0	476.0	475.0	475.2	474.9	474.5	475.5	476.2	476.0	475.0	474.5	475	474.5	474	474

8k

SUBJECT DL-5-225 SHEET NO. 16
 DDC COMPANY REACTIVITY LIFETIME
 PS DEPARTMENT
 SHIPPING PORT TEST GRA CHECKED BY DATE 7-19-58 to 7-20-58

FORM 628-7112

TABLE IV C

	BLANKET EXIT & INLET TEMPERATURES																							
DATE	7-19	7-19	7-19	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20	7-20
TIME	2315	2330	2400	0030	0100	0130	0200	0230	0300	0330	0400	0430	0500	0530	0600	0630	0700	0730	0800	0830	0900	0930	1000	1030
PT																								
1	529.5	529.5	530.0	530.0	529.5	529.5	530.0	529.5	529.5	529.5	529.0	529.5	530.0	530.5	529.5	529.5	529.2	529.2	529.0	529.2	529.0	529.0	528.5	528.2
2	530.8	530.2	531.0	531.0	531.0	530.5	531.0	530.5	530.5	530.0	530.0	530.5	531.0	531.5	530.5	530.2	530.0	530.0	530.0	530.0	529.5	529.2	529.2	529.0
3	530.0	529.0	530.0	530.0	529.5	529.5	530.5	530.0	530.0	530.0	529.5	530.5	530.5	531.0	530.0	530.0	530.0	530.0	530.0	529.8	529.8	529.8	529.9	529.8
4	531.0	530.0	531.0	531.0	531.0	530.5	531.5	530.5	531.0	530.5	530.0	531.0	531.5	531.5	530.5	530.8	530.7	531.0	531.0	531.0	530.5	530.5	530.5	530.0
5	521.3	520.8	521.5	521.5	521.5	521.0	522.0	521.5	521.5	521.5	521.0	522.0	522.0	522.5	521.0	521.2	521.2	521.2	521.2	521.2	521.0	521.0	521.0	520.5
6	532.8	532.0	532.5	532.5	532.0	532.0	533.0	532.0	532.0	532.0	532.0	532.5	533.5	532.5	532.0	532.6	532.0	532.0	532.0	532.0	532.0	531.5	531.5	531.5
7	527.5	526.9	527.0	528.0	527.0	526.5	527.0	526.5	527.0	526.5	526.0	527.0	527.5	527.5	527.0	526.8	526.8	526.8	526.8	526.8	526.2	526.5	526.2	526.5
8	522.8	522.0	522.0	523.5	522.0	521.5	522.0	521.0	521.5	521.0	521.5	522.0	521.5	521.5	521.5	521.5	521.5	521.5	521.5	521.5	521.0	521.0	521.0	520.5
9	547.0	546.3	547.0	549.5	547.0	546.5	547.5	546.5	546.5	546.5	546.5	546.5	546.5	546.5	546.5	546.5	547.0	547.0	547.0	547.0	547.0	547.0	547.0	547.0
10	536.5	535.0	536.0	537.0	536.0	535.5	536.0	535.0	535.5	535.5	535.5	535.5	535.5	535.5	535.5	535.5	535.5	535.5	535.5	535.5	535.5	535.5	535.5	535.5
11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13	529.0	527.8	528.5	529.5	528.5	528.5	528.5	528.5	528.5	528.5	528.5	528.5	528.5	528.5	528.5	528.5	528.5	528.5	528.5	528.5	528.5	528.5	528.5	528.5
14	517.0	516.0	517.0	519.0	517.0	516.5	516.5	516.5	516.5	516.5	516.5	516.5	516.5	516.5	516.5	516.5	516.5	516.5	516.5	516.5	516.5	516.5	516.5	516.5
15	524.0	523.0	523.5	525.0	523.5	523.5	523.5	523.5	523.5	523.5	523.5	523.5	523.5	523.5	523.5	523.5	523.5	523.5	523.5	523.5	523.5	523.5	523.5	523.5
16	531.5	531.5	531.5	532.0	531.0	531.0	531.5	531.5	531.0	531.0	531.0	531.5	531.0	531.0	531.5	531.5	531.2	531.2	531.2	531.2	531.5	531.2	531.0	530.5
17	536.8	536.8	536.4	537.0	536.5	536.0	536.5	536.0	536.0	535.5	535.5	536.5	536.0	537.0	536.5	536.0	536.0	536.0	536.0	536.0	536.5	536.5	536.5	536.5
18	528.2	528.0	527.5	528.0	527.5	527.0	527.5	527.5	527.5	527.5	527.5	527.5	527.5	527.5	527.5	527.5	527.5	527.5	527.5	527.5	527.5	527.5	527.5	527.5
19	463.8	463.8	463.8	464.0	464.5	463.5	462.0	461.5	461.5	461.5	461.5	461.5	461.5	461.5	461.5	461.5	461.5	461.5	461.5	461.5	461.5	461.5	461.5	461.5
20	530.5	530.6	530.0	531.0	530.0	529.5	530.5	530.5	530.5	530.5	530.5	531.0	530.0	531.5	531.0	531.2	531.2	531.0	531.6	531.0	531.0	530.5	531.5	530.8
21	524.5	525.0	524.5	525.5	524.5	524.0	524.5	524.5	524.0	524.0	523.5	524.0	523.5	524.0	523.5	523.5	523.5	523.5	523.5	523.5	523.5	523.5	523.5	523.5
22	529.8	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5	529.5
23	510.0	510.0	510.5	511.0	510.0	509.5	511.0	510.5	510.5	510.5	510.5	511.0	510.5	511.0	510.5	510.5	510.5	510.5	510.5	510.5	510.5	510.5	510.5	510.5
24	509.8	530.0	530.0	531.0	530.0	529.5	530.5	530.5	530.5	530.5	530.0	530.5	530.5	531.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5	530.5
25	522.2	522.5	522.5	522.0	522.5	522.0	522.0	522.0	522.0	522.0	522.0	522.0	522.0	522.0	522.0	522.0	522.0	522.0	522.0	522.0	522.0	522.0	522.0	522.0
26	531.4	531.5	531.0	532.0	531.5	531.0	532.5	532.5	531.0	531.5	531.5	531.5	531.5	531.5	531.5	531.5	531.5	531.5	531.5	531.5	531.5	531.5	531.5	531.5
27	458.0	457.8	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0
28	508.5	508.5	508.5	509.0	508.5	508.5	509.0	509.0	509.0	509.0	509.0	509.0	509.0	509.0	509.0	509.0	509.0	509.0	509.0	509.0	509.0	509.0	509.0	509.0
29	507.6	507.5	507.5	508.0	507.5	507.5	508.0	508.0	508.0	508.0	508.0	508.0	508.0	508.0	508.0	508.0	508.0	508.0	508.0	508.0	508.0	508.0	508.0	508.0
30	505.0	505.0	505.0	505.0	505.0	505.0	505.0	505.0	505.0	505.0	505.0	505.0	505.0	505.0	505.0	505.0	505.0	505.0	505.0	505.0	505.0	505.0	505.0	505.0
31	507.5	507.3	507.5	508.0	507.5	507.0	507.5	507.5	507.0	507.5	507.5	507.5	507.5	507.5	507.5	507.5	507.5	507.5	507.5	507.5	507.5	507.5	507.5	507.5
32	510.9	511.0	510.5	511.0	510.5	511.0	511.0	511.0	511.0	511.0	511.0	511.0	511.0	511.0	511.0	511.0	511.0	511.0	511.0	511.0	511.0	511.0	511.0	511.0
33	506.0	506.5	506.0	507.0	506.5	505.0	507.5	506.5	507.0	506.5	506.5	506.5	506.5	506.5	506.5	506.5	506.5	506.5	506.5	506.5	506.5	506.5	506.5	506.5

