



REQUEST FOR PROPOSAL (RFP) – INSTRUCTIONS

RFP 2020-000886

TREAT Prototype Loop Fabrication

TerraPower (referenced as the “Company” hereafter) requests your proposal in response to the following documents:

- Statement of Work (SOW)
- Specification (Spec)
- Purchase Order Terms and Conditions, including Required Flowdowns

Proposal selection will focus on the bidder’s team capability to address all areas of the statement of work, specification, and supplier proposed schedule. This work is being done under a government contract requiring the bidder to comply with the terms and conditions above.

The scope of work is envisioned to include the fabrication, verification and related requirements for the Transient Reactor Test Facility (TREAT) Prototype Loop system hereafter known as the Prototype Loop System (PLS) or unit, for use on the TerraPower TREAT sodium loop development program. The SOW is split into four tasks:

Task 1: Prototype Loop fabrication, and design and fabrication of the associated Data Acquisition System (DAQ) – Estimated delivery date to TerraPower (Everett, WA): March 31, 2021

Task 2: Fabrication of the Prototype Loop Frame and Catch Pan – Estimated delivery date to TerraPower (Everett, WA): March 31, 2021

Task 3: Fabrication of the Prototype Loop Secondary Can – Estimated delivery date to TerraPower (Everett, WA): March 31, 2021

Task 4: Fabrication of the Prototype Loop Test Section – Estimated delivery date to TerraPower (Everett, WA): March 31, 2021

See the Statement of Work and Specifications for more information. Bidder can submit pricing on one or more Tasks listed above or all four Tasks. Bidders are encouraged to submit pricing on all four tasks.

The successful bidder will enter into an agreement with the Company. The Company’s format is provided and contains the Company’s terms and conditions, including required flowdowns, and the requirements associated with workscope and pricing.

Bidder is requested to provide firm, fixed pricing for the required scope of services.

SCHEDULE

Date	Activity
October 30, 2020	Request for Proposal (RFP) Release in Bonfire. Statement of Work, Specifications and other documents will be available for download via Bonfire.



November 12, 2020	Pre-Proposal Meeting: November 12, 2020; 10:00 – 11:00 AM, PST, via WebEx. <i>Suppliers interested in attending the Pre-Proposal Meeting will need to e-mail Sandy Lee (slee@terrapower.com) by November 11, 2020 for the WebEx call in number.</i> <i>TerraPower's technical team will be available via WebEx to provide an overview of the project and answer any technical questions.</i>
November 18, 2020	Last Day for Bidder Questions.
November 23, 2020	Last Day for TerraPower to Provide Answers to Bidder Questions.
December 4, 2020	Proposals Due. Supplier proposal packages must be uploaded to Bonfire by December 4, 2020, 5:00 PM PST.
December 2020	Estimated Expected Award Date.

COMPLIANCE WITH FEDERAL GRANT

This project is funded by a U.S. Department of Energy (DOE) grant administered through Battelle Energy Alliance, LLC (BEA). The selected Bidder shall comply with the federal requirements as applicable.

PROPOSAL FORMAT

Proposals shall be submitted in four volumes as shown below. Please provide all volumes as separate documents along with an executive summary (also separate, as an attachment to your submittal letter).

Executive Summary

Include as a minimum: brief statement of the major areas of focus, background information, concise analysis and recommendations.

Volume I – Management & Operations

Volume I (i.e., draft Project Plan) shall describe the management and other organization elements that would be in place to support work under the draft task order (e.g., engineering, document control, design/drafting). Include as a minimum:

1. Organization chart of the management, technical and support team applicable to the Statement of Work; include all sub-tier suppliers and locations/facilities.
2. Schedule, draft, summary/high-level.
3. Describe how your company will address potential delays to the schedule (i.e. due to COVID-19, other factors, etc.).
4. Work Breakdown Structure (WBS), draft.
5. Staffing plan for key individuals, Full-time-equivalent (FTE) personnel per month.
6. Level of participation anticipated by the Company's technical personnel to support the draft SOW activities.



