

**U.S. NUCLEAR REGULATORY COMMISSION  
NOTICE OF GRANT/ASSISTANCE AWARD**

1. GRANT/AGREEMENT NO. NRC-04-10-155	2. MODIFICATION NO. M001	3. PERIOD OF PERFORMANCE FROM: 9/30/2010 TO: 9/30/2012	4. AUTHORITY Pursuant to Section 31b and 141b of the Atomic Energy Act of 1954, as amended
5. TYPE OF AWARD <input checked="" type="checkbox"/> GRANT <input type="checkbox"/> COOPERATIVE AGREEMENT	6. ORGANIZATION TYPE University Affiliated Foundation NACIS: 611310 DUNS: 111310249	7. RECIPIENT NAME, ADDRESS, and EMAIL ADDRESS SOUTH CAROLINA RESEARCH FOUNDATION  901 SUMTER ST STE 511 COLUMBIA SC 292080001	

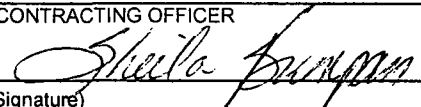
8. PROJECT TITLE: Ultrasonic Guided Wave Sensor for Gas Accumulation Detection in Nuclear Emergency Core Cooling Systems

9. PROJECT WILL BE CONDUCTED PROPOSAL(S) DATED AND APPENDIX A-PROJECT GRANT PROVISIONS	10. TECHNICAL REPORTS ARE REQUIRED <input checked="" type="checkbox"/> PROGRESS AND FINAL <input type="checkbox"/> FINAL ONLY <input type="checkbox"/> OTHER (Conference Proceedings)	11. PRINCIPAL INVESTIGATOR(S) NAME, ADDRESS and EMAIL ADDRESS Dr. Yong-June Shin 301 S Main Street Columbia, SC 29208 <a href="mailto:shinjune@enr.sc.edu">shinjune@enr.sc.edu</a>
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12. NRC PROGRAM OFFICE (NAME and ADDRESS) U.S. Nuclear Regulatory Commission Office of Nuclear Regulatory Research Attn: Robin Barnes Mail Stop: C5A24M Washington, DC 20555 Tel: 301-251-7401 TA: Zee-chung Wang	13. ACCOUNTING and APPROPRIATION DATA APPN. NO: 31X0200.160 B&R NO: 2011-60-11-6-119 JOB CODE: G6002 BOC NO: 4110 OFFICE ID NO: RES-11-175 FEES: 112602	14. METHOD OF PAYMENT <input type="checkbox"/> ADVANCE BY TREASURY CHECK <input type="checkbox"/> REIMBURSEMENT BY TREASURY CHECK <input type="checkbox"/> LETTER OF CREDIT <input checked="" type="checkbox"/> OTHER (SPECIFY) Electronic ASAP.gov (See Remarks in Item #20 "Payment Information")
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15. NRC OBLIGATION FUNDS	16. TOTAL FUNDING AGREEMENT
THIS ACTION <u>\$31,000.00</u>	NRC <u>\$300,000.00</u> This action provides funds for Fiscal Year 2011 in the amount of <u>\$31,000.00</u>
PREVIOUS OBLIGATION <u>\$40,000.00</u>	RECIPIENT _____
TOTAL <u>\$71,000.00</u>	TOTAL <u>\$300,000.00</u>

17. NRC ISSUING OFFICE (NAME, ADDRESS and EMAIL ADDRESS)  
  
U.S. Nuclear Regulatory Commission  
Div. of Contracts  
Attn: M`Lita Carr  
Mail Stop: TWB-01-B10M  
Washington, DC 20555

18.  Signature not required	19. NRC CONTRACTING OFFICER   (Signature) _____ 5/23/2011 (Date) _____ NAME (TYPED) <u>Sheila Bumpass</u> TITLE <u>Contracting Officer</u> TELEPHONE NO. <u>301-492-3484</u>
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20. PAYMENT INFORMATION  
  
Payment will be made through the Automated Standard Application for Payment (ASAP.gov) unless the recipient has failed to comply with the program objectives, award conditions, Federal reporting requirements or other conditions specified in 2 CFR 215 (OMB Circular A110).

21. Attached is a copy of the "NRC General Provisions for Grants and Cooperative Agreements Awarded to Non-Government Recipients. Acceptance of these terms and conditions is acknowledged when Federal funds are used on this project.

22. ORDER OF PRECEDENCE  
In the event of a conflict between the recipient's proposal and this award, the terms of the Award shall prevail.

23. By this award, the Recipient certifies that payment of any audit-related debt will not reduce the level of performance of any Federal Program.

**DESCRIPTION OF MODIFICATION**

The purpose for modification number 001 is to:

1. Provide incremental funding in the amount of \$31,000.00;
2. Change the Project Manager;
3. Add Financial and Performance reporting requirements.

As a result of this modification:

1. The obligated amount has increased from \$40,000.00 to \$71,000.00;
2. Zeechung Wang has been replaced by Robin Barnes as the RES Project Manager;
3. In the Monitoring and Reporting section entitled "Federal Financial Reports" delete and replace with the following:

**"b. Federal Financial Reports**

Effective October 1, 2009, NRC transitioned from the SF-269, SF-269A, SF-272, and SF-272A to the Federal Financial Report (SF-425) as required by OMB:

Federal Register Notice: [http://www.whitehouse.gov/omb/fedreg/2008/081308\\_ffr.pdf](http://www.whitehouse.gov/omb/fedreg/2008/081308_ffr.pdf)

Federal Financial Report Form (SF-425): [http://www.whitehouse.gov/omb/grants\\_forms/](http://www.whitehouse.gov/omb/grants_forms/)

The Recipient shall submit a Federal Financial Report (SF-425) on a quarterly basis, for the periods ending 3/31, 6/30, 9/30 and 12/31. Reports are due within 30 calendar days following the end of each reporting period. The reports must be emailed to Grants\_FFR@nrc.gov. "

4. In the Programmatic Requirements section entitled "Performance (Technical) Reports" add the following:

"c. The required performance (technical) reports must be emailed to Grants\_PPR@nrc.gov."

Base Period: September 30, 2010 – September 30, 2012 (unchanged)

Assistance Award Ceiling: \$300,000.00 (unchanged)

NRC Total Obligated Amount: \$71,000.00 (changed)

All terms and conditions remain the same.