DL-S-225

18

DL-C

REACTIVITY LIFE TIME

P.S. DEPT

SAPS

7-20-58 TO 7- -58

TABLE IV C

BLANKET EXIT & INLET TEMPERATURES

DATE	7-20	7-20	7-20	7-20	7-20	7-20	7-21	7-21	7-21	7-21	7-21	7-21	7-21	7-21	7-21	7-21	7-21	7-21	7-21	7-22	7-22	7-22	7-22				
TIME	1230	1300	1430	1800	1500	1900	2300	0300	0700	1000	1030	1100	1500	1900	2000	2030	2100	2130	2200	2230	2300	2330	2400	0030	0400	0130	0300
PT.																											
1	528.3	528.8	528.8	528.5	529.0	529.5	529.8	530.0	529.0	528.5	528.0	527.5	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0
2	529.8	529.6	529.3	529.5	530.0	530.1	530.8	530.5	529.5	528.5	527.0	526.5	527.0	527.0	527.0	527.0	527.0	527.0	527.0	527.0	527.0	527.0	527.0	527.0	527.0	527.0	527.0
3	529.5	530.0	530.2	530.2	530.5	529.9	530.1	530.0	530.0	529.0	528.0	527.0	527.5	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0
4	530.2	530.5	531.0	531.0	531.2	530.8	531.0	531.0	530.5	529.0	528.0	527.0	527.5	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0
5	530.5	531.2	531.5	531.5	531.8	531.4	531.3	531.5	531.0	530.0	529.0	528.0	528.5	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0
6	531.0	532.0	531.5	532.0	532.2	532.0	531.9	532.0	531.5	531.0	530.0	529.0	529.5	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0
7	536.8	536.0	536.2	536.0	536.5	536.3	536.4	537.0	536.0	535.0	534.0	533.0	533.5	534.0	534.0	534.0	534.0	534.0	534.0	534.0	534.0	534.0	534.0	534.0	534.0	534.0	534.0
8	530.5	531.0	531.2	531.0	531.5	531.0	531.1	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0
9	546.0	546.5	547.0	546.5	547.0	547.0	546.8	547.0	546.5	546.0	546.0	545.0	546.0	546.0	546.0	546.0	546.0	546.0	546.0	546.0	546.0	546.0	546.0	546.0	546.0	546.0	546.0
10	534.5	535.5	535.5	535.2	535.5	535.3	535.1	535.5	535.0	535.0	535.0	535.0	535.0	535.0	535.0	535.0	535.0	535.0	535.0	535.0	535.0	535.0	535.0	535.0	535.0	535.0	535.0
11																											
12																											
13	528.0	528.2	528.2	528.0	528.5	529.0	528.9	528.5	528.0	527.5	527.5	527.0	527.0	527.0	527.0	527.0	527.0	527.0	527.0	527.0	527.0	527.0	527.0	527.0	527.0	527.0	527.0
14	515.3	516.5	516.0	516.2	516.5	516.0	516.0	516.0	516.0	516.0	516.0	516.0	516.0	516.0	516.0	516.0	516.0	516.0	516.0	516.0	516.0	516.0	516.0	516.0	516.0	516.0	516.0
15	522.5	523.0	523.0	523.8	523.5	523.5	523.0	523.5	523.5	523.0	522.0	521.5	522.0	522.0	522.0	522.0	522.0	522.0	522.0	522.0	522.0	522.0	522.0	522.0	522.0	522.0	522.0
16	530.3	531.0	531.0	531.0	531.4	531.7	530.7	531.0	530.5	530.0	529.0	528.0	528.5	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.0
17	535.0	535.5	535.5	535.6	536.0	536.0	535.9	536.0	536.0	536.0	536.0	536.0	536.0	536.0	536.0	536.0	536.0	536.0	536.0	536.0	536.0	536.0	536.0	536.0	536.0	536.0	536.0
18	527.6	527.8	527.8	527.5	528.0	528.0	527.4	528.0	528.5	528.0	527.0	526.5	527.5	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0
19	461.0	461.0	461.2	461.2	461.8	462.1	461.3	461.0	461.0	461.0	461.0	461.0	461.0	461.0	461.0	461.0	461.0	461.0	461.0	461.0	461.0	461.0	461.0	461.0	461.0	461.0	461.0
20	530.2	530.8	531.0	531.0	531.2	531.0	529.9	530.5	531.0	531.0	530.0	529.5	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0
21	523.0	523.5	523.5	523.5	524.0	524.8	523.9	524.0	523.0	522.5	522.5	522.5	522.5	522.5	522.5	522.5	522.5	522.5	522.5	522.5	522.5	522.5	522.5	522.5	522.5	522.5	522.5
22	524.5	525.0	525.0	525.0	525.0	525.1	525.0	525.0	525.0	525.0	525.0	525.0	525.0	525.0	525.0	525.0	525.0	525.0	525.0	525.0	525.0	525.0	525.0	525.0	525.0	525.0	525.0
23	509.5	510.0	510.0	509.5	509.8	510.5	510.4	510.5	510.0	510.0	510.0	510.0	510.0	510.0	510.0	510.0	510.0	510.0	510.0	510.0	510.0	510.0	510.0	510.0	510.0	510.0	510.0
24	529.5	530.0	530.0	530.0	530.5	530.2	529.9	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0
25	527.5	527.5	527.5	527.8	528.0	528.0	527.5	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0	528.0
26	531.8	531.5	531.5	531.7	531.7	531.9	531.3	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0	531.0
27	457.5	457.3	457.5	457.8	458.0	458.8	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0
28	508.5	509.0	509.8	508.8	508.8	508.8	508.8	508.8	508.8	508.8	508.8	508.8	508.8	508.8	508.8	508.8	508.8	508.8	508.8	508.8	508.8	508.8	508.8	508.8	508.8	508.8	508.8
29	507.5	507.8	507.8	507.8	508.0	507.5	507.5	508.0	507.5	507.0	507.0	507.0	507.0	507.0	507.0	507.0	507.0	507.0	507.0	507.0	507.0	507.0	507.0	507.0	507.0	507.0	507.0
30	509.5	509.0	509.0	509.0	509.0	509.9	509.8	509.0	509.5	509.0	509.0	509.0	509.0	509.0	509.0	509.0	509.0	509.0	509.0	509.0	509.0	509.0	509.0	509.0	509.0	509.0	509.0
31	507.8	507.5	507.2	507.5	507.5	507.1	507.1	507.0	507.0	507.0	507.0	507.0	507.0	507.0	507.0	507.0	507.0	507.0	507.0	507.0	507.0	507.0	507.0	507.0	507.0	507.0	507.0
32	510.8	511.0	511.0	511.0	511.0	510.5	510.5	511.0	511.0	510.0	510.0	510.0	510.0	510.0	510.0	510.0	510.0	510.0	510.0	510.0	510.0	510.0	510.0	510.0	510.0	510.0	510.0
33	505.0	506.0	506.5	506.0	506.5	507.1	506.9	506.5	507.0	506.5	506.5	506.5	506.5	506.5	506.5	506.5	506.5	506.5	506.5	506.5	506.5	506.5	506.5	506.5	506.5	506.5	506.5

8 m

16

REACTIVITY LIFE TIME

P.S. DEPT
SAPS

TEST GROUP

7-20-58 TO 7-22-58

TABLE IV c

BLANKET EXIT & INLET TEMPERATURES

[illegible]

SEED EXIT WATER TEMPERATURES

NO DATA TAKE N

80

DL-5-225
Reactivity Lifetime

Test Group

Table IV C

Blanket Exit and Inlet Temperatures

Date 7-22
Time 0130 0300 0330 0400 0430 0500 0530 0600 0630 0700 0730 0800 0830 0900 0930 1000 1030 1100 1500 1500 2300 0300 0700 1100 1500 1930 0300 0700

Rt

[illegible]

21

Reactivity Lifetime

Test Group

Table IV c

Blanket Exit and Inlet Temperatures:

Seed Exit Water Temperatures

22

REACTIVITY LIFETIME

FOIA b 7

Test Group

DATE 7/24 - 7/28/58

Table IV C (CONT'D)

BLANKET EXIT and INLET TEMPERATURES

[illegible]

25

POWER STATIONS

SHIPPING PORT A.P.S.

TEST GROUP

7/28 - 7/29/58

TABLE IV C

BLANKET Exit & INLET TEMPERATURES

85

DUGUESNE LIGHT

COMPANY

REACTIVITY LIFETIME

POWER STATIONS

PARTNENT

SHIPPINGPORT A.P.S.

DIVISION

COMPILED BY TEST GROUP CHECKED BY _____

DATE 8/1 - 8/5/58

FORM 632-7119

TABLE IV C

		BLANKET EXIT 4 INLET TEMPERATURE																									
DATE	8/1	8/1	8/1	8/1	8/1	8/1	8/1	8/1	8/1	8/1	8/1	8/1	8/1	8/1	8/1	8/1	8/1	8/1	8/1	8/1	8/1	8/1	8/1	8/1	8/1		
TIME	0400	0430	0500	0530	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900	
PT.																											
1	529.0	529.1	529.0	529.8	529.5	528.0	526.0	529	529.0	529.9	529.2	529.5	529.0	529.0	529.4	529.5	529	529.5	529.0	529.0	529.0	529.0	529.0	529.0	529.0	529.7	
2	530.4	529.9	530.0	530.5	530.2	529.5	529.5	530	530.5	530.6	530.0	530.5	530.5	530.5	531.0	529.8	531.7	532	532	533.5	532.2	532.0	533.0	532.0	532.5	531.8	532.5
3	529.2	528.5	529.0	529.5	529.5	529.0	529.5	529.8	529.5	530.1	529.2	530	529.8	529.2	529.9	529.0	529.9	530	530	530	529.0	529.4	530.0	529.5	530.0	529.5	529.7
4	529.5	529.1	529.6	530.0	530.0	530.0	530.0	531.3	531.0	530.7	530.0	531	529.5	529.0	530.8	529.5	530.0	531	529.2	531	530.1	530.3	531.0	530.5	531.5	530.5	530.6
5	520.3	520.0	520.9	520.0	520.5	520.0	520.5	521.2	521.0	521.2	520.3	521	519.5	520.0	521.0	520.0	520.5	521	522.5	521.2	520.4	520.6	521.0	521.0	521.5	520.0	520.5
6	531.5	531.4	531.3	531.5	531.5	531.5	531.5	532.5	533.0	532.0	531.3	531.8	529.2	529.8	532.0	531.0	531.0	532	534.5	533.5	531.7	531.8	532.1	532.0	532.5	531.5	531.8
7	536.2	536.1	536.5	535.9	536.5	536.5	537.0	536.5	536.5	537.0	536.5	536.5	533.0	533.5	535.4	536.0	536.0	536	539.5	538.5	536.8	536.9	537.0	536.5	537.0	536.0	536.9
8	531.0	530.6	531.2	530.5	531.4	531.0	531.5	531.5	531.5	531.3	531.2	531.2	528.8	529.0	531.6	531.0	531.0	531	535	533	531.4	531.7	532.0	531.0	531.5	530.5	531.2
9	546.1	545.6	546.9	546.0	546.5	547.0	547.5	547.5	547.5	548.3	546.8	547	542.5	549.0	547.8	546.2	547.0	548	548.5	548	547.0	547.1	547.5	548.0	548.0	547.0	547.6
10	534.5	535.5	535.5	534.2	535.0	534.5	534.5	535.5	535.5	535.0	535.1	535	530.2	533.0	535.8	534.8	534.8	535	538.5	536.8	535.1	535.0	535.6	535.5	536.0	534.5	535.9
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
13	527.6	527.9	528.4	527.2	528.5	528.5	528.5	528.3	528.5	529.6	529.2	528.5	529.0	529.5	529.6	529.0	529.0	528	528	528.5	528.8	529.4	529.5	528.0	528.5	528.5	529.1
14	516.1	515.7	516.5	515.1	517.0	517																					

SUBJECT DL-S-225 SHEET NO. 31
DUQUESNE LIGHT, DEPARTMENT Reactivity Lifetime
POWER STATIONS
SHIPPINGPORT DIVISION Test Group CHECKED BY 8/1/58 - 8/5/58