Volume II – Technical

Volume II shall address the technical aspects related to Supplier's approach envisioned to respond to the SOW. Include as a minimum:

1. Provide a redline version of the Statement of Work and Specification indicating adherence or exception.
2. Provide a redline version of any suggestions and comments to the Drawings.
3. The technical approach envisioned to perform the draft SOW; highlight any prior/relevant experience; key discussion points to be included:
 - a. Configuration proposed for the equipment design (e.g., mechanical, sub-elements, etc.).
 - b. The supplier's previous experience with the equipment and operating environment: e.g., plants, test facilities, issues encountered and resolution.
 - c. Experience with materials of construction; including experience in similar or previous projects.
4. Description of facility and equipment capabilities to be applied to the SOW activities.
5. Resumes (2-page format) of the key technical team (attachments); highlight relevant experience.

Volume III – Quality

Volume III shall describe the supplier's quality system as applicable to work under the SOW. Include, as a minimum:

1. Statement of Quality Standards and Codes to which the units would be fabricated.
2. Certifications, as required
3. Quality Manual

Volume IV – Business & Contract

Volume IV shall contain the pricing and business proposal to support the SOW. Company requests a firm-fixed price agreement. As such, Volume IV shall include the following:

1. Firm fixed price for activities stated in the Statement of Work and Specification.
2. Break out pricing for the optional activities/phases (if any).
3. Acceptance of TerraPower Purchase Order Terms and Conditions and Required Flowdowns.
4. List and describe any exceptions to the terms and conditions and provide, as an attachment, any changes (markup/redline) to the document required to address each exception for consideration.
5. Complete and return all Proposal Forms.

ALTERNATIVE APPROACHES

Company will consider ideas and/or recommendations for alternative approaches that will improve the project/program in meeting its specified goals. Please provide your inputs as appropriate in a separate attachment. Note that Company will be under no obligation to choose an alternative approach; however, they will be reviewed.

RESTRICTIONS

Restrictions on end use of technology - if known, please inform Company of any government or other imposed conditions on the end use of the technology and final deployment of the fabricated equipment.



EXPORT CONTROLLED INFORMATION (if applicable)

All Export Controlled Information (ECI) shall be shared using ShareFile workspace. Bonfire workspace cannot be used to share ECI.

TERRAPOWER SHAREFILE WORKSPACE

Company will be sharing information and documents that are proprietary, confidential and/or contain Export Controlled Information through Company's ShareFile Workspace. In order to access these documents, Suppliers will need to submit the ShareFile Workspace Authorization Request Form. This form is available on Bonfire and needs to be submitted to the Contract Administrator. Please note that it may take 1-2 business days in order to get access to the ShareFile Workspace.

QUESTIONS AND CONTACTS

Please provide (separately) any questions or comments on the RFP package and the process used for selection as per the BonFire schedule. Any questions can be directed to:

Sandy Lee, Senior Buyer/Contract Administrator
(425) 324-2698
slee@terrapower.com

Autumn Brown, Procurement Manager
(425) 324-2683
abrown@terrapower.com

PROPOSAL SELECTION CRITERIA

Bidder proposals will be reviewed for responsiveness to all elements of the RFP documents and Company plans to score proposals in accordance with the allocation shown in the table below. Company reserves the right to reject any or all proposals received, to make an award to other than the low cost proposal, to reject any proposal that is in any way incomplete or irregular, and to waive any informality or irregularity in any proposal received. Further, Company reserves the right in its discretion to modify its scoring allocation and selection process, and all determinations by Company will be final.

Category/item	Weight (max-points)
General	Pass/Fail
Responsiveness to RFP – Bidders must submit all proposal forms	
Document quality – references, support for claims	
On-time submittal	
I - Management & Operations	25
Staffing, facilities/equipment, qualifications	
Management organization defined & adequate	
Technical staff defined and adequate	



Facilities and equipment capable of delivering the right product	
Plan and schedule	
Plan and schedule includes all deliverables and will meet end-goal	
Resource commitments identified and adequate	
II – Technical	35
Technical Approach	
Requirements understood & addressed	
Design/development approach is feasible	
Applicable technical experience highlighted in development approach	
Comments provided to Spec are substantive and supported	
Comments provided to SOW are substantive and supported	
III – Quality	10
Quality Program	
QA program responsiveness to SOW requirements	
IV - Business & Contract	30
Pricing	
Costs and estimates are reasonable and supported	
Allocation between elements is supported	
Contract - acceptance of terms and conditions	
TOTAL	100

DOCUMENTS AVAILABLE FOR DOWNLOAD

Ref. #	Document Number	Document Name	Revision	Release Date to Suppliers
	Documents Available in Bonfire:			
1	N/A	Proposal Instructions		Available
2	TREAT-ENG-SOW-0003	Statement of Work (SOW)	0	Available
3	TREAT-ENG-EQSPEC-0003	Specification	0	Available
	Documents Available in ShareFile:			
4	Drawings	All Drawings		Available



CORRECTIONS TO SPECIFICATION TREAT-ENG-EQSPEC-0003 REV 0

Section 1.4 Drawings List

The list below replaces the Drawings List in the Specification document.

