The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of offers is extended, is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

N/A

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS; IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

A. THIS CHANGE ORDER IS ISSUED PURSUANT TO (Specify authority):

THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

B. THE ABOVE-NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (Such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

D. OTHER (Specify type of modification and authority):

IAW Part II, Section H, Contract Clause H.34 entitled “Agreements and Commitments”

E. IMPORTANT: Contractor___ is not, X is required to sign this document and return ___ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible)

The purpose of this modification is to update Part III Section J Attachment R, to include the Resource Commitments Table and Resource Commitment #11 and Update Part I, Section G, Contract Administration Data.

(See Continuation)
The following changes have been made to Section J, Attachment R:

Table 3-1 Revision 3 is deleted in its entirety and replaced with the attached Table 3-1 Revision 4.

Resource Commitment Form #11–EPRI (2 pages) is deleted in its entirety and replaced with the attached Resource Commitment Form #11–EPRI Rev. 1 (3 pages).

The following changes have been made to Part I Section G, Contract Administration Data:

Paragraph G.1 (b) is changed to read Suzette M. Olson in lieu of Michael L. Adams.

G.6 Contract Administration is changed to read as follows:

U.S. Department of Energy
Idaho Operations Office
Contract Management Division
ATTN: Suzette M. Olson
1955 Fremont Ave.
Idaho Falls, Idaho 83401-1240
Telephone (208) 526-7385
Fax: (208) 526-8789
Email: olsonsm@id.doe.gov

All other terms and conditions remain unchanged
The following changes have been made to Section J, Attachment R:

Table 3-1 Revision 3 is deleted in its entirety and replaced with the attached Table 3-1 Revision 4.

Resource Commitment Form #11 – EPRI (2 pages) is deleted in its entirety and replaced with the attached Resource Commitment Form #11 – EPRI Rev. 1 (3 pages).

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Telephone (208) 526-7385
Fax: (208) 526-8789
Email: olsonsm@id.doe.gov

All other terms and conditions remain unchanged
Resource Commitment Form #11 – EPRI – (Revision 1)

The Electric Power Research Institute, Inc. is committing the following resources to the INL:

1. Resource Description

Provide technical support to Advanced Nuclear Technology Development at Idaho National Laboratory (INL). This commitment is comprised of two areas of emphasis:

A. Advanced nuclear reactors and reactor systems, including advanced nuclear fuel cycles. This effort primarily focuses on reactor and fuel cycle systems beyond current ALWR technology, including HTGRs for process heat and hydrogen generation and closed nuclear fuel cycles (i.e., fast spectrum reactors and advanced recycling).

B. Advanced nuclear technologies that support advances in LWR and ALWR technologies. The work primarily focuses on technology areas that fall within the definition of the Nuclear Energy Systems Support Program (NESSP) authorized in the 2005 Energy Policy Act, that: "... support R&D activities addressing reliability, availability, productivity, component aging, safety, and security of existing nuclear power plants." It is anticipated that technologies that support current plants within this scope are also equally applicable to ALWRs. This subsection could include work associated with DOE’s NP2010 program, but could also include work funded by other DOE programs. This area of emphasis potentially may include additional grid work beyond that which was conducted under the previous Resource Commitment No. 11, to which the parties may mutually agree.

Resource Description for Area of Emphasis A: Advanced Nuclear Technology (*ANT*):

Provide technical support to Advanced Nuclear Technology programs, such as Generation IV, Advanced Fuel Cycle Initiative (AFCI), Next Generation Nuclear Plant (NGNP), Nuclear Hydrogen Initiative, Global Nuclear Energy Partnership (GNEP) and related advanced reactor and advanced fuel cycle programs. It also includes support for cooperative efforts between DOE’s Office of Nuclear Energy and DOE’s Office of Civilian Radioactive Waste Management toward achieving an integrated spent fuel management system.

- Support the development, update and implementation of INL’s industry-focused Business Plan for the NGNP.
- Support the development, finalization and implementation of INL’s Industry-focused Business Plan for GNEP.
- Develop with INL a Consensus Nuclear R&D Strategy and seek NEI and DOE support. Revise and re-issue the Strategy in 2007 or 2008, and as necessary.
- Provide assistance for INL in its DOE-assigned tasks related to creation of Technology Development Plans, Program Plans, review of proposals, etc. Participate in INL meetings, conferences, etc. to coordinate provision of input and assistance from industry.
- Coordinate provision of perspectives of the commercial nuclear utilities to INL for matters covered in this commitment, including review by relevant EPRI advisory committees.

Resource Description for Area of Emphasis B: NESSP:

Provide technical support to LWR technology development for current plants and near-term deployment ALWRs in areas supporting the objectives of the Congressionally-authorized NESSP.