TABLE IV C

		BLANKET EXIT & INLET TEMPERATURE																								
DATE	8/1/58	8/1/58	8/1/58	8/1/58	8/1/58	8/1/58	8/1/58	8/1/58	8/1/58	8/2/58	8/2/58	8/2/58	8/2/58	8/2/58	8/2/58	8/2/58	8/2/58	8/2/58	8/2/58	8/2/58	8/2/58	8/2/58	8/2/58	8/2/58	8/2/58	
Time	0400	0430	0500	0530	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	
Pt.	34	513.2	513.0	513.0	515.0	513.2	512.0	512.5	513.0	513.0	513.5	512.0	513	570.5	571.0	513.3	513.0	512.0	513	517	513.5	512.2	512.7	513.0	512.5	513.0
35	532.2	533.0	533.2	534.4	533.8	532.5	532.5	533.8	534.0	534.5	533.5	534.5	528.2	528.2	528.2	533.3	534.8	533.5	533.5	533.5	533.8	534.3	533.0	534.0	534.0	534.0
36	483.0	483.1	483.1	481.5	483.5	482.0	483.0	482.3	483.0	483.0	482.0	483.5	481.3	481.0	483.5	483.2	483.0	483.5	482.5	484.5	482.2	482.6	482.0	482.0	482.5	481.4
37	504.5	504.5	503.9	503.1	504.5	505.0	506.0	506.0	505.0	505.5	505.0	506	504.5	503.2	506.5	504.0	505.5	507	508	505.5	504.8	504.9	505.0	505.5	506.0	504.5
38	542.9	542.9	543.1	544.5	544.0	544.5	545.5	545.5	545.4	545.6	545.7	546.5	540.5	539.3	544.5	543.8	544.5	545.5	545.5	544.9	544.9	545.9	545.0	546.0	546.0	546.5
		SEED EXIT WATER TEMPERATURES																								
DATE	8/1/58	8/1/58	8/1/58	8/1/58	8/1/58	8/1/58	8/1/58	8/1/58	8/1/58	8/2/58	8/2/58	8/2/58	8/2/58	8/2/58	8/2/58	8/2/58	8/2/58	8/2/58	8/2/58	8/2/58	8/2/58	8/2/58	8/2/58	8/2/58	8/2/58	
TIME	0400	0430	0500	0530	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	1900	2300	0300	0700	1100	1500	
Pt.	1	526.5	526.5	527.5	529.0	526.0	525.5	527.0	527.0	527.0	526.0	527.0	526.0	529.0	529.0	526.5	525.5	526.5	527.0	526.5	525.7	525.5	526.2	526.4	527.0	527.0
2	526.3	526.3	526.5	529.0	526.0	525.5	527.0	527.0	527.0	526.0	527.0	526.0	529.0	529.0	526.5	525.5	526.5	527.0	526.5	525.7	525.5	526.2	526.4	527.0	527.0	526.0
3	539.0	538.5	539.5	541.5	538.8	538.5	539.8	540	540.5	540.0	539.0	540.0	536.0	539.5	538.0	537.3	537.0	539.6	540.0	539.5	538.6	538.2	539.6	540.0	540.3	539.5
4	475.0	474.8	475.0	475.0	474.8	474.0	473.9	474.5	474.0	475.0	474.5	475.0	472.0	471.5	473.8	473.6	474.0	474.5	475.0	473.5	472.5	472.5	471.6	472.0	472.5	472.9
5	519.0	518.5	519.0	521.0	519.0	518.5	519.0	518.8	519.0	519.0	518.8	519.5	516.5	516.0	519.2	519.1	519.0	518.7	521.0	519.0	518.6	519.1	518.8	518.5	519.5	519.0
6	542.0	542.0	542.5	545.0	545.0	543.0	542.7	542.0	542.5	543.5	543.7	544.0	536.5	535.0	542.0	543.0	542.0	542.0	541.5	542.0	542.5	543.0	542.6	542.0	543.5	543.5
7	497.0	497.0	497.5	497.5	497.0	497.0	496.8	496.5	496.5	497.0	497.0	497.0	493.5	493.0	498.0	498.2	497.0	497.5	498.0	496.5	491.2	491.2	496.6	495.0	498.0	497.9
8	503.5	504.0	503.5	504.0	503.0	503.0	502.2	502.8	502.5	503.5	503.2	504.5	499.0	498.0	503.2	504.1	504.5	503.0	504.5	504.0	502.8	502.5	502.5	502.8	502.0	503.2
9	518.3	518.5	518.5	518.0	519.0	518.5	519.0	518.2	519.5	519.0	519.0	519.0	516.0	516.0	519.3	520.0	519.0	518.7	518.8	518.0	518.9	519.0	519.0	519.0	519.0	518.9
10	531.5	531.5	532.0	536.5	532.0	531.5	531.5	532.0	532.5	532.0	531.6	532.5	526.5	529.0	531.5	532.0	532.0	531.8	531.3	531.5	531.7	531.9	532.5	532.0	533.0	533.0
11	515.0	515.0	516.0	515.0	515.0	514.5	514.7	515.0	515.5	516.0	515.5	516.0	512.0	511.5	516.1	516.0	515.3	515.8	516.1	515.0	514.7	515.2	515.0	514.0	516.0	516.0
12	480.0	480.0	480.0	479.0	478.5	477.5	477.2	477.0	477.5	478.0	478.0	478.5	475.0	473.0	478.0	479.2	481.0	480.7	482.5	478.0	477.0	476.1	476.0	476.0	476.0	477.5
13	514.1	513.8	514.0	518.0	513.5	512.5	513.1	513.6	514.0	514.0	513.2	514.0	511.0	511.0	513.8	513.7	513.5	513.2	517.0	514.0	513.2	512.9	514.0	518.0	514.0	513.5
14	529.0	529.0	529.5	529.0	529.5	530.5	530.4	531.0	530.5	530.5	530.5	531.5	527.0	525.5	529.5	528.8	529.0	530.5	531.0	530.5	529.8	529.5	531.0	530.5	531.5	530.8
15	515.0	515.0	515.0	514.5	515.0	515.0	515.3	515.0	515.5	515.5	515.5	516.0	512.5	512.5	516.1	515.0	515.5	515.5	520.0	516.0	514.7	515.2	516.0	515.0	516.0	516.0
16	542.5	542.5	542.5	542.5	543.0	544.5	544.1	544.2	544.5	545.0	544.5	545.0	539.0	538.0	543.4	542.7	543.0	543.7	544.0	544.0	543.4	543.8	544.5	543.8	545.5	544.9
17	513.0	543.0	543.5	542.5	543.0	543.0	542.8	542.6	543.5	544.0	543.5	543.5	536.0	535.5	543.0	543.2	543.0	543.1	542.3	542.5	542.7	542.9	544.0	542.0	543.0	543.9
18	535.0	535.0	536.0	535.0	535.0	535.0	534.7	534.8	535.0	536.5	535.5	536.0	529.5	528.5	535.0	535.5	535.0	535.2	535.0	539.5	534.9	535.1	536.0	534.5	535.5	535.9
19	527.0	527.0	527.5	528.5	529.0	529.0	528.2	528.5	529.5	530.0	529.4	529.0	527.0	526.5	529.0	528.9	529.0	528.7	528.0	529.0	528.3	529.0	526.5	528.0	528.0	529.0
20	528.3	528.4	529.0	528.0	528.3	528.5	528.4	528.4	529.0	530.5	529.0	530.0	522.0	521.5	528.0	528.9	529.0	529.3	530.0	528.0	528.5	529.0	529.8	528.5	529.5	530.0
21	542.0	541.3	542.5	541.0	541.0	540.5	540.2	540.4	540.5	541.5	540.5	541.0	539.5	538.5	542.5	541.3	541.0	540.8	544.9	541.5	540.2	540.1	541.0	539.8	540.5	541.0
22	543.6	543.3	544.0	545.0	543.0	543.0	543.0	543.0	543.5	545.0	543.0	544.0	537.0	536.5	543.0	542.9	542.0	543.0	542.8	543.0	542.9	543.0	544.0	542.8	544.0	544.0
23	533.0	537.6	538.0	544.0	537.5	537.0	537.4	537.5	538.0	539.0	538.0	539.0	532.0	530.5	536.9	536.6	537.0	537.7	540.1	538.0	537.3	537.8	539.0	538.0	539.0	539.1
24	540.0	540.0	540.5	542.0	540.0	539.0	539.3	539.8	540.0	541.0	539.5	540.0	533.0	532.5	539.8	539.8	539.0	539.5	539.2	539.0	539.0	539.1	540.0	539.0	540.0	540.0

8 aa

SUBJECT DL-S-225 SHEET NO. 32

Duquesne Light

REACTIVITY LIFETIME

Power Station

REF ID: A65767

Shipping port APS division

COMPILED BY Test Group CHECKED BY:

DATE 8/5 - 8/9/58

TABLE IV C

[illegible]

SHEET NO. 34

REACTIVITY LIFETIME

DEPARTMENT

DIVISION

CA

TABLE IV C

FORM 622-7112

[illegible]

SUBJECT DL-5-225 SHEET NO. 35

COMPANY

REACTIVITY LIFE TIME

PART IV. 7

DIVISION

COMPILED BY Test Group CHECKED BY _____ DATE 8/9-8/14/58

FOIA b 7 - D
FOI# GLE-7112

TABLE IV C

[illegible]

SUBJECT DL-5-225 SHEET NO. 1
 COMPANY REACTIVITY LIFETIME
 DEPARTMENT _____
 DIVISION _____ COMPILED BY _____ CHECKED BY _____ DATE _____

TABLE IV D
 MISCELLANEOUS DATA

DATE				7/1/58			7/2/58					7/3/58						7/4/58			7/5/58			7/6/58				
TIME				17:30	1900	2300	0700	1200	1230	1300	1500	2300	0700	1000	1030	1100	1130	1200	1500	2300	0700	1500	2300	0700				
CALIBRATING TC	1A LOOP	°F		510.1	508.7	510.9	510.4	—	—	—	510.1	510.0	509.1	509.8	509.6	509.4	510.2	510.0	509.8	509.2	509.2	510.1	509.8	509.2	509.4	509.8		
	1B LOOP	"		511.4	510.6	510.9	509.8	—	—	—	508.6	509.2	508.2	508.8	508.6	508.4	509.1	509.0	508.6	508.3	508.3	509.1	509.6	508.2	508.5	508.7	508.7	
	1C LOOP	"		511.3	509.5	511.9	511.0	—	—	—	509.6	510.0	509.1	509.7	509.5	509.3	510.1	509.9	509.5	509.0	509.0	509.7	508.8	508.7	508.9	509.4	509.3	
	1D LOOP	"		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
1A FW FLOW	IND	1B/1C	X10 ³	270.0	270.0	255.0	257.0	272.0	272	272	275	270	270						270	278	280	282	275	280	275	275	280	
1B "	"	"	"	230	230	225	210	251	250	250	249	240	249						250	250	260	260	248	255	255	255	255	
1C "	"	"	"	255	255	245	249	262	269	263	265	260	260						262	270	272	270	265	270	272	275	275	
1D "	"	"	"	—	—	—	—	—	—	—	—	—	—						O. O. S.	—	—	—	—	—	—	—	—	
1A STEAM FLOW	IND	"		290	290	275	275	291	292	292	291	290	290						CALIBRATION	290	298	300	300	293	290	293	300	300
1B "	"	"	"	210	214	195	210	229	229	229	228	221	226						225	230	235	231	228	232	230	230	230	
1C "	"	"	"	258	240	245	250	269	270	270	269	264	267						268	272	279	278	270	277	274	270	278	
1D "	"	"	"	—	—	—	—	—	—	—	—	—	—						—	—	—	—	—	—	—	—	—	
PRIMARY CALORIMETRIC	%			89.95	91.34	87.37	85.45	89.82	91.71	91.73	91.68	90.85	88.91						95.60	94.47	93.62	93.65	93.99	93.20	95.18	95.62		

DATE				7/6/58			7/7/58				7/8/58				7/9/58			7/10/58			7/11/58			7/12/58			7/13/58			7/14/58
TIME				1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700
CALIBRATING TC	1A LOOP	°F		509.7	509.0	509.5	509.6	510.7	510.2	510.2	510.0	509.3	509.6	510.4	509.8	509.6	509.7	510.0	513.0	—	509.8	510.0	510.2	509.6	511.0	—	—	—	—	—
	1B "	"		508.4	508.3	508.3	508.4	509.6	509.0	508.8	508.8	508.0	508.4	509.2	508.3	508.4	508.4	508.8	508.1	—	508.6	509.2	508.6	508.3	509.0	—	—	—	—	—
	1C "	"		509.0	508.8	508.4	509.0	509.8	509.1	509.3	509.0	508.3	508.8	509.4	508.7	508.7	508.7	509.2	508.2	—	508.9	509.3	508.9	508.9	—	—	—	—	—	—
	1D "	"		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1A FW FLOW	IND	1B/1C	X10 ³	280	280	280	280	280	280	280	280	280	275	280	280	278	282	283	280	278	273	280	275	0	280	265				
1B "	"	"	"	255	258	250	255	250	250	250	254	255	255	250	252	255	248	255	250	250	250	252	248	250	0	230	240			
1C "	"	"	"	273	275	278	277	278	270	270	275	275	273	270	275	275	273	275	270	270	275	270	270	270	2	205	—			
1D "	"	"	"	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	250	265			
1A STEAM FLOW	IND	"		278	296	298	300	300	300	300	300	300	295	300	296	300	302	292	299	299	294	300	300	10	290	285				
1B "	"	"	"	230	230	234	232	232	235	230	230	233	231	226	232	230	230	232	219	228	230	229	227	230	0	210	220			
1C "	"	"	"	277	275	279	280	280	280	280	280	280	275	280	277	278	280	275	277	278	277	273	270	0	0	—				
1D "	"	"	"	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12	252	267			
PRIMARY CALORIMETRIC	%			92.21	94.11	93.03	93.90	95.32	94.37	94.14	94.63	93.42	93.61	93.26	92.98	92.6	92.03	95.60	91.34	94.24	94.60	94.04	92.71	93.91	—	89.93	89.98			