Task 1: Prototype Loop fabrication, and design and fabrication of the associated Data Acquisition System (DAQ)

Drawing Number	Rev	Description
TREAT-ENG-ASSY-0001	DRAFT	Loop and Can Assembly, TREAT
TREAT-ENG-PART-0146	DRAFT	Bracket, Valve, Loop Drain
TREAT-ENG-ASSY -0005	DRAFT	Loop Weldment, Test Section, Treat
TREAT-ENG-PART-0114	DRAFT	Top Plate, PRRL, Modified
TREAT-ENG-PART-0012	DRAFT	Top Pipe
TREAT-ENG-PART-0078	DRAFT	Pipe, Test Train, Lower
TREAT-ENG-PART-0036	DRAFT	Pipe, Lower Loop
TREAT-ENG-PART-0147	DRAFT	Pipe, Modified for Weldment
TREAT-ENG-PART-0034	DRAFT	Elbow, Butt Weld, 1/2", 90°, Modified
TREAT-ENG-ASSY-0032	DRAFT	Flow Meter, Venturi TREAT
TREAT-ENG-PART-0164	DRAFT	Flow Meter, Venturi
TREAT-ENG-PART-0169	DRAFT	Adapter, Eccentric, Venturi to Elbow
TREAT-ENG-PART-0120	DRAFT	Tubing Drain, 1/2" OD x .036" Wall
TREAT-ENG-PART-0119	DRAFT	Tubing, Drain/Fill, Loop to Dump Tank
TREAT-ENG-ASSY-0041	DRAFT	ASSEMBLY, PT and adapter
TREAT-ENG-ASSY-0015	DRAFT	Hood Assembly, TREAT
TREAT-ENG-ASSY-0044	DRAFT	Hood Weldment
TREAT-ENG-PART-0188	DRAFT	Housing, Hood
TREAT-ENG-PART-0189	DRAFT	Plate, Top, Hood
TREAT-ENG-PART-0187	DRAFT	Guide, Rod, Hood
TREAT-ENG-PART-0191	DRAFT	Cap, 3" Pipe, 304 SST, Modified
TREAT-ENG-ASSY-0033	DRAFT	Block Instrument, TREAT Loop
TREAT-ENG-PART-0042	DRAFT	Weldment, Instrument Block
TREAT-ENG-PART-0163	DRAFT	Bracket, Valve, Cover Gas
TREAT-ENG-PART-0167	DRAFT	Plate, Cover, TREAT Instrument Block
TREAT-ENG-PART-0085	DRAFT	Interface Ring, Bag, Lower
TREAT-ENG-PART-0086	DRAFT	Interface Plate, Bag, Upper
TREAT-ENG-ASSY-0026	0	DRAIN/FILL TANK ASSY
TREAT-ENG-PART-0154	0	Bracket, Drain/Fill Tank to Frame
TREAT-ENG-ASSY-0029	0	Weldment, Dump Tank



TREAT-ENG-PART-0137	0	Pipe, Sch 40, Seamless, 6 inch, Dump Tank
TREAT-ENG-PART-0155	0	Plate, Support, Dump Tank
TREAT-ENG-PART-0156	0	Plate, Dump Tank, TREAT
TREAT-ENG-PART-0157	0	Bracket, Support, Dump Tank
TREAT-ENG-ASSY-0028	0	Flange Weldment, Drain/Fill Tank
TREAT-ENG-PART-0136	0	Top Plate, Drain/fill Tank
TREAT-ENG-PART-0138	0	Flange, 2" Pipe, Modified, Drain/Fill Tank
TREAT-ENG-PART-0142	0	Dip Tube, Drain/Fill Tank
TREAT-ENG-PART-0158	0	Riser Pipe, Drain/Fill Tank
TREAT-ENG-PART-0159	0	Tubing, Drain/Fill Tank

