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LIST OF UNCLASSIFIED REPORTS RECEIVED AND ISSUED BY THE UCRL INFORMATION DIVISION DURING THE PERIOD OF DECEMBER 1-13, 1957

December 16, 1957

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WAPD-SC-545	Hydrogen Flammability Data and Application to PWR Loss-of-Coolant Accident	Dr. Z. Shapiro, T. Moffette, Same	9-57
WAPD-SC-546	Safeguards Aspects of PWR Reactor Coolant Chemistry	W. Lindsay, Same	
WAPD-SC-547	Description of Shippingport Atomic Power Station Site and Surrounding Area with Radiation Background and Meteorological Data	R. McAllister, W. Wirth, T. Harris, Jr. Same	6-57
WAPD-SC-548	Hazards to the Area Surrounding PWR Due to Atmospheric Diffusion of Radioactivity	R. Valentine, Same	9-57
WAPD-SC-549	PWR Plant Container Sizing Criteria. Studies of Transient Temperature and Pressure in Plant Container Following Primary Coolant System Rupture	R. Rome, T. Moffette, Same	6-57
YAEC-27	Thermal Stability of the Yankee Nuclear Power Plant	C. Obermesser, Yankee Atomic Electric Co., Boston	5-15-57
YAEC-35	Quarterly Progress Report for the Period March 16, 1957 to June 30, 1957	I. Coen, R. Birkel, Same	7-30-57

MISCELLANEOUS

AERE-CE/R-2257 (Rev.)	Conference on the Utilisation of Heat from Nuclear Reactors, Held at Harwell on 18th January 1957	C. Nicholls, ed. Gt. Brit. Atomic Energy Res. Est., Harwell, Berks, Eng.	1957
TID-7537(Pt. 1)	Control Over Source and Special Nuclear Material. A Symposium Held at New York, March 5-7, 1957	Division of Nuclear Materials Management, AEC and New York Operations Office, AEC	11-57

LIST OF UNCLASSIFIED REPORTS ISSUED BY THE UCRL INFORMATION DIVISION

UCRL-3799	Hyperons and Heavy Mesons: Systematics and Decay	M. Gell-Mann, A. Rosenfeld	7-57
UCRL-3920	A Carbon-14 Respiration Pattern Analyzer for Clinical Studies	B. Tolbert, M. Kirk, F. Upham	9-24-57
UCRL-3934	The Isolation of Americium-241 in 100-Milligram Quantities from Large Amounts of Impurities	F. Weigel	9-57
UCRL-3942	Energy Transfer in Ordered and Unordered Photochemical Systems	G. Tollin, P. Sogo, M. Calvin	10-29-57
UCRL-8006	A Measurement of the Spin-Flip Probability in Negative Photopion Production from Deuterium	K. Bandtel, W. Frank, R. Madey	10-4-57
UCRL-8012	Nuclear Spin of Gallium-68	J. Hubbs, R. Marrus, J. Worcester	10-10-57

UCRL-8018	Electron-Capture Decay of Gadolinium-151	V. Shirley, J. Rasmussen	10-57
UCRL-8020	Nuclear Reactions of Uranium Induced by 5.7-Bev Protons; Radiochemical Yields of Light Elements	C. Carnahan (Thesis)	10-57
UCRL-8047	Some Considerations on the Probability of Nuclear Fission	R. Vandenbosch, G. Seaborg	11-57
UCRL-8061	List of Unclassified Reports Received and Issued by the UCRL Information Division During the Period of November 16-30, 1957		12-3-57