- Provide access to selected areas of prior EPRI research that is relevant to current INL needs. Specific EPRI products to be provided to INL will be identified by mutual agreement.
- Conduct joint projects in areas of mutual interest as determined by both INL and EPRI, with an anticipated emphasis on:
- Instrumentation and Control: potential areas such as diagnostics and prognostics; digital I&C and human system interface, all-digital control rooms, technical and regulatory solutions; wireless technologies, etc.

- Non-Destructive Examination: seek development of new poolside fuel cladding NDE techniques; laser UT technology, etc.

- Advanced nuclear safety analyses, potentially including advanced plant analysis risk methods (including external event risk sources such as seismic and security threats, grid impacts, etc.), and support to INL's new Center for Advanced Modeling and Simulation.
  
  - In support of Resource Commitment #9, facilitate steps toward recognition of advanced, high performance fuel development (high burnup) as an important element of NESSP.
  
  - General support of INL technical efforts to improve its capabilities to support current nuclear plants, which may lead to funding support to achieve the aims of the NESSP for the benefit of the public.

2. Location of Resource

3420 Hillview Avenue, Palo Alto California, 94304 and 1300 West W.T. Harris Boulevard, Charlotte, NC 28262.

3. Monetary Value

Total Monetary Value: $180,000 / year (Total staff allocated to this resource will be approximately 0.45 FTE annually or approximately 824 hours per year).

Total Estimated Monetary Value: $1M per year value of EPRI research and development IP access as set forth in the Subcontract.

4. Describe which Project/Program would benefit from the Resource Commitment and why:

This commitment is intended to focus on strategic program areas that are of current highest priority to INL. Most Advanced Nuclear R&D programs (e.g., GEN IV, NGNP, AFCI, etc. are anticipated to benefit directly, as will nearer term programs such as NP2010 and NESSP (currently unfunded)).

5. Date the resource will be provided:

This resource commitment revises the initial submission. EPRI will begin to actively support the revised commitment starting upon the approval of these revisions.

6. The Resource will be provided by:

Electric Power Research Institute, Inc. (EPRI).

7. Describe any liability related to this resource, financial or otherwise:

EPRI's ability to provide this resource as currently configured will depend on levels of current funding and interest from EPRI's members in the areas covered hereunder, and also depends upon anticipated support from INL and DOE in these subject areas.

8. How the resource will be managed:

Two separate individuals, both EPRI senior staff members with management responsibility, will provide the management interface and oversight for the two areas of emphasis under this resource commitment (i.e., two management interfaces, for each of the ANT and NESSP areas of emphasis). These managers will interface internally within EPRI with appropriate engineering and scientific personnel, and will interface with the INL Associate Director, Nuclear Systems, via the Director, Technology Partnerships.
9. How the resource will be integrated into the INL:

Initially, EPRI intends to conduct training and workshops to present the capabilities and the information that is available at EPRI. Similarly, the INL will engage EPRI staff, through the two identified EPRI managers, in its planning, programmatic, and R&D activities on programs [mutually agreed to by EPRI and INL] within the defined scope, and seek to employ EPRI resources to meet INL's obligations to the DOE. This commitment includes a strategic planning function to further integrate the R&D efforts of EPRI and the INL. The Director of Technology Partnerships will be responsible for a program of continuing awareness of IP available from EPRI and current emphasis of scientific areas of research ongoing at INL.

10. Other pertinent information (e.g., exclusive rights and control of the resource):

All EPRI background IP existing in EPRI Materials now or developed in the future remains the property of EPRI; all EPRI Materials are provided to BEA under the license set forth in Exhibit D of the Subcontract.

This resource commitment, upon its approval, replaces the old Resource Commitment #11, titled "Provisions of Technical Support at Critical Infrastructure Testbed," which is deleted in its entirety. All resources provided by EPRI to the INL during 2005 and 2006 under the previous version of Resource Commitment #11 will be carried forward and credited under this revised Resource Commitment #11.

11. Signature of responsible Corporate Official and Date of Signature:

Michael W. Howard, Ph.D., P.E.
Sr. Vice President, R&D
Electric Power Research Institute, Inc.
Date: November 12, 2007

12. Approval of Revision:

Not Applicable

Battelle Energy Alliance, LLC
Date: _________ 2007
Table 3-1.

<table>
<thead>
<tr>
<th>Provider</th>
<th>Resource Commitment</th>
<th>Type of Resource Commitment</th>
<th>Nuclear Energy</th>
<th>National Security</th>
<th>S&amp;T and Education</th>
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</thead>
<tbody>
<tr>
<td>Battelle Energy Alliance</td>
<td>Upgrades to Advanced Test Reactor Research Capability and Fuel Line</td>
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<td>Support for Education Programs</td>
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<td>Electronic Data Systems</td>
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<td>Battelle Energy Alliance</td>
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<td><strong>Total</strong></td>
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<td><strong>$107.64M</strong></td>
<td><strong>$1.064B</strong></td>
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</table>

(1) Direct – funds committed to a specific purpose at INL. (2) Program – funds available for prescribed project or consulting activity. (3) Access – capital or replacement value of an asset being offered for use.