SUBJECT DL-S-225 SHEET NO. 2D.L.C. COMPANY REACTIVITY LIFETIME

P.S. DEPARTMENT

SHIPPING PORT DIVISION COMPILED BY CHECKED BY DATE 7/14-7/30TABLE IV D
MISCELLANEOUS DATA

FORM GSB-7112

DATA				7/14/83	7/15			7/16			7/17			7/18			7/19			7/20			7/21			7/22	
TIME				1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700
CALIBRATING Tc-1A Loop °F				510.8	509.6	510.0	509.8	509.8	509.8	510.9	509.9	510.4	509.4	509.8	510.4	509.6	510.5	510.4	510.0	510.2	510.6	510.4	510.6	510.0	509.8	510.9	510.0
IB Loop °F				510.2	509.0	509.0	508.0	509.1	508.3	510.0	508.8	509.4	509.0	508.8	509.4	508.6	509.3	509.5	510.0	508.6	508.8	508.8	509.4	509.0	508.8	509.6	509.0
IC Loop "				—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ID Loop "				510.5	509.4	509.3	509.4	508.6	508.6	510.5	509.1	509.4	509.0	509.0	509.9	509.3	509.1	509.3	509.8	509.9	510.3	510.1	509.7	508.1	508.2	509.7	508.2
IA FW Flow IND ^{LB/HR} X 10 ³				270	280	281	280	279	275	275	274	276	275	277	280	275	270	280	270	278	280	273	273	274	274	272	278
IB " " " "				255	250	255	250	250	249	248	245	255	245	248	250	245	245	259	245	245	250	261	270	265	260	267	
IC " " " "				—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ID " " " "				278	278	279	278	277	270	275	272	270	275	274	275	275	270	280	279	271	278	273	275	275	270	270	276
IA Steam Flow IND "				301	299	301	299	297	300	295	295	298	295	297	300	295	291	301	290	298	300	298	294	300	294	293	300
IB " " " "				230	231	232	230	248	230	225	225	228	225	226	230	222	222	230	220	223	229	220	230	225	218	230	
IC " " " "				—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ID " " " "				280	280	280	280	280	278	280	276	275	280	276	280	282	269	282	282	278	280	279	279	280	278	275	282
PRIMARY CALORIMETRIC %				95.15	94.5	94.93	95.21	95.7	95.51	93.12	94.39	94.05	93.94	93.67	94.25	91.92	91.87	92.80	94.24	94.76	93.15	93.76	94.16	94.46	92.69	92.68	94.18
DATE				7/22	7/23			7/24			7/25			7/26			7/26	7/27	7/27	7/27	7/28	7/28	7/28	7/29	7/29	7/30	
TIME				1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700
CALIBRATING Tc-1A Loop °F				510.3	510.3	510.4	510.2	510.2	509.8	510.4	510.4	510.1	510.4	510.2	510.2	510	510.2	510.8	509.9	509.8	510.2	510.2	510.0	510.6	510.2	510.2	510.2
IB Loop °F				508.6	508.9	508.6	509.2	509.0	508.3	509.4	509.3	508.6	509.2	509.2	509.2	508.8	509.2	509.8	508.9	509.0	509.0	509.1	509.2	509.2	509.9	509.3	
IC Loop °F				005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ID Loop °F				510.1	507.3	510.1	509.2	508.1	509.0	509.3	509.0	510.1	509.1	509.1	509.3	509.4	510.2	509.7	508.6	508.8	508.2	507.9	508.0	508.1	508.5	508.1	508.1
IA FW Flow IND ^{LB/HR} X 10 ³				272	271	275	275	277	275	280	274	275	278	276	275	278	275	273	280	271	275	280	275	280	275	275	281
IB " " " "				263	261	267	267	263	270	270	260	270	265	265	269	265	264	265	267	265	265	266	266	270	267	270	270
IC " " " "				—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ID " " " "				272	268	275	277	272	277	280	270	276	275	274	280	275	276	275	266	265	280	275	275	280	277	280	279
IA Steam Flow IND "				293	292	298	298	297	297	300	296	298	297	298	298	300	295	296	301	294	298	300	295	302	295	300	302
IB " " " "				272	219	228	225	222	279	228	220	232	222	223	240	225	225	225	278	225	229	228	226	228	227	230	230
IC " " " "				—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ID " " " "				279	275	281	281	278	281	282	276	285	280	280	286	280	278	283	280	280	285	280	284	281	283	283	283
PRIMARY CALORIMETRIC %				92.83	92.12	94.95	95.05	93.59	94.69	95.20	93.45	93.95	94.32	94.71	95.44	94.68	92.92	94.30	95.17	94.09	92.99	94.73	94.76	95.17	94.42	95.70	95.71

SUBJECT DL-S-225 SHEET NO. 3

D.L.C. COMPANY REACTIVITY LIFETIME

P.S. DEPARTMENT

S.A.P.S. DIVISION CONFIRMED BY Test Group CHECKED BY DATE 7/30 - 8/14/58

TABLE IV D

MISCELLANEOUS DATA

DATE			7/30	7/30	7/31	7/31	7/31	8/1/58	8/1/58	8/1/58	8/2/58	8/2/58	8/2/58	8/3/58	8/3/58	8/3/58	8/4/58	8/4/58	8/4/58	8/5/58	8/5/58	8/5/58	8/6/58	8/6/58	8/6/58	8/7/58
TIME			1500	2300	0700	1700	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700	1500	2300	0700
CALIBRATING	T _c	1A Loop °F	509.8	510.6	509.2	509.8	509.9	510.0	509.3	509.7	509.9	512.2	509.8	509.7	509.6	510.2	509.4	509.8	510.0	509.4	510.0	510.0	509.6	510.2	510.2	
		1B Loop °F	509.0	509.6	509.2	509.9	509.0	509.2	508.8	508.2	509.0	511.8	509.0	509.0	509.2	509.9	509.0	509.6	509.4	509.0	509.6	509.6	509.2	509.6	509.8	
		1C Loop "	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
		1D Loop "	508.9	508.9	508.8	508.9	509.1	509.1	508.9	509.9	509.0	511.1	508.0	508.0	508.9	508.8	508.8	508.2	508.2	508.1	508.2	508.2	508.1	509.0	509.2	
1A F.W. FLOW IND		%/Hr	275	282	33.0	258	270	280	280	279	276	200	280	285	278	278	279	280	275	275	280	275	278	284		
1B " " " "		"	269	265	32.0	250	260	265	270	264	266	200	262	275	266	262	265	266	268	265	264	268	268	263	270	
1C " " " "		"	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
1D " " " "		"	279	280	35.0	254	272	270	278	279	270	208	275	280	272	270	276	276	275	275	274	279	275	273	280	
1A STEAM FLOW IND		"	299	304	44.0	279	282	300	301	300	299	220	300	305	298	299	300	300	303	297	298	303	298	299	305	
1B " " " "		"	229	230	21.0	212	223	228	232	230	228	168	227	236	226	225	230	229	229	227	226	230	227	222	232	
1C " " " "		"	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
1D " " " "		"	285	286	42.0	259	278	278	283	284	278	210	275	285	280	276	284	281	282	281	280	285	284	279	288	
PRIMARY CALORIMETRIC	%		99.75	96.09	72.9	87.68	92.56	93.66	99.52	94.86	94.67	70.93	93.14	99.55	92.80	93.20	94.78	95.52	94.78	93.43	94.79	94.55	93.71	99.08	95.03	

DATE	TIME	8/7/58	8/7/58	8/8/58	8/8/58	8/8/58	8/9/58	8/9/58	8/9/58	8/10/58	8/10/58	8/10/58	8/11/58	8/11/58	8/11/58	8/12/58	8/12/58	8/12/58	8/13/58	8/13/58	8/13/58	8/14	8/14	8/14
CALIBRATING T _c - 1A Loop °F		509.6	509.8	510.2	509.6	509.4	509.5	509.5	509.2	509.6	509.6	509.8	510.0	509.2	509.4	509.2	509.2	509.4	509.0	509.2	509.9	509.9	509.2	
	1B Loop "	509.2	509.2	509.2	509.3	509.0	509.0	509.6	509.6	509.2	509.2	509.7	509.6	509.0	509.4	509.4	509.5	509.7	509.0	509.5	509.6	509.6	508.9	
	1C Loop "	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	1D Loop "	509.1	508.1	508.1	508.6	508.2	508.6	508.6	508.2	508.6	508.4	509.4	508.8	507.4	507.7	507.4	507.5	510.1	507.5	508.6	508.6	508.6	508.9	
1A F.W. FLOW IND. %/hr		280	282	285	280	275	280	285	281	283	284	280	281	288	288	285	290	288	284	290	285	290	290	
1B " " " "		268	265	270	265	265	270	270	265	270	270	265	270	274	268	268	270	268	270	270	265	270	270	
1C " " " "		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
1D " " " "		280	280	280	280	280	280	282	278	282	281	280	280	282	280	282	282	280	285	287	280	284	285	
1A STEAM FLOW IND. "		303	303	305	303	302	305	308	302	307	304	302	304	309	309	306	310	310	310	312	306	310	311	
1B " " " "		230	227	231	230	230	231	231	237	232	230	225	222	233	230	231	233	230	233	223	228	232	232	
1C " " " "		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
1D " " " "		288	283	288	288	288	288	292	283	290	289	282	290	290	290	290	295	290	290	294	288	291	292	
PRIMARY CALORIMETRIC %		95.72	95.38	95.89	95.36	95.96	94.62	96.93	93.83	94.19	96.27	95.31	95.41	96.37	96.08	95.93	96.91	96.36	97.97	97.58	95.45	100.8	97.39	

SUBJECT DL-S-225

DUQUESNE LIGHT COMPANY

REACTIVITY LIFETIME

POWER STATIONS DEPARTMENT

SHIPPINGPORT A.P.S.