Task 2: Fabrication of the Prototype Loop Frame and Catch Pan

Drawing Number	Rev	Description
TREAT-ENG-ASSY-0017	DRAFT	Top Level Assy, TREAT
TREAT-ENG-PART-0170	DRAFT	Drip Pan, PRRL
TREAT-ENG-PART-0171	DRAFT	Clip, Drip Pan, TREAT
TREAT-ENG-PART-0172	DRAFT	Bracket, Can Support
TREAT-ENG-PART-0145	DRAFT	Seismic Support Frame
TREAT-ENG-PART-0053	DRAFT	Frame, TREAT Loop and Can
TREAT-ENG-PART-0061	DRAFT	Guard, Front Frame, TREAT

Task 3: Fabrication of the Prototype Loop Secondary Can

Drawing Number	Rev	Description
TREAT-ENG-ASSY-0023	0	Can Assy, TREAT
TREAT-ENG-PART-0132	0	Seal, Can Halves, One Inch Wide, Silicone
TREAT-ENG-PART-0101	0	Flange, Bottom, Can, TREAT
TREAT-ENG-PART-0135	0	O-Ring, Bottom Plate, Can Assy
TREAT-ENG-PART-0152	0	Plate, Can Access
TREAT-ENG-PART-0153	0	Seal, Front Access Cover
TREAT-ENG-ASSY-0024	0	Weldment, Can and Flange
TREAT-ENG-PART-0130	0	Can, Flanged Half, TREAT
TREAT-ENG-PART-0131	0	Flange, Half Can, Top

Task 4: Fabrication of the Prototype Loop Test Section

Drawing Number	Rev	Description
TREAT-ENG-ASSY-0009	DRAFT	Test Train, 7-Pin, TREAT
TREAT-ENG-ASSY-0035	DRAFT	Pins and Heater Assembly
TREAT-ENG-PART-0060	DRAFT	BASE SEAL, TEST TRAIN, TREAT



TREAT-ENG-ASSY-0038	DRAFT	Weldment, Pin, Plug and Wire
TREAT-ENG-PART-0069	DRAFT	PLUG, PIN, 7- PIN TREAT
TREAT-ENG-ASSY-0039	DRAFT	Weldment, Tempco Heater, Plug and Wire
TREAT-ENG-PART-0176	DRAFT	Plug, Heater, 7-pin TREAT
TREAT-ENG-PART-0063	DRAFT	HEX TUBE, 7-PIN BUNDLE
TREAT-ENG-PART-0064	DRAFT	RAIL, 7-PIN, LONG, TREAT
TREAT-ENG-PART-0065	DRAFT	RAIL, 7-PIN, SHORT, TREAT
TREAT-ENG-ASSY-0036	DRAFT	Weldment, Test Train Support, Upper
TREAT-ENG-PART-0081	DRAFT	Collar, Hex to Support Bars
TREAT-ENG-PART-0104	DRAFT	SUPPORT, TEST TRAIN REMOVAL, TREAT
TREAT-ENG-PART-0074	DRAFT	RING, EXPANSION SLIDE
TREAT-ENG-ASSY-0037	DRAFT	SHAFT AND HUB ASSEMBLY, TEST TRAIN
TREAT-ENG-PART-0072	DRAFT	Shaft, Test Train Removal, TREAT
TREAT-ENG-PART-0073	DRAFT	RING, RETAINER, WASHER STACK
TREAT-ENG-PART-0080	DRAFT	RETAINER, THREADED, .75-10 UNC

Section 3.3.2 Requirements Table

The following requirement is removed from the table:

ID	Requirement Title	Requirement	Verification Method(s)	Requirement Type
TREAT-PRRL-CAN-F2	Pressure Boundary	This section contains system leak requirement		functional



REQUEST FOR PROPOSAL FORM 1

PROPOSAL PRICE OFFER RFP 2020-000886

After careful review of all RFP documents and drawings, the Proposer shall furnish all services, labor, materials and equipment to complete the work as specified for the price below. Provide a firm fixed price.

Proposer shall submit this form. Any pricing details can be submitted on separate sheets of paper and attach all sheets to this form.

