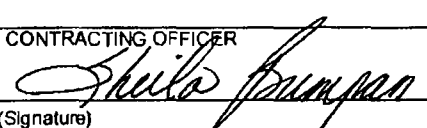


**U.S. NUCLEAR REGULATORY COMMISSION  
NOTICE OF GRANT/ASSISTANCE AWARD**

1. GRANT/AGREEMENT NO. NRC-04-10-156	2. MODIFICATION NO. M001	3. PERIOD OF PERFORMANCE FROM: 9/30/2010 TO: 9/30/2013	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  State Related Higher EDU DUNS: 003403953 NAICS: 611310		7. RECIPIENT NAME, ADDRESS, and EMAIL ADDRESS PENNSYLVANIA STATE UNIVERSITY, THE PENN STATE  408 OLD MAIN  UNIVERSITY PARK PA 168021505
8. PROJECT TITLE: In-Situ Study of Hydride Reorientation and Fracture Behavior of Zirconium Alloys			
9. PROJECT WILL BE CONDUCTED PER GOVERNMENT'S/RECIPIENT'S 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. Arthur T. Motta 227 Reber Bldg., University Park, PA 16802; E-mail: <a href="mailto:atm2@psu.edu">atm2@psu.edu</a>	
12. NRC PROGRAM OFFICE (NAME and ADDRESS) NRC ATTN: Robin Barnes, <a href="mailto:Robin.Barnes@nrc.gov">Robin.Barnes@nrc.gov</a> 21 Church Street MS: C6D20 Rockville, MD 20850 (301) 251-7401 Harold Scott, <a href="mailto:TAHarold.scott@nrc.gov">TAHarold.scott@nrc.gov</a>	13. ACCOUNTING and APPROPRIATION DATA APPN. NO: 31X0200.160 B&R NO: 2011-60-11-6-174 JOB CODE: G8006 BOC NO: 4110 OFFICE ID NO: RES-11-251 FAIMIS: GR0082	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")	
15. NRC OBLIGATION FUNDS  THIS ACTION <u>\$65,000</u>  PREVIOUS OBLIGATION <u>\$152,885</u>  TOTAL <u>\$217,885</u>		16. TOTAL FUNDING AGREEMENT  NRC <u>\$435,519</u>  RECIPIENT _____  TOTAL <u>\$435,519</u>  This action provides funds for Fiscal Year _____ in the amount of _____	
17. NRC ISSUING OFFICE (NAME, ADDRESS and EMAIL ADDRESS)  U.S. Nuclear Regulatory Commission Div. of Contracts Attn: Chris Walston Mail Stop: TWB-01-B10M Washington, DC 20555; E-mail: <a href="mailto:Chris.Walston@nrc.gov">Chris.Walston@nrc.gov</a>			
18.  Signature not Required		19. NRC CONTRACTING OFFICER  <div style="text-align: center;"> (Signature) _____ NAME (TYPED) <u>Sheila Bumpass</u>  TITLE _____  TELEPHONE NO. <u>301-492-3484</u> Email: <a href="mailto:sheila.bumpass@nrc.gov">sheila.bumpass@nrc.gov</a> <div style="text-align: right;">8/3/11 (Date)</div></div>	
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.			

**TEMPLATE - ADM001**

**SUNSI REVIEW COMPLETE**

**ADM002**

**DESCRIPTION OF MODIFICATION:**

The purpose of this modification M001 is:

1. Provide incremental funding in the amount of \$65,000;
2. Change the Project Manager;
3. Add Financial and Performance reporting requirements;

As a result of this modification:

1. The obligated amount has increased by \$65,000 from \$152,885 to \$217,885;
2. Robin Barnes has replace Harold Scott as the RES Project Manager and Mr. Scott is hereby designated as the Technical Analyst;
3. In section b. entitled "Federal Financial Reports" under Monitoring and Reporting deleted 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. A final SF-425 shall be submitted within 90 days after the expiration of the award. 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, 2013 (unchanged)

Total Agreement Amount: \$435,519 (unchanged)

Total Obligated Amount: \$217,885 (changed)

All terms and conditions remain the same.