TEST GROUP

DATE 7-1 thru 7-18-58

TABLE V (CONT'D)

2300 682-7111

DATE 7/1/58 7/2/58 7/3/58 7/4/58 7/5/58 7/6/58 7/7/58 7/8/58 7/9/58 7/10/58 7/11/58 7/12/58 7/13/58 7/14/58 7/15/58 7/16/58 7/17/58 7/18/58

TIME — — 2315 2130 2015 2030 2030 — 1145 2330 0945 1430 0200 0430

CHANNEL A CURRENT

AS FOUND	MA	83.25	88.8	91.2	90.0	92.7	—	—	—	—	—	—	—	—	—	—	—
60% POWER	MA	55.8	55.8	55.8	58.2	56.1	59.1	59.7	59.40	59.4	58.5	57.5	57.2	56.0	56.4	—	—
70"	"	64.6	63.9	63.3	67.2	65.7	67.8	68.4	68.4	68.4	68.0	69.5	69.5	69.6	66.0	—	—
80"	"	72.3	71.7	71.4	75.0	74.1	75.6	76.5	75.9	75.3	76.0	79.5	73.0	73.7	74.4	—	—
90"	"	80.7	79.8	79.5	84.0	83.4	84.3	85.2	84.3	84.6	82.0	85.0	81.0	82.7	83.1	—	—
100"	"	89.7	89.1	88.5	93.3	93.0	94.5	94.8	94.2	94.2	93.0	91.8	91.0	92.6	93.0	—	—
110"	"	97.5	96.9	96.9	104.7	101.4	103.2	103.2	103.2	102	102.0	101.5	101.0	101.5	102.3	—	—
120"	"	107.4	106.8	106.5	111.9	99.9	112.8	113.1	112.8	111.3	110.5	111.5	110.5	111.5	111.0	—	—
130"	"	115.5	115.5	114.6	120.9	120.6	121.8	122.4	121.8	120	119.5	120	120.0	122.2	120.6	—	—
140"	"	124.5	123.6	122.3	129.9	129.6	131.1	131.4	130.8	128.4	123.5	127.5	128.0	131.0	130.5	—	—

CHANNEL B CURRENT

AS FOUND	MA	106.2	114.6	114.3	115.8	115.8	—	—	—	—	—	—	—	—	—	—	—
60% POWER	MA	67.5	69.6	68.9	71.7	70.5	72.0	72.6	72.0	73.5	73.0	74.5	74.7	72.0	75.3	—	—
70"	"	75.4	79.8	78.6	82.2	81.6	83.1	83.7	83.4	84	82.5	81.5	89.8	82.7	86.7	—	—
80"	"	88.2	90.0	89.1	92.9	91.8	93.0	93.6	96.7	93.6	93.0	93.0	93.8	92.8	96.9	—	—
90"	"	98.1	96.7	98.4	102.6	101.7	103.5	103.5	102.9	103.5	103.5	102.5	105.0	109.0	107.4	—	—
100"	"	107.7	108.3	108.0	112.5	111.6	113.7	113.7	112.8	112.8	114.5	112.6	114.0	119.8	117.3	—	—
110"	"	116.7	117.3	116.7	121.2	120.6	122.1	122.7	121.8	121.8	122.5	122.8	123.0	123.3	126.6	—	—
120"	"	126.3	126.0	125.4	129.6	129.6	131.4	132.0	131.4	130.8	132.5	131.5	133.5	133.5	135.9	—	—
130"	"	134.4	135.0	133.8	139.5	138.6	141.3	141.0	140.4	139.2	140.5	139.0	141.5	142.6	145.5	—	—
140"	"	143.1	143.4	143.1	146.7	141.3	150.0	149.7	149.7	148.2	149.0	148.0	150.0	152.0	—	—	—

CHANNEL C CURRENT

AS FOUND	MA	107.1	116.4	116.7	114.9	118.5	—	—	—	—	—	—	—	—	—	—	—
60% POWER	MA	70.2	69.9	69.9	71.4	72.0	72.3	72.3	71.7	75.0	74.5	74.2	72.0	72.6	—	—	—
70"	"	81.6	81.3	79.8	82.5	82.8	84.0	84.3	83.7	85.5	85.0	85.4	84.0	84.0	—	—	—
80"	"	92.1	91.5	90.9	94.2	94.2	94.8	94.8	93.9	96.3	94.5	95.6	94.7	94.8	—	—	—
90"	"	102.6	102.3	101.4	105.8	105.9	106.2	106.5	106.5	107.4	105.0	107.0	106.3	105.9	—	—	—
100"	"	114.0	113.1	112.5	116.1	116.4	116.7	117.6	116.7	116.4	115.5	117.0	117.0	116.4	—	—	—
110"	"	124.2	123.9	123.0	126.6	126.9	127.8	128.4	127.5	127.2	127.5	128.0	128.2	128.1	—	—	—
120"	"	135.0	134.4	134.1	138.0	138.6	141.0	139.8	139.8	139.0	138.0	138.8	139.9	138.9	—	—	—
130"	"	145.8	145.2	145.2	149.1	—	—	—	—	147.9	147.5	147.5	150.2	150.0	—	—	—
140"	"	150.0	149.4	148.5	—	—	—	—	—	—	—	150.0	—	—	—	—	—

DL-3-225 2
 REACTIVITY LIFETIME
 DATE 7-1 Thru 7-58

TABLE II (CONT'D)

DATE 7/1/58 7/4/58 7/3/58 7/4/58 7/5/58 7/6/58 7/7/58 7/12/58 7/15/58 7/18/58 7/24/58 7/25/58 8/2/58
 TIME 2315 2130 2015 2030 2030 1145 0945 1930 0200 0430

CHANNEL D CURRENT

AS FOUND	MA	91.8	98.1	99.0	97.2	100.5	—	—	—	—	—	—	—
60% POWER	MA	62.1	63.0	60.9	64.5	69.5	66.0	67.2	66.0	64.8	—	64.5	64.0
70"	"	70.2	70.2	69.0	72.9	72.6	74.7	75.3	73.5	73.2	—	72.0	73.9
80"	"	78.1	78.0	76.8	81.3	81.0	82.8	83.7	82.8	81.0	—	80.0	80.6
90"	"	87.0	86.2	85.8	90.3	90.2	91.8	92.7	91.5	89.7	—	90.0	89.9
100"	"	95.1	94.5	94.2	98.7	101.7	100.2	100.8	100.2	97.8	—	97.0	98.2
110"	"	103.2	102.6	102.0	108.0	108.0	109.5	109.8	109.2	105.9	—	106.5	106.8
120"	"	112.5	111.3	111.3	117.0	117.0	118.2	118.2	118.2	114.0	—	116.0	114.8
130"	"	120.6	120.0	120.0	125.8	124.8	127.2	127.2	127.2	122.0	—	123.0	124.8
140"	"	129.6	128.7	128.9	135.0	134.7	136.5	136.8	139.5	134.4	—	132.5	133.5

① METER USED

② METER USED

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SIMPSON METER USED

SIMPSON METER USED

WESTON METER USED

CURVE I

DUQUESNE LIGHT COMPANY
 POWER STATIONS DEPARTMENT
 SHIPPINGPORT ATOMIC POWER STATION

REACTIVITY LIFETIME, SECTION I
 FIRST PERFORMANCE
 DL-S-225 (T-612118)

NOTE: Data obtained from indicators.

Duquesne Light Company
 Shippingport Atomic Power Station
 Effective Purification Half Life
 Data obtained during Station Start-up
 Following Safety Shutdown of July 31, 1958
 Reactivity Lifetime, Section I
 DL-S-154
 T-6121-8

TABLE VI

LOG OF EVENTS

<u>Date</u>	<u>Time</u>	
7-1-58	1205	Started to pull control rods. EFPH - 681.9
	1232	Reactor critical.
	1306	Started to steam slow roll turbine.
	1442	Generator synchronized.
	1446	Generator loaded to 5 mw.
	1450	Generator load increased to 9 mw.
	1612	Generator load increased to 15 mw.
	1622	Generator load increased to obtain 15 mw net for DL-S-229.
	1632	Generator load increased to obtain 30 mw net for DL-S-229.
	1648	Performed calorimetrics.
	1707	Generator load increased to obtain 45 mw net for DL-S-229.
	1717	Generator load increased to obtain 56.5 mw net. Performed primary and secondary calorimetrics to set Nuclear Instruments. Obtained the currents necessary to produce various power levels in Nuclear Instruments. Started taking data for DL-S-225.
7-2-58	0945	Increased generator load from 60 mw gross to 64 mw gross. Channel B of Nuclear Instrumentation indication increased sharply.
	1420	Added 42 cubic feet of hydrogen to Reactor Coolant System.
	1624	Changed minimum power level relay (NIS) from channel C to B. This decreased oscillation spread of Channel B and improved the signal to the P and T System. The oscillations were resulting in noise on start-up rate signal.
7-3-58	1738	Increased generator load from 58.9 mw gross to 60 mw gross.

DUQUESNE LIGHT COMPANY
POWER STATIONS DEPARTMENT
SHIPPINGPORT ATOMIC POWER STATION

REACTIVITY LIFETIME, SECTION I
FIRST PERFORMANCE
DL-S-225 (T-612118)

TABLE VI (cont'd)

<u>Date</u>	<u>Time</u>	
7-4-58	1720	Decreased generator load from 65 mw gross to 64 mw gross.
	1850	Nuclear instrument channels adjusted based on secondary calorimetrics. Each channel was adjusted by a ratio of 0.96 of the indicated value. The limiting or maximum permissible ion currents for the nuclear instrumentation were agreed on by Duquesne Light Company and Atomic Energy Commission as Channel A - 96.7 μ a, Channel B = 118.9 μ a, Channel C = 121.4 μ a and Channel D = 104.6 μ a. This correspond to 107 per cent power.
	0130	Increased load from 59 to 60 mw net.
7-5-58	1500	Performed weekly reactor protection system set operation per normal operating procedure. No abnormal conditions noted. Channel D level scram reset from 142 per cent to 138 per cent.
7-6-58	1440	Added 35 cubic feet of hydrogen to Reactor Coolant System.
	2155	Pressure and Temperature System gave "RODS-IN" signal. It appears that a Nuclear Instrumentation System signal added to 523.5 F signal to give the signal.
7-7-58	1315	Started heating 1D coolant loop using bleed and feed method.
	1500	No boiler blowdown occurred during test thus far.
	2030	Obtained the currents necessary to produce various power levels in Nuclear Instrument. No adjustments were necessary.
	2220	1D coolant loop temperature 393 F.
	0535	Tuesday, July 8, 1958 at 0535 plant container air contamination alarm, Channel 12, ORMS, sounded. Closed butterfly valves in air treatment system and shutdown fans. The pressure increasing in the container prevented immediate re-establishing of air flow.
7-8-58	0600	Air treatment system back-in normal service.
	1615	A generator load drop from 59.9 mw to 59.2 mw was observed. Calorimetric at 1800 showed power level of 100.7 per cent (secondary based on feedwater flow).

DUQUESNE LIGHT COMPANY
 POWER STATIONS DEPARTMENT
 SHIPPINGPORT ATOMIC POWER STATION

REACTIVITY LIFETIME, SECTION I
 FIRST PERFORMANCE
 DL-S-225 (T-612118)

TABLE VI (cont'd)

<u>Date</u>	<u>Time</u>	
7-8-58	1830	1D coolant loop temperature stabilized at 499 F. Could heat it no higher utilizing pump heat and feed from 1B loop.
7-9-58	1135	1BD purification loop placed in service with flow from the 1B and 1D loops.
	2350	1D coolant loop temperature 492 F. Being held in reserve.
7-10-58	0647	Safety insertion occurred when 138 kv line (Z28) breaker was opened. The Power and Temperature Control System nuclear signal dipped 1.6 F causing a 1/2 inch rod withdrawal. The rod withdrawal in turn caused a high flux level on Channel B to give a safety insertion. The reactor control was transferred to manual to restore normal conditions.
	0700 to 1530	70 cubic feet of H ₂ added to primary system.
7-11-58	1200	30 cubic feet of H ₂ added to primary system.
7-12-58	1330	Shift Reactor Engineer completed weekly Reactor Protection System test.
	2100	A flux tilt was noticed on nuclear instrumentation with Channel B at 105 per cent and Channel D at 96 per cent.
	2146	Power and Temperature Control System initiated a Rods-out signal due to a nuclear signal variation.
	2200	Channel B reached peak at 106 per cent. Channel D was 95 per cent.
	2230	Pressure and Temperature System again initiated rod movement from a "SPIKE" from Nuclear Instrumentation.
7-13-58	0100	Channel D reached its lowest value.
	0500	Flux tilt was 0 per cent all four channels at approximately the same value.

TABLE VI (cont'd)

<u>Date</u>	<u>Time</u>	
7-13-58	1000	Completed alignment of the Nuclear Instrumentation System source, intermediate and power range as part of pre-critical checkout. The zero setting on all four channels was adjusted in order to give the correct current for 100 per cent power. This adjustment decreased the power level on Channel A by 2.5 per cent, on Channel B by 4.0 per cent, on Channel C by 6.0 per cent and on Channel D by 5.0 per cent.
	1325	Started reducing station output.
	1340	Station load at 8 mw.
	1403	No. 1 Main Generator off the line.
	1406	Started shutting down the reactor.
	1434	All rods (except 4's and 8's) at 6".
	1442	All rods on bottom.
	1450	Shutdown 1D main coolant pump and opened hydraulic stop valves.
	1458	1D main coolant pump on fast speed.
	1510	Shutdown 1C main coolant pump and closed 1C loop main stop valves.
	1550	Started pulling rods for criticality.
	1720	Started steam roll.
	1801	No. 1 Main Generator on the line.
	1815	Increased load to 20 mw gross.
	1820	Started increasing load to 46 mw gross.
	1845	Adjusted Nuclear Instrumentation zero setting and set gains to give 100 per cent signal with current found after last adjustment on 7-4-58.
	2153	Started to increase load to 66 mw gross. Load was reduced to 63 mw gross when Channel B power level increased to 110 per cent.
	2400	EFPH = 964.5

DUQUESNE LIGHT COMPANY
POWER STATIONS DEPARTMENT
SHIPPINGPORT ATOMIC POWER STATION

REACTIVITY LIFETIME, SECTION I
FIRST PERFORMANCE
DL-S-225 (T-612118)

TABLE VI (cont'd)

<u>Date</u>	<u>Time</u>	
7-14-58	0001	1C Coolant Loop being cooled.
	0015	Transferred rods No. 22 and 61 to spare bus to correct flux tilt indicated on Channel B. Rods No. 22 and 61 were inserted a total of 1 inch.
	0130	Pulled rods No. 22 and 61 - 0.25 inches. Rods No. 22 and 61 now 0.75 inches lower than banked 2's and 6's.
	0200	Pulled rods No. 22 and 61 - 0.25 inches. Rods No. 22 and 61 now 0.50 inches lower than banked 2's and 6's.
	0235	Pulled rods No. 22 and 61 - 0.25 inches. Rods No. 22 and 61 now 0.25 inches lower than banked 2's and 6's.
	0313	Pulled rods No. 22 and 61 - 0.25 inches. Rods No. 22 and 61 now banked with 2's and 6's.
	0525	Pulled rods No. 22 and 61 - 0.25 inches. Rods No. 22 and 61 now 0.25 inches higher than banked 2's and 6's.
	0732	Opened the OCB for 138 kv line Z28.
	1230	Inserted rods No. 22 and 61 - 0.25 inches. Rods No. 22 and 61 now banked with 2's and 6's.
	1423	Increased load from 58 mw to 60 mw net (66 mw gross).
	1722	Closed the OCB for 138 kv line Z28.
	1725	Transferred rods No. 21 and 62 to their normal buses.
	1729	Reactor placed on "AUTO".
	1915	Station load adjusted to 60 mw net.
	2116	Reactor placed on manual. Variations in linear power level inputs to the P and T Recorder caused excessive rod motion.
	2300	Added 85 cu. ft. of hydrogen to Reactor Coolant System.

DUQUESNE LIGHT COMPANY
POWER STATIONS DEPARTMENT
SHIPPINGPORT ATOMIC POWER STATION

REACTIVITY LIFETIME, SECTION I
FIRST PERFORMANCE
DL-S-225 (T-612118)

TABLE VI (cont'd)

<u>Date</u>	<u>Time</u>	
7-15-58	0535	Load decreased 1 mw due to unknown cause.
	0622	Opened the OCB for 138 kv line Z28.
	1459	Closed the OCB for 138 kv line Z28.
	----	The Reactor Plant Container Air Cooling System 1B supply fan fresh air dampers were found closed.
7-16-58	0622	Opened the OCB for 138 kv line Z28.
	1659	Closed the OCB for 138 kv line Z28.
	----	Removed a concrete plug from each chamber enclosure to stimulate natural air circulation in an attempt to cool the containers.
7-17-58	0740	Opened the OCB for 138 kv line Z28.
	1558	Closed the OCB for 138 kv line Z28.
	1650	Rods No. 24 and 63 placed on spare inverters in anticipation of flux tilt.
	1813	Rods No. 24 and 63 placed on normal inverters. No rod motion was required. Channel D maximum was 106.5 per cent.
7-18-58	0300	The flux tilt reached its peak at about this time. Channels B and C peaked at 105 and 104 per cent respectively. Channels A and D were 98.5 per cent.
	1027	Heater drain pump placed in operation. Generator output increased about 1.5 mw to 67.5 mw gross due to increased plant efficiency. Generator load adjusted to give 60 mw net output. All nuclear instrument channels were about 1 per cent lower after the adjustment.
7-19-58	0200	Flux tilt reached its peak.
	0520	Increased load to 66.5 mw gross which resulted in a 59.6 mw net load.
	1100	Decreased generator load 1 mw.

DUQUESNE LIGHT COMPANY
POWER STATIONS DEPARTMENT
SHIPPINGPORT ATOMIC POWER STATION

REACTIVITY LIFETIME, SECTION I
FIRST PERFORMANCE
DL-S-225 (T-612118)

TABLE VI (cont'd)

<u>Date</u>	<u>Time</u>	
7-19-58	1107	Rods No. 23, 24, 62 and 63 placed on spare busses in anticipation of flux tilt.
	1618	Rods No. 23, 24, 62 and 63 returned to normal inverters. No rod motion was necessary during flux tilt.
	2000	Channel C ion current was 0.2 amps above limit and power level at 105 per cent.
	2030	Channel C ion current was 1.6 amps above limit. Channel B ion current was 1.1 amps above limit. Power level was 105.5 and 105 per cent respectively. Power level indication was used for flux tilt indication rather than ion current readings. Original ammeter damaged and calibration of replacement meter was questionable.
	2124	Rods No. 21, 22, 61 and 64 switched to spare inverters.
	2236	Rods No. 21, 22, 61 and 64 inserted 0.3 inch to correct for flux tilt.
	2244	Rods No. 23, 24, 62 and 63 withdrawn 0.3 inch to correct for T_{avg} .
	2250	Rods No. 21, 22, 61 and 64 inserted 0.25 inch.
	2255	Rods No. 23, 24, 62 and 63 withdrawn 0.35 inch. Rods No. 21, 22, 61 and 64 withdrawn 0.25 inch.
	2308	Rods No. 21, 22, 61 and 64 inserted 0.15 inch.
	2355	Added 40 cu. ft. of hydrogen to coolant.
	0019	Rods No. 21, 22, 61 and 64 withdrawn 0.25 inch.
7-20-58	0037	Rods No. 23, 24, 62 and 63 inserted 0.25 inch.
	0114	Rods No. 23, 24, 62 and 63 inserted 0.125 inch. Rods No. 21, 22, 61 and 64 withdrawn 0.125 inch.
	0154	Rods No. 21, 22, 61 and 64 withdrawn 0.25 inch for T_{avg} correction.

DUQUESNE LIGHT COMPANY
POWER STATIONS DEPARTMENT
SHIPPINGPORT ATOMIC POWER STATION

REACTIVITY LIFETIME, SECTION I
FIRST PERFORMANCE
DL-S-225 (T-612118)

TABLE VI (cont'd)

<u>Date</u>	<u>Time</u>	
7-20-58	0200	Rods No. 21, 22, 61 and 64 withdrawn 0.1 inch. All 2's and 6's now banked.
	0425	Rods No. 21, 22, 61, 62, 63 and 64 withdrawn 0.125 inch.
	0503	Rods No. 21, 22, 61, 62, 63 and 64 inserted 0.06 inch.
	0542	Rods No. 21, 22, 61, 62, 63 and 64 inserted 0.06 inch.
	0545	Rods No. 21, 22, 61, 62, 63 and 64 inserted 0.06 inch.
	0935	Calibrated Blanket Flow recorder.
	0945	Started weekly Reactor Protection System test.
	1020	Completed weekly Reactor Protection System test.
	1035	Rods No. 21, 22, 61, 62, 63 and 64 withdrawn 0.10 inch.
	1042	Rods No. 21, 22, 61 and 64 transferred to normal inverters.
	2400	EFPH - 1128.9.
7-21-58	0713	Line Z28 OCB opened for DLC System.
	1000	Charging pump flowmeter isolated and by-passed. Gear teeth failed and brass chips entered the Coolant Charging System.
	1030	The Blanket Flow Recorder and Core Seed Metal Temperature recorders were calibrated.
	1100	No. 2 FEDAL activity monitor out of service to troubleshoot high voltage breakdown.
	1440	Rod groups 2 and 6 withdrawn 0.15 inch to correct T_{avg} .
	1530	Rod groups 2 and 6 withdrawn 0.10 inch to correct T_{avg} .
	1702	Steam generator leak alarm on 1B Boiler, Channel 2 on ORMS, sounded. Health Physics notified.

DUQUESNE LIGHT COMPANY
POWER STATIONS DEPARTMENT
SHIPPINGPORT ATOMIC POWER STATION

REACTIVITY LIFETIME, SECTION I
FIRST PERFORMANCE
DL-S-225 (T-612118)

TABLE VI (cont'd)

<u>Date</u>	<u>Time</u>	
7-21-58	2019	Transferred Rods No. 23, 24, 62 and 63 to spare busses.
	2040	Rods No. 23, 24, 62 and 63 inserted 0.3 inches.
	2042	Rods No. 2 and 6 inverters withdrawn 0.2 inches.
	2049	Generator output reduced 0.5 mw.
	2057	Flux tilt essentially flat.
	2243	50 cu. ft. of hydrogen added to Coolant System.
	2243	Rods No. 23, 24, 62 and 63 withdrawn 0.25 inches.
	2243	Rods No. 23, 24, 62 and 63 withdrawn 0.25 inches.
7-22-58	0001	1C Main Coolant Pump running in slow speed with by-pass valve open.
	0030	Rod Nos. 21, 22, 23, 24, 61, 62, 63 and 64 were inserted 0.13 inch for temperature correction.
	0310	Rods Nos. 21, 22, 23, 24, 61, 62, 63 and 64 were withdrawn 0.130 inch for temperature correction.
	0450	1C loop boiler filled to about +0.8 inch. 1AC purification loop return valve (07-H16-11) was closed to isolate 1C loop from the primary system. Proceeded to cool down 1C loop from 227 F to 120 F. NOTE: The wide range Pressurizer Norwood indicator indicates approximately 2-1/2 inches lower than the narrow range Pressurizer Norwood indicator. The two pressurizer level recorders indicate the same level in agreement with the narrow range Norwood.
	0635	Rods No. 23, 24, 62 and 63 transferred to their respective normal inverters.
	1030	Completed nuclear magamp linearity check to determine drift. No drift observed. Data taken with "269 SIMPSON" meter. See Table V for Results.

DUQUESNE LIGHT COMPANY
POWER STATIONS DEPARTMENT
SHIPPINGPORT ATOMIC POWER STATION

REACTIVITY LIFETIME, SECTION I
FIRST PERFORMANCE
DL-S-225 (T-612118)

TABLE VI (cont'd)

<u>Date</u>	<u>Time</u>	
7-22-58	1100	Health Physics report sample taken July 21, 1958 from 1B steam generator leak detector indicates activity of 2.4×10^{-7} mc/ml. Activity is normal.
	1145	Rods No. 21, 22, 23, 24, 61, 62, 63 and 64 withdrawn 0.16 inch to correct for T_{avg} .
	1228	Line 228 OCB opened for DLC System.
	1400	Several low blanket flow alarms were obtained. Investigation found that by closing the Blanket Flow Recorder door, the No. 3 flow point went below 70 per cent. Apparent cause was break down in insulation due to bending of wires.
	1709	Line 228 OCB opened for DLC System.
	2350	A and C Nuclear Instrumentation Channels have been together and almost flat since 1800. Channels B and D started to tilt around 1900.
	----	Calibrated 1D steam pressure recorder.
7-23-58	0230	A broken wire on the Blanket Flow Recorder terminal board (point 18) was found and repaired.
	0325	Received "STEAM GENERATOR LEAK" alarm from Channel 2 of ORMS. Alarm was reset and indication fell to zero.
	0415	Received "STEAM GENERATOR LEAK" alarm from Channel 2 ORMS. Alarm was reset and indication fell to zero.
	0510	Received "LOW SAMPLE FLOW" alarm on FEDAL when multiport valve moved from part 35 to part 36.
	0755	Line 228 OCB was opened for DLC System.
	0930	Received "STEAM GENERATOR LEAK" alarm three times since 0800, each time the alarm was reset. Health Physics notified.
	0934	Received "AIR PART. DETECTOR MECH. FAILURE" alarm which was reset immediately, therefore, it was not possible to determine the offending channel.

DUQUESNE LIGHT COMPANY
POWER STATIONS DEPARTMENT
SHIPPINGPORT ATOMIC POWER STATION

REACTIVITY LIFETIME, SECTION I
FIRST PERFORMANCE
DL-S-225 (T-612118)

TABLE VI (cont'd)

<u>Date</u>	<u>Time</u>	
7-23-58	1045	Channel 2 ORMS alarms which were received earlier were found to be due to Channel 11 sporadic paper drive and mechanical failure relay operation.
	1100	Rod groups 2 and 6 were raised 0.04 inch to correct for T _{avg} .
	1400	Rod groups 2 and 6 were raised 0.14 inch to correct for T _{avg} .
	1440	Pressurizer drained for two minutes. Level dropped 20 inches, therefore, drain rate through 40 gpm flash tank orifice is approximately 100 gpm.
	1455	Rod groups 2 and 6 were lowered 0.03 inch for T _{avg} correction.
	----	1A boiler feed pump recirculation line flow control valve found open. Stop valves closed.
	1733	Line Z28 OCB closed for DLC System.
	2240	Began to add hydrogen to primary system.
	2320	Hydrogen addition completed. Added 50 cu. ft.
	----	Received high temperature alarm on 1D coolant pump bearing water. Temperature was 126 F.
7-24-58	0300	The average of the Nuclear Instrument Channel readings is slightly in excess of limits per the Test Procedure. Special calorimetric being performed.
	0600	Special calorimetrics not valid. Total feedwater flow apparently changed due to 1A boiler feed pump recirculation line stop valves being closed.
	0700	Calorimetric satisfactory.
	0750	Line Z28 OCB opened.
	----	Checked Nuclear Instrumentation for drift. No drift evident. See Table V for details.
	1400	Increased load 2 mw.

DUQUESNE LIGHT COMPANY
POWER STATIONS DEPARTMENT
SHIPPINGPORT ATOMIC POWER STATION

REACTIVITY LIFETIME, SECTION I
FIRST PERFORMANCE
DL-S-225 (T-612118)

TABLE VI (cont'd)

<u>Date</u>	<u>Time</u>	
7-24-58	1510	Line Z28 OCB closed.
	----	Special test performed to attempt to determine effect of 1A and 1B boiler feed pump recirculation line leakage on Secondary Calorimetric. Results were inconclusive. Apparently 1A and 1B recirculation valves allow different flows at different times. Total feedwater flow is actually 15,000 to 30,000 lb/hr lower than total feedwater flowmeter has been indicating. In order to protect the boiler feed pumps at low or no load conditions, the 1A and 1B boiler feed pump recirculation lines will be left open.
7-25-58	0750	Line Z28 OCB opened.
	----	Test Procedure changed. A valid calorimetric is one in which Secondary is greater than Primary by 4-1/2 per cent $\pm$ 2 per cent. Secondary calorimetric will be based on total of individual 1A, 1B and 1D boiler feedwater flowmeters. This change made due to 1A and 1B boiler feed pump recirculation problems.
	1659	Line Z28 OCB closed.
7-26-58	----	Weekly Reactor Protection System check. Adjusted 1B Channel 4 loop insertion magamp. No other problems encountered.
	----	Adjusted Pressurizer wide range low level alarm to actuate at 76 inches.
	1320	Repaired 1A heat exchanger D/P recorder, 1A main coolant pump D/P recorder and 1B reactor D/P recorder.
7-27-58	0845	Load increased 1 mw.
	1205	Load decreased 0.5 mw.
	----	Flash tank H ₂ concentration alarm removed from service.
	----	30 cu. ft. of hydrogen added to primary system.
	----	1B coolant loop by-pass valve green indicating light went out. Relay 20LBCX contacts were not made properly. Relay to be cleaned and repaired.

DUQUESNE LIGHT COMPANY
POWER STATIONS DEPARTMENT
SHIPPINGPORT ATOMIC POWER STATION

REACTIVITY LIFETIME, SECTION I
FIRST PERFORMANCE
DL-S-225 (T-612118)

TABLE VI (cont'd)

<u>Date</u>	<u>Time</u>	
7-27-58	2400	EFPH = 1293.7 hours.
7-28-58	0749	Opened line Z28 OCB for DLC System.
	1300	Blanket and seed flow recorders calibrated.
	1315	Trouble on 1B loop bypass valve greed indicating light cleared (relay 20LB-CX-2).
	1430	Decreased load approximately 0.5 mw to 60 mw net.
	1650	Closed line Z28 OCB for DLC System.
	1755	Decreased load approximately 0.5 mw to 59.5 mw net, due to change in frequency.
	2130	Shift Reactor Engineer informed Test Group that Channel D of nuclear instrumentation reads 1.5 per cent higher after check by SRE of nuclear instrumentation at 100 per cent power. When placing switch from "TEST" back to "OPERATE," meter recorded 1.5 per cent higher. This took place at approximately 0730 and has remained at this value to the present time.
7-29-58	0230	Transferred rods No. 24 and 63 to spare inverters No. 1 and 2.
	----	Inserted rods 24 and 63 - 0.3 inches.
	----	Inserted rods 24 and 63 - 0.2 inches. Total differential - .5 inch between rods on spare buses and banked rods.
	0530	Raised rods 24 and 63 - 0.25 inch.
	0617	Raised rods 24 and 63 - 0.25 inch. Rods No. 24 and 63 now banked.
	0655	Decreased load by 1/2 mw to lower power level as indicated on Nuclear Instrumentation.
	0827	Increased generator load 1/2 mw.
	0950	Decreased generator load 1/2 mw to 60 mw net.

DUQUESNE LIGHT COMPANY
POWER STATIONS DEPARTMENT
SHIPPINGPORT ATOMIC POWER STATION

REACTIVITY LIFETIME, SECTION I
FIRST PERFORMANCE
DL-S-225 (T-612118)

TABLE VI (cont'd)

<u>Date</u>	<u>Time</u>	
7-29-58	1005	Returned rods 24 and 63 to their normal inverters.
	1300	Increased load 1/2 mw to 59 mw net.
7-30-58	1400	Power and temperature recorder taken out of service because the Sanborn connections made to the inverse period loaded DC computer.
	1631	Transferred rods 24 and 63 to their respective spare inverters.
	1640	Decreased load 1/2 mw to 59.5 mw net to lower power level.
	1803	Transferred rods 24 and 63 to their respective normal inverters. No rod motion required to suppress flux oscillations.
	2322	Aligned rod subgroups 2's and 6's. The 6's were .26 inches below the 2's.
7-31-58	0245	Safety shutdown occurred. Rod 61 dropped to bottom when 6's were placed on spare bus No. 2.
	0250	CB-14 was opened to shutdown reactor.
	0522	Completed of precritical check out. Pulled rods to approach criticality.
	0604	Reactor supercritical at 0.3 SUR. 2's at 66.45 inches and 6's at 65.96 inches. 6's raised to level of 2's.
	0620	Started steam slow roll.
	0650	No. 1 generator synchronized. Group III rods at 20.5 inches.
	0656	Transferred 1A and 1C 2400 V buses to No. 1 Station Transformer.
	0705	Started up No. 1 Rod MG set and shutdown No. 2.
	0800	Rod positions - 1 - 69.99 5 - 69.10 2 - 58.52 6 - 58.50 3 - 69.35 7 - 69.21 4 - 1.00 8 - 1.00
	0800	Main generator output 30 mw.

DUQUESNE LIGHT COMPANY
POWER STATIONS DEPARTMENT
SHIPPINGPORT ATOMIC POWER STATION

REACTIVITY LIFETIME, SECTION I
FIRST PERFORMANCE
DL-S-225 (T-612118)

TABLE VI (cont'd)

<u>Date</u>	<u>Time</u>	
7-31-58	0823	Raised generator load to 40 mw gross.
	----	1D loop Muller resistance bridge not operating properly.
	1110	Increased generator load to 60 mw gross.
	1215	Rods No. 23 and 62 transferred to No. 1 and No. 2 spare inverter, respectively. Lowered rods No. 23 and 62 on No. 1 and No. 2 inverter 0.5 inches. Lowered rods 23 and 62 0.25 inches. Lowered rods 23 and 62 - 0.25. Total difference between banked 2's and 6's and those on spare inverters is 1.00 inches.
	1530	Lowered blanket 2's and 6's - 0.25 inches. Total difference now is 0.75 inches between banked 2's and 6's and those on spare inverters.
	1558	Raised rods 23 and 62 - .25 inches.
	1605	Lowered all 2's and 6's - 0.25 inches.
	1609	Raised 23 and 62 - 0.25 inches. Total difference between rods 23 and 62 and 2's and 6's on normal bus is now 0.25 inches.
	1724	Raised rods 23 and 62 - 0.25 inches, all 2's and 6's now banked.
	1738	Raised all 2's and 6's - 0.125 inches.
	1754	Raised all 2's and 6's - 0.125 inches.
	----	Raised all 2's and 6's - 0.125 inches.
	1800	Fuse placed in 1D loop Muller resistance bridge. Meter appears to be operating satisfactorily.
	1836	Raised all 2's and 6's - 0.125 inches.
	1859	Raised all 2's and 6's - 0.125 inches.
	1914	Raised all 2's and 6's - 0.125 inches.
	1937	Raised all 2's and 6's - 0.125 inches.
	1952	Raised all 2's and 6's - 0.125 inches.

DUQUESNE LIGHT COMPANY
POWER STATIONS DEPARTMENT
SHIPPINGPORT ATOMIC POWER STATION

REACTIVITY LIFETIME, SECTION I
FIRST PERFORMANCE
DL-S-225 (T-612118)

TABLE VI (cont'd)

<u>Date</u>	<u>Time</u>	
7-31-58	2012	Raised all 2's and 6's - 0.125 inches.
	2033	Raised all 2's and 6's - 0.125 inches.
	2052	Raised all 2's and 6's - 0.125 inches.
	2110	Raised all 2's and 6's - 0.125 inches.
	2131	Raised all 2's and 6's - 0.125 inches and started to increase generator output to 60 mw net.
	2155	Generator output at 59.8 mw net.
	2345	Did not obtain a valid calorimetric.
8-1-58	0017	Raised rods on inverters No. 2, No. 6 and spare inverters 1 and 2 - 0.25 inches to correct for T_{avg} .
	0030	Commenced 3 hours of calorimetrics. The 2300 calorimetric was not within limits.
	0110	All 2's and 6's raised 0.20 inches to correct for T_{avg} .
	0205	All 2's and 6's up .25 inches to correct T_{avg} .
	0213	Transferred rods No. 23 and 62 back to normal inverters.
	0400	Calorimetrics completed and all were valid.
	0706	Line Z28 OCB opened.
	0716	Line Z28 OCB closed.
	0800	Power and Temperature Control System out of service to connect and pioneer intermediate range nuclear instrument signal to a Sanborn Recorder.
	1947	1B boiler steam generator leak alarm sounded. Meter reset and indication fell to zero.
	2150	Steam generator leak alarm sounded on Channel 2 of ORMS.

DUQUESNE LIGHT COMPANY
POWER STATIONS DEPARTMENT
SHIPPINGPORT ATOMIC POWER STATION

REACTIVITY LIFETIME, SECTION I
FIRST PERFORMANCE
DL-S-225 (T-612118)

TABLE VI (cont'd)

<u>Date</u>	<u>Time</u>	
8-2-58	0100	Four steam generator leak alarms sounded on Channel 2 of ORMS. Probable cause is a high noise level.
	0300	Completed weekly mag-amp drift test.
	0730	1B boiler sample activity was 5.25×10^{-8} mc per ml.
	1205	Safety shutdown occurred. The Test Engineer apparently grounded the test microammeter leads on the C Channel nuclear power level linear amplifier. Excess current was drawn through ground. Channel C power level indication went to 116 per cent causing the safety shutdown.
	1208	Nuclear instrumentation alignment started.
	1350	Nuclear instrumentation alignment completed.
	1355	Started pulling control rods for precritical checkout.
	1400	Safety shutdown occurred because the "C" Channel signaled a high start-up rate. CB-14 was opened.
	1401	Rod withdrawal started for precritical checkout.
	1421	Started pulling control rods for criticality.
	1458	Reactor critical.
	1502	Rods 2's and 6's inserted while adding water to boiler drums.
	1515	Started to steam slow roll turbine.
	1530	Turbine governor controlling turbine.
	1553	Synchronized generator.
	1555	7 mw gross load on generator.
	1556	Transferred 1A and 1C 2400 V buses to No. 1 Station Transformer.
	1614	20 mw gross load on station.

DUQUESNE LIGHT COMPANY
POWER STATIONS DEPARTMENT
SHIPPINGPORT ATOMIC POWER STATION

REACTIVITY LIFETIME, SECTION I
FIRST PERFORMANCE
DL-S-225 (T-612118)

TABLE VI (cont'd)

<u>Date</u>	<u>Time</u>	
8-2-58	1625	25 mw gross load on station.
	1635	40 mw gross load on station.
	1730	50 mw gross load on station.
	1735	Lowered rods No. 21, 22, 23, 24 - 0.29 inches to align them with rod group 6.
	2115	Calorimetrics being performed so station output can be increased.
8-3-58	0032	Increased load from 43 to 53.5 mw net.
	0110	Started to increase load to 60 mw net.
	0122	Obtained 59.5 mw net.
	0209	Decreased load approximately 2 mw to determine reason for turbine line steam pressure indicator oscillations. Oscillations corrected by throttling stop valve.
	0400	Power and Temperature System operational.
	0906	Load increased 1 mw.
	1810	Added 50 cu. ft. of hydrogen to coolant.
	2101	1C loop by-pass valve opened.
	2104	1C loop by-pass valve closed.
8-4-58	0130	Started bleed and feed on 1C loop to cool loop down.
	0530	Stopped bleed and feed on 1C loop.
	0714	Line Z28 OCB opened.
	0340	P and T Control System recorder chart drive sticking. Maintenance performed to correct condition.
	1715	Line Z28 OCB closed.

DUQUESNE LIGHT COMPANY
POWER STATIONS DEPARTMENT
SHIPPINGPORT ATOMIC POWER STATION

REACTIVITY LIFETIME, SECTION I
FIRST PERFORMANCE
DL-S-225 (T-612118)

TABLE VI (cont'd)

<u>Date</u>	<u>Time</u>	
8-4-58	1805	No. 1 Rod MG set output was found varying excessively. Commutator and brush at the 10 o'clock position arcing. Brushes were recently replaced.
	1905	Received numerous steam generator leak alarms from ORMS Channel 2 between 4:00 PM and 7:00 PM. Health Physics to take sample. After an alarm, resetting the meter causes indication to fall to zero.
8-5-58	0710	No. 2 Rod MG set started on No. 2 feeder. No. 1 Rod MG set shutdown due to commutation trouble. Brushes chatter and commutator dirty.
	0727	Opened line Z28 OCB.
	1230	Maintenance worked on No. 1 Rod MG set. Cleaned commutator and replaced brushes.
	1415	130 Volt ground developed on FEDAL System. FEDAL System switched to emergency bus supply. Ground located on relay K-50.
	1453	No. 1 Rod MG set placed in service. No. 2 Rod MG set shutdown.
	1651	Closed line Z28 OCB.
	----	Added 40 cubic feet of hydrogen to Coolant System.
8-6-58	0030	Connected auctioneer intermediate log level signal to P and T System.
	0735	Opened line Z28 OCB.
	1430	Transferred FEDAL 120 V DC back to normal supply.
	1530	Performed linearity check on Simpson 269 and compared with new Weston meter. New meter constant = 3.0. Weston meter within one microamp of Simpson.
	1633	Line Z28 OCB closed.

DUQUESNE LIGHT COMPANY
POWER STATIONS DEPARTMENT
SHIPPINGPORT ATOMIC POWER STATION

REACTIVITY LIFETIME, SECTION I
FIRST PERFORMANCE
DL-S-225 (T-612118)

TABLE VI (cont'd)

<u>Date</u>	<u>Time</u>	
8-6-58	2300	Seed exit water temperature recorder repeated points 1 to 12 instead of indicating points 13-24. Recorder operated satisfactorily thereafter.
8-7-58	0355	Reduced net load 0.5 mw to 59.8 mw to decrease Nuclear Instrumentation Channel A level.
	0908	Opened line Z28 OCB.
	1305	Channel B, Source Range, Nuclear Instrumentation out of service. Closed line Z28 OCB.
	1415	40 cubic feet of hydrogen added to Coolant System.
	1500	Started taking ion current readings with new Weston meter instead of Simpson meter.
8-8-58	0430	Obtained CLC current readings for 60 per cent to 140 per cent. See Table V.
	0804	Opened line Z28 OCB.
	1520	Channel B, Source Range, Nuclear Instrumentation, returned to service.
	1657	Line Z28 OCB closed.
	1924	Load increased from 60 to 61 mw net per Atomic Energy Commission request.
	1950	Trouble on time delay on FEDAL causing numerous alarms.
	2020	FEDAL low flow alarms stopped.
	2230	FEDAL low flow alarms sounded again.
8-9-58	0222	Wide Range Pressurizer Level Instrumentation indicated a drop from 92 in. to 58 in. At the same time it was observed that the P and T inverse period signal increased from a - 0.7 to a + 1.3 F. Apparent cause is unknown.

DUQUESNE LIGHT COMPANY
POWER STATIONS DEPARTMENT
SHIPPINGPORT ATOMIC POWER STATION

REACTIVITY LIFETIME, SECTION I
FIRST PERFORMANCE
DL-S-225 (T-612118)

TABLE VI (cont'd)

<u>Date</u>	<u>Time</u>	
8-9-58	0805	Steam generator leak alarm sounded on Channel 4 ORMS (1D Boiler). Health Physics notified.
8-10-58	1230	Ten inches of water added to component cooling water expansion tank.
	1510	30 cu. ft. hydrogen added to Primary System.
8-11-58	0900	P and T System being repaired to attempt to remove noise entering System from auctioneer log level.
	1300	Aligned Channel B, Source Range. Alignment satisfactory.
	2210	Completed alignment of Nuclear Instrumentation System Intermediate and Source Range in preparation for shutdown. Shutdown was postponed.
8-12-58	----	Channel 10, ORMS, Air Particle Detector Mechanical Alarm, sounded periodically.
8-13-58	0700	Channel D, Nuclear Instrumentation System recorder indicated step changes at 0410 and 0645. Replaced recorder battery.
	1745	Began heating up steam vent line for Decay Heat Test.
	2220	P and T System rods-in and rods-out set points checked. The relays picked up at 1.0 and dropped out at 0.7 of the pick-up value.
8-14-58	0410	Completed alignment of Nuclear Instrumentation System intermediate and source ranges in preparation for shutdown. Shutdown was postponed.
	1500	Aligned Nuclear Instrumentation System intermediate range.
	1606	No. 2 Rod MG set placed in service and No. 1 Rod MG set shutdown.
	1610	S-19 switch opened to prevent a locked in safety insertion thus permitting an override of the insertion after turbine generator is shutdown.
	1623	Reactor on AUTO.

DUQUESNE LIGHT COMPANY
POWER STATIONS DEPARTMENT
SHIPPINGPORT ATOMIC POWER STATION

REACTIVITY LIFETIME, SECTION I
FIRST PERFORMANCE
DL-S-225 (T-612118)

TABLE VI (cont'd)

<u>Date</u>	<u>Time</u>	
8-14-58	1630	Turbine and generator shutdown by manual operation of the turbine operating oil-governor oil bypass. Test completed. EFPH = 1692.8.

TEST RESULTS DL-S-225

T-612118

REACTIVITY LIFETIME, SECTION I, FIRST PERFORMANCE (cont'd)

Test Performed By Test Group Date 8/22/58
Results Prepared By G E Eckenrode per W79 Date 8/22/58
Approved By Edward Jones Date 8/22/58
Approved By W F Gresham Date 8/22/58
Approved By Stanley H Schaffer Date 8/25/58

Approvals:

AEC R. M. Forsell Date 10/24/58
AEC R. J. Stratton Date 10/24/58
DLC Stanley H Schaffer Date 8-28-58
DLC [Signature] Date 10-22-58