Proposer can submit pricing on one or more Tasks listed below or all four Tasks.

TREAT Prototype Loop Fabrication – Firm Fixed Price			
Description	Quantity	Unit Price	Extended Price
Task 1: Prototype Loop fabrication, and design and fabrication of the associated Data Acquisition System (DAQ) TerraPower P/N: TREAT-PRRL-LOOP	1 Unit	\$	\$
Task 2: Fabrication of the Prototype Loop Frame and catch pan TerraPower P/N: TREAT-PRRL-FRAME	1 Unit	\$	\$
Task 3: Fabrication of the Prototype Loop Secondary Can TerraPower P/N: TREAT-PRRL-CAN	1 Unit	\$	\$
Task 4: Fabrication of the Prototype Loop Test Section TerraPower P/N: TREAT-PRRL-TEST	1 Unit	\$	\$
Shipping and delivery of the equipment – <u>FOB Destination</u> to the following address: TerraPower Innovation Laboratory – Seaway Center 3315 Seaway Blvd. Everett, WA 98203	1 Time	\$	\$
Subtotal			\$
Sales Tax (9.8%)			\$
TOTAL			\$



Terms and Conditions

Do you accept TerraPower Purchase Order Terms and Conditions? ☐ Yes ☐ No

If No, list and describe any exceptions as an attachment with markup/redlines to the document for consideration. The Company will be under no obligation to accept the exceptions; however, they will be reviewed.

Payment Terms

Indicate payment terms below or attach on separate sheets of paper:

Proposer or Authorized Representative:

Signed this _____ day of _____ 2020

Company Name _____

Print Name & Title _____

Signature _____



REQUEST FOR PROPOSAL FORM 2

PROPOSER INFORMATION AND SIGNATURE RFP 2020-000886

Date:	
Principal Contact Person:	
Title:	
Telephone Number:	
E-Mail Address:	
Firm's Legal Name:	
Firm's Address:	
State of Incorporation and Date Established:	

Check all that apply:

Firm's address is the following: ☐ Main Office ☐ Branch Office ☐ Other: _____

Corporate structure: ☐ Corporation ☐ Partnership ☐ Joint Venture ☐ Sole Proprietorship

☐ Other: _____

Business Classification (check all that apply)	Federal Certified	State Certified	Self Certified
Small Business (SB) (including ANC and Indian Tribes)			
Small Disadvantaged Business (SDB)			
Woman Owned Small Business (WOB)			
HUBZone Small Business (HUB)			
Veteran-Owned Small Business			
Service-Disabled Veteran-Owned Small Business			

Has your company been suspended or debarred from doing business with the U.S. Government?

☐ Yes ☐ No



Is your company registered in the System for Award Management (SAM)? ☐ Yes ☐ No

Complete the following:

Former Firm Name (if any):	
Parent Company Name:	
Parent Company Address:	
Washington State Contractor Registration Number:	
Washington State Unified Business Identifier Number:	
Employment Security Department Number:	
Federal Tax Identification Number:	
DUNS Number:	
NAICS Code and Size Standard:	

Certification

The Bidder certifies that, to the best of his/her knowledge, the information presented in this Request for Quote is a statement of facts and that the firm has the financial capability to perform the work. The Bidder further certifies that it knows of no personal and/or organizational conflict of interest prohibited under federal, state and local law.

I certify/declare under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.

Signature

Name

Title

Date

City and State



TerraPower, LLC Purchase Order Terms and Conditions

These Purchase Order Terms and Conditions ("**Terms and Conditions**") shall apply to and be deemed a part of this Purchase Order.

1) COMPLETE AGREEMENT. This Purchase Order, including these Terms and Conditions, Exhibits to these Terms and Conditions, the SOW, all supplemental or other incorporated terms and conditions and all other documents incorporated by reference into this Purchase Order, constitutes the entire agreement between the parties and supersedes any previous communication, representations, whether oral or written, with respect to the subject matter of this Purchase Order. No revision, amendment or modification of any provision of this Purchase Order (other than any change or termination by Company expressly permitted herein) shall be valid, unless set forth in a written instrument signed by both parties.

