

Grant and Cooperative Agreement

CHOOSE ONE:
 COOPERATIVE AGREEMENT
 GRANT

CHOOSE ONE: EDUCATION FACILITIES RESEARCH SDCR TRAINING

1. GRANT/COOPERATIVE AGREEMENT NUMBER NRC-HQ-60-15-G-0003	2. SUPPLEMENT NUMBER M0002	3. EFFECTIVE DATE 02/01/2018	4. COMPLETION DATE
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5. ISSUED TO NAME/ADDRESS OF RECIPIENT (No., Street, City/County, State, Zip) PENNSYLVANIA STATE UNIVERSITY THE ATTN MRS ALLISON EISENHOWER 110 TECHNOLOGY CENTER UNIVERSITY PARK PA 168027000	6. ISSUED BY US NRC - HQ Mailing Address: ACQUISITION MANAGEMENT DIVISION MAIL STOP TWFN-8E06M WASHINGTON DC 20555-0001
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7. TAXPAYER IDENTIFICATION NO. (TIN) 24-6000376	9. PRINCIPAL INVESTIGATOR/ORGANIZATION'S PROJECT OR PROGRAM MGR. (Name & Phone) [REDACTED]
8. COMMERCIAL & GOVERNMENT ENTITY (CAGE) NO.	[REDACTED]

10. RESEARCH, PROJECT OR PROGRAM TITLE
Experiments on Scalability of Horizontal Two-phase Flow in Small and Large Diameter Pipes

11. PURPOSE
See Schedule

12. PERIOD OF PERFORMANCE (Approximately)
05/01/2015 through 04/30/2018

13A.	AWARD HISTORY	13B.	FUNDING HISTORY
PREVIOUS	\$494,153.00	PREVIOUS	\$494,153.00
THIS ACTION	\$0.00	THIS ACTION	\$0.00
CASH SHARE	\$0.00	TOTAL	\$494,153.00
NON-CASH SHARE	\$0.00		
RECIPIENT SHARE	\$0.00		
TOTAL	\$494,153.00		

14. ACCOUNTING AND APPROPRIATION DATA

PURCHASE REQUEST NO.	JOB ORDER NO.	AMOUNT	STATUS

15. POINTS OF CONTACT

	NAME	MAIL STOP	TELEPHONE	E-MAIL ADDRESS
TECHNICAL OFFICER	CHON DAVIS	10 B16	301-415-6610	CHON.DAVIS@NRC.GOV
NEGOTIATOR				
ADMINISTRATOR	M'LITA R. CARR		301-415-6869	MLita.Carr@nrc.gov
PAYMENTS				

16. THIS AWARD IS MADE UNDER THE AUTHORITY OF:
Pursuant to Section 31b and 141b of the Atomic Energy Act of 1954, as amended

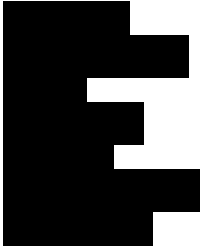
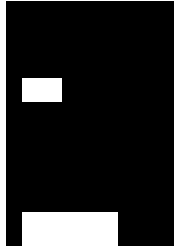
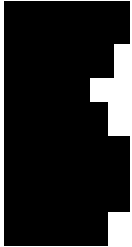
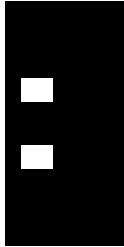




17. APPLICABLE STATEMENT(S), IF CHECKED: <input type="checkbox"/> NO CHANGE IS MADE TO EXISTING PROVISIONS <input type="checkbox"/> FDP TERMS AND CONDITIONS AND THE AGENCY-SPECIFIC REQUIREMENTS APPLY TO THIS GRANT	18. APPLICABLE ENCLOSURE(S), IF CHECKED: <input type="checkbox"/> PROVISIONS <input type="checkbox"/> SPECIAL CONDITIONS <input type="checkbox"/> REQUIRED PUBLICATIONS AND REPORTS
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UNITED STATES OF AMERICA	COOPERATIVE AGREEMENT RECIPIENT
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CONTRACTING/GRANT OFFICER M'LITA R. CARR	DATE 02/01/2018	AUTHORIZED REPRESENTATIVE	DATE
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ITEM NO. (A)	ITEM OR SERVICE (Include Specifications and Special Instructions) (B)	QUANTITY (C)	UNIT (D)	ESTIMATED COST	
				UNIT PRICE (E)	AMOUNT (F)
	<p>CFDA Number: 77.009</p> <p>NRC-HQ-60-15-G-0003</p> <p>ZEROREQ-RES-18-0060</p> <p>The purpose of this modification is to:</p> <ol style="list-style-type: none"> 1. Change the Principal Investigator and 2. Revise the budget to add subcontracting work. <p>As a result of this modification:</p> <ol style="list-style-type: none"> 1. The Principal Investigator changed from Dr. XXXXXXXXXX. 2. The budget was revised as seen on page 3 to accept and approve the proposed subcontracting work. <p>**All other terms and conditions remain the same.**</p> <p>Payment:</p> <p style="padding-left: 40px;">ASAP GRANT FUNDS REIMBURSEMENT SYS</p> <p style="padding-left: 40px;">US TREASURY</p> <p>Period of Performance: 05/01/2015 to 04/30/2018</p> <p>NRC-HQ-60-14-FOA-0001</p>				

	<u>Orig. Budget</u>	<u>Change</u>	<u>New Budget</u>
			
			
Yearly Total	\$ 494,153.00	\$0	\$ 494,153.00