

 <p style="text-align: center; font-weight: bold; font-size: 1.2em;">SUPPORTING DOCUMENT</p>		NUMBER N001ER 000006	REV LTR/CHG NO SEE SUMMARY OF CHG																																	
PROGRAM TITLE L-85 Reactor		DOCUMENT TYPE Engineering Report																																		
DOCUMENT TITLE L-85 Reactor - Annual Operations for the Year 1979		KEY NOUNS Reactor Operations																																		
PREPARED BY/DATE V. A. Swanson <i>V.A. Swanson</i>		DEPT 731	MAIL ADDR T093																																	
IR&D PROGRAM? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> IF YES, ENTER TPA NO. _____		GO NO. 94117	S/A NO. PAGE 1 OF TOTAL PAGES 3 REL. DATE 1-25-80 <i>da</i>																																	
APPROVALS M. E. Remley <i>M.E. Remley</i> 23 Jan 80 J. H. Walter <i>J.H. Walter</i>		SECURITY CLASSIFICATION (CHECK ONE BOX ONLY) <table style="width:100%; border: none;"> <tr> <td style="width:33%;">UNCL <input type="checkbox"/></td> <td style="width:33%;">DOE <input type="checkbox"/></td> <td style="width:33%;">DOD <input type="checkbox"/></td> <td style="width:33%;">RESTRICTED DATA <input type="checkbox"/></td> </tr> <tr> <td>CONF. <input type="checkbox"/></td> <td></td> <td></td> <td>DEFENSE INFO. <input type="checkbox"/></td> </tr> <tr> <td>SECRET <input type="checkbox"/></td> <td></td> <td></td> <td></td> </tr> </table>		UNCL <input type="checkbox"/>	DOE <input type="checkbox"/>	DOD <input type="checkbox"/>	RESTRICTED DATA <input type="checkbox"/>	CONF. <input type="checkbox"/>			DEFENSE INFO. <input type="checkbox"/>	SECRET <input type="checkbox"/>																								
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1. SUMMARY OF OPERATING EXPERIENCE

The L-85 was operated without incident during calendar year 1979. Three hundred twenty-nine (329) runs were made for a total integrated thermal power output of 583,842 watt-hours. Two hundred twenty-six (226) runs were for neutron radiography, ninety-five (95) for training programs, and eight (8) for routine checks.

2. EMERGENCY SHUTDOWN AND INADVERTENT SCRAMS

Four inadvertent scrams occurred during the year. Three were caused by electrical noise in one of the power level channels and the fourth was a power level scram which occurred when the operator failed to insert the control rod in time to level the power at the desired 2.75 kw. All scrams operated properly and scram levels were not exceeded.

3. MAJOR MAINTENANCE OPERATIONS

The Daystrom compensated ion chamber connected to the Power Monitor Channel was replaced by a new Reuter-Stokes compensated ion chamber with better gamma compensation.

Other normal maintenance and minor repairs were performed as required.

4. CHANGES TO FACILITY AND PROCEDURE

The circuitry and procedure for testing the core pressure trip setting were modified for better accuracy.

The core pressure channel was modified for connection to the battery powered emergency power system. Power will automatically be provided to the pressure transducer if 120 VAC power is lost or if the transducer power supply fails. A battery operated digital panel meter was also added to provide core pressure indication at all times.

5. RELEASE OF RADIOACTIVE EFFLUENTS

No uncontrolled radioactive effluents were released or discharged to the environs.



6. ENVIRONMENTAL SURVEYS

Environmental surveys are performed by the Radiation and Nuclear Safety Group by sampling for radioactive analysis the soil, vegetation, water and air up to a distance of 10 miles from Energy Systems Group, California sites. A report by J. D. Moore* describing the monitoring procedures and results for 1979 summarizes these surveys. This report concludes that environmental radioactivity observed by the monitoring is due to natural sources and to fallout of radioactive material from foreign atmospheric testing of nuclear devices rather than to Energy Systems Group operations at California sites.

* J. D. Moore, "Energy Systems Group Environmental Monitoring and Facility Effluent Annual Report - 1979".