2) ORDER OF PRECEDENCE. If any term of this Purchase Order conflicts with any other of its terms, the parties shall apply the following order of precedence: (a) the exceptions and supplemental terms (if any) set forth in Exhibit B; (b) the Required Flowdowns, to the extent applicable, set forth in Exhibit A; (c) these Terms and Conditions; (d) the SOW; and (e) documents referenced in the SOW, in each case, with amendments thereto ranking in precedent in reverse chronological order. Company shall not be bound by, and specifically objects to, any term, condition or other provision contained in or presented on any quotation, invoice, shipping document, acceptance, confirmation, correspondence or other documents from Supplier that purports to amend, modify or supplement this Purchase Order.

3) INTERPRETATION. In these Terms and Conditions, the singular includes the plural and the plural the singular; the terms "including" and "include" will mean "including but not limited to"; and references to a "Section" will mean a section of these Terms and Conditions, unless otherwise expressly stated. All section titles in these Terms and Conditions are for convenience or reference purposes only and shall not control or alter the meaning of these Terms and Conditions as set forth in the text.

4) DEFINITIONS. The following terms shall have the meanings assigned to them below when used in this Purchase Order:

- (a) "**Applicable Laws**" means all laws, ordinances, rules, regulations, orders, licenses, permits and other requirements, now or hereafter in effect, of any governmental or regulatory authority applicable to a party;
- (b) "**Claims**" means any demand, assertion, legal proceeding or governmental investigation brought by any third party and all resulting judgments, settlements, fines, penalties, losses, liabilities, damages and expenses (including reasonable attorneys' fees and costs);
- (c) "**Company**" means TerraPower, LLC;
- (d) "**Confidential Information**" means all non-public information and materials, including all designs, drawings, diagrams, plans, reports, equipment, specifications, Products, Services, prices, pricing policies, processes and inventions, samples, prototypes, software, source code, object code, passwords, customer lists, customer documents and requirements, financial information, employee lists and information and marketing and advertising information, that are made known to, developed by or otherwise acquired by Supplier in the course of or as a result of the performance of Supplier's obligations under this Purchase Order;
- (e) "**Contract Administrator**" or "**CA**" means the commercial representative of Company who is authorized to administer this Purchase Order as specified in the SOW under this Purchase Order;
- (f) "**days**" means calendar days unless business days are clearly stated;
- (g) "**EH&S Requirements**" has the meaning given in Section 9 (*Quality Assurance; EH&S*);
- (h) "**Final Acceptance**" means when (1) all Products are finally inspected and accepted by Company's representative at the final destination, (2) all Submittals and all other property to be furnished by Supplier hereunder have been submitted to and accepted by Company and (3) the CA on behalf of the Company clearly and unequivocally approves specific Services rendered, in each case as complete performance of this Purchase Order;
- (i) "**Force Majeure Event**" has the meaning given in Section 40 (*Force Majeure*);
- (j) "**Foreign National**" means any person who is neither a U.S. citizen nor a "Lawful Permanent Resident" (i.e., Green Card holder, 8 USC § 1101(a)(20)) nor other "Protected Individual" under the Immigration and Naturalization Act (8



TerraPower, LLC Purchase Order Terms and Conditions

USC §1324b(a)(3)) designated an asylee, refugee, or a temporary resident under amnesty provisions. A Foreign National also means any foreign corporation, business association, partnership or any other entity or group that is not incorporated to do business in the U.S.;

(k) “**Indemnitee**” means Company, its successors and assigns, and the respective directors, officers, employees, consultants, agents, representatives and (if applicable) customers of Company and their successors and assigns;

(l) “**Lien**” has the meaning given in Section 12 (*Title and Risk of Loss*);

(m) “**permitted Subcontractor**” has the meaning given in Section 30 (*Subcontracting*);

(n) “**Price**” has the meaning given in Section 16 (*Price/Taxes*);

(o) “**Products**” means any and all products, goods, studies, reports, documents, data, information, notes, designs, specifications, plans, drawings, patterns, samples, computer programs, software, results and other materials and items developed for or provided by Supplier to Company as part of the Work under this Purchase Order;

(p) “**Purchase Order**” means this purchase order, including the signature page, all parts referenced on the signature page and all attachments thereto, each of which is hereby incorporated herein, as may be amended from time to time;

(q) “**Services**” means the services provided or to be provided by Supplier to Company under this Purchase Order, as may be further described in the Statement of Work;

(r) “**Submittals**” means the Work documentation and data furnished by Supplier under this Purchase Order, as specifically identified in this Purchase Order;

(s) “**Supplier**” means the person, partnership, corporation or other entity specified in this Purchase Order as the seller or provider of Products and/or Services under this Purchase Order;

(t) “**Supplier Coordination Request**” or “**SCR**” means a request submitted by Supplier to Company for disposition and response;

(u) “**Statement of Work**” or “**SOW**” means the written statement of work that describes the Work to be performed by Supplier under this Purchase Order and which is incorporated into and forms an integral part of this Purchase Order;

(v) “**Technical Representative**” means the technical representative named in the SOW who will serve as Company’s point of contact and will interface with Supplier on technical matters related to this Purchase Order; and

(w) “**Work**” means all of the obligations to be performed by Supplier pursuant to this Purchase Order, including, as applicable, the supply and delivery of the Products and the performance of Services.

5) SUPPLIER ASSENT. Performance of any of the following acts by Supplier shall constitute Supplier's acceptance of these Terms and Conditions: (a) signing and returning a copy of this Purchase Order to Company; (b) issuance of an invoice to Company; (c) shipment or delivery of any Products or performance of any Services, as applicable; and/or (d) informing Company in any manner of commencement of performance of any Work. Upon Supplier's performance of any of the foregoing acts, this Purchase Order shall be binding on Supplier. Noalteration, change, modification or revision of any part of this Purchase Order by Supplier shall be binding upon Company unless made in a writing referencing this Purchase Order and provided by the CA as signed by the Company’s authorized representative.

6) WORK PERFORMANCE. The Work to be provided by Supplier under this Purchase Order will be described in the Statement of Work. Supplier shall perform all Work: (a) in a professional and workmanlike manner in accordance with this Purchase Order, utilizing the highest standards of care, skill and diligence observed in Supplier's industry for the performance of the Work and (b) in conformance to and in compliance with this Purchase Order. Supplier may not substitute any other materials or accessories for those specified in this Purchase Order without the express prior written authorization of Company. Supplier shall not subcontract any portion of the Work encompassed by this Purchase Order without Company’s prior written approval. Time is of the essence in Supplier’s performance under this Purchase Order.

Company shall specify any work control requirements in this Purchase Order. Supplier shall manage the Work in a manner that meets the work control requirements, including, as appropriate, periodic status and performance reviews, and performance reports.



TerraPower, LLC Purchase Order Terms and Conditions

7) SUBMITTALS. Supplier shall deliver Submittals to Company for review, information or approval in accordance with this Purchase Order. Submittals shall be provided via the secure electronic information transfer system established and designated by Company, with a separate notification to submittals@terrapower.com, unless otherwise specified by Company in this Purchase Order. Administrative (i.e., not Confidential Information) items may be provided by email to submittals@terrapower.com. The CA will provide any additional specific guidance and other submittal methods as required by this Purchase Order. Supplier shall appropriately mark all Submittals to allow processing and control of the Submittal, in accordance with this Purchase Order and as instructed by the CA.

8) MANDATORY HOLD OR NOTIFICATION POINTS. The Work may be subject to certain mandatory hold or notification points (each, a “**Hold Point**”), which may require witnessing by an authorized representative of Company. Any Hold Points applicable to the Work shall be set forth in the SOW and must be clearly indicated on Supplier’s work sequence document. Applicable Work may not proceed beyond a Hold Point without either (a) inspection or review by an authorized representative of Company or (b) Company’s express written authorization for the applicable Work to proceed. Supplier shall provide Company at least ten (10) business days’ advanced written notice of each Hold Point to allow the parties to schedule the Work related to the applicable Hold Point.

9) QUALITY ASSURANCE; EH&S. If any quality assurance requirements (“**QA Requirements**”) and/or environmental, health and safety requirements (“**EH&S Requirements**”) apply to the Work, Company shall specify the applicable QA Requirements and/or EH&S Requirements in the SOW to this Purchase Order, and Supplier shall provide Work that conforms to those applicable QA Requirements and EH&S Requirements. Supplier shall incorporate the QA Requirements and EH&S Requirements of this Purchase Order into any Subcontracts and lower-tier supply agreements. When specified in this Purchase Order, Company, through its designated representatives or agents, may access Supplier’s and any permitted Subcontractor’s facilities and records for QA and/or EH&S surveillance, inspection, or audit during normal business hours.

10) IDENTIFICATION, PACKING AND DELIVERY.

(a) Supplier shall:

(i) include the number of this Purchase Order on all invoices, packing lists, packages, shipping notices, instruction manuals, and other written documents provided by Supplier under this Purchase Order, include a packing list that details the contents of each container, box or package shipped pursuant to this Purchase Order and mark the number of this Purchase Order on each such container, box or package; and

(ii) properly package all Products provided to Company in accordance with any requirements expressly stated in the SOW and in a manner to protect against any damage to or deterioration of such Products from shipment, handling, storage or other any other cause, ship all Products from the point of shipment specified in the SOW, email copies of the applicable shipping documents and packing slips to the CA on the day a shipment is made and deliver such Products to the delivery destination no later than the applicable delivery date, in each case as specified in the SOW.

(b) Company shall not be responsible or liable for any charges, fees or other amounts related to shipment of the Products in a manner different than that expressly authorized by this Purchase Order or required under the SOW.

(c) Unless otherwise expressly agreed by Company in writing, Company shall not process any invoice for payment until all Work covered by such invoice has been provided by Supplier and accepted under this Purchase Order.

11) EXPEDITING; INSPECTIONS AND REJECTION.

(a) Company may elect to inspect or expedite any Work supplied under this Purchase Order, including any materials or components thereof, in its sole discretion, during and after manufacture, upon written notice to Supplier. Supplier shall provide Company and its agents and representatives with any information pertinent to this Purchase Order, and shall allow Company and its agents and representatives to have access to any production facility in order to witness the progress of the Products and inspect the materials being used. Such inspections shall be at Company’s cost and shall not unduly interfere with the normal operations of Supplier. Neither Company’s inspection nor failure to inspect shall relieve Supplier of its obligations hereunder. Products may be rejected by Company if they fail to meet the requirements of this Purchase Order.



TerraPower, LLC Purchase Order Terms and Conditions

(b) All Work received from or performed by Supplier shall be subject to, as applicable, initial inspection by Company at the delivery destination specified in the SOW and further testing and review as part of acceptance procedures detailed in the SOW ("**Acceptance Procedures**"), unless otherwise specified in this Purchase Order. Neither Company's initial inspection nor failure to inspect shall relieve Supplier of any responsibility with respect to such Work or imply any Final Acceptance thereof. During the Acceptance Procedures: (i) Company will review the Work furnished to Company to confirm there are no defects, deficiencies, errors or nonconformities in the Work and that all of the Work complies with the requirements of this Purchase Order and (ii) Supplier shall provide Company with such additional support as Company may request.

(c) Company will notify Supplier of its Final Acceptance or rejection of the Work upon completion of the Acceptance Procedures. In the event of rejection, Company shall notify Supplier of such rejection, identifying the reason(s) therefor, and Supplier will furnish conforming Work within twenty (20) days after its receipt of such notice. If Supplier fails to furnish conforming Work within such period of time, Company may elect to either (i) provide Supplier with a further opportunity to provide conforming Work; or (ii) receive a refund of all amounts paid under this Purchase Order for such Work, which refund Supplier shall pay to Company within thirty (30) days of Company's request for such refund. Any Final Acceptance by Company shall not be conclusive of the absence of latent defects.

12) TITLE AND RISK OF LOSS. Except as otherwise provided in this Purchase Order, title to all Products furnished by Supplier shall become the property of Company upon payment therefor or upon delivery, whichever occurs earlier. Notwithstanding the foregoing, Supplier shall be responsible for and shall bear any and all risk of loss for Products until satisfactory completion of Acceptance Procedures regarding the same. Supplier warrants that (a) all Products delivered or to be delivered under this Purchase Order shall be (i) free from all defects in title, (ii) merchantable, and (iii) free and clear of all liens, security interests, encumbrances and claims of laborers or material and (b) following Final Acceptance, Company shall have full and unencumbered ownership in and title to the Products. Should any lien or other encumbrance ("**Lien**") be filed against all or any portion of the Products or Company's property, Supplier shall, at its sole cost and expense, remove and discharge such Lien within twenty-five (25) days of the filing of such lien or encumbrance. If Supplier fails to remