

Lock 150-39

Office Memorandum • UNITED STATES GOVERNMENT

TO : Lyall E. Johnson, Chief
Licensing Branch

FROM : Clifford K. Beck, Chief
Hazards Evaluation Branch

DATE: DEC 15 1958

SUBJECT: CURTISS-WRIGHT CORPORATION - REQUEST FOR OPERATION AT FULL POWER

Curtiss-Wright Corporation built a 1 Megawatt Research Reactor in Quehanna, Penna. Pending the installation and completion of the cooling system, operation of the reactor was limited to a maximum of 100 Kw. Curtiss-Wright Corporation now informs us that the primary coolant system is completed and fully instrumented. The heat exchanger, cooling tower and secondary coolant system pumps are not yet installed. The licensee requests permission to make short runs up to the design power of 1 megawatt in order to test the cooling system and the shielding. Operation at 1 megawatt is feasible because the reactor pool water contains approximately 147,000 gallons of water at room temperature. Assuming no external cooling source it is estimated that reactor operation at a power of 1 megawatt for a period of 10 hours would result in heating the reactor pool water from about 64°F to 100°F.

The licensee requests permission to operate the reactor at 1 megawatt power under the following conditions and restrictions:

primary coolant flow rate 700 gallons per minute
slow shutdown-low flow 525 gallons per minute (75% of normal rated flow)
differential temperature across the core 10°F
alarm temperature - core effluent 110°F

Calculations submitted by the licensee indicate that operation under the above stipulated conditions would result in an average maximum fuel temperature of about 114°F. The calculations were based on a core array of 4 x 5, no reflector elements in the core.

The analysis of the reactor design and the supplementary information presented in the request for the amendment indicated that the reactor can be operated under the conditions and restrictions stipulated above without undue hazard to the public.

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Project #28

Lyall E. Johnson, Chief
Licensing Branch

DEC 11 1958

Clifford K. Beck, Chief
Hazards Evaluation Branch

CURTISS-WRIGHT CORPORATION - REQUEST FOR OPERATION AT FULL POWER

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Robert V. 56-39

OFFICE ▶	HEB:DL&R	HEB:DL&R				
SURNAME ▶	NGrossman:mma	C.K. Beck				
DATE ▶	12/11/58	12/15/58				

Marvin Mann, Assistant Director
Division of Inspection

NOV 24 1958

Lyall Johnson, Chief, Licensing Branch
Division of Licensing and Regulation

REQUEST FOR FACILITY LICENSE AMENDMENT, CURTISS-WRIGHT CORPORATION,
DOCKET NO. 50-39

SYMBOL:LRL:FCL

Attached for your information and files is a letter dated
November 7, 1958, from the Curtiss-Wright Corporation requesting
the necessary amendment to its facility license R-36 to permit
short duration operation at 1 megawatt.

Attachment:
ltr. dtd. 11/7 (2)

OFFICE ▶	LRL	LRL	LRL			
SURNAME ▶	FC Lee / mjm	Edwards	L Johnson			
DATE ▶	11/21/58	11/21	11/27			

Office Memorandum • UNITED STATES GOVERNMENT

TO : C. K. Beck, Chief, Hazards Evaluation Branch
 Division of Licensing and Regulation DATE: November 21, 1958

FROM : *[Signature]*
 C. T. Edwards, Chief, Facilities Section
 Licensing Branch, Division of Licensing and Regulation

SUBJECT: CURTISS-WRIGHT CORPORATION - DOCKET NO. 50-39

SYMBOL:LRL:FCL

Attached for your information and appropriate action are three copies of a letter filed by the subject applicant, dated November 7, 1958, requesting that facility license R-36 be amended to permit short duration operation at 1 megawatt.

Attachment:
Ltr. dtd. 11/7/58 (copies - 3)

1 copy of the Project file
What distribution? 1 copy Government
11/24/58 Janner

28 ✓

Reply made 12/15/58
memo to L. Johnson

C. R. Beck, Chief, Hazards Evaluation Branch
Division of Licensing and Regulation

November 21, 1958

C. R. Edwards, Chief, Facilities Section
Licensing Branch, Division of Licensing and Regulation

CURTIS-WRIGHT CORPORATION - DOCKET NO. 50-39

SYMBOL: LRL-FUL

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Attachment:
Ltr. dtd. 11/7/58 (copies - 3)

OFFICE	LRL	LRL				
	<i>[Signature]</i>	<i>[Signature]</i>				
SURNAME	FOLE/mjm	Edwards				
DATE	11/21/58					

Marvin Mann, Assistant Director
Division of Inspection

JUN 19 1958

Lyall Johnson, Chief, Licensing Branch
Division of Licensing and Regulation

REQUEST FOR FACILITY LICENSE AMENDMENT - CURTISS-WRIGHT CORPORATION,
DOCKET NO. 50-39

SYMBOL: LRL:FCL

Attached for your information and files is a letter dated June 3, 1958 from the Curtiss-Wright Corporation requesting the necessary amendments to its license and construction permit to authorize its receipt and use of 0.2 kg. of U-235 contained in two additional fuel elements.

Attachment:
Ltr. dtd. June 3, 1958

OFFICE ▶	LRL	LRL	LRL		
SURNAME ▶	FCLee/mjm	EEdwards	LJohnson		
DATE ▶	6/17/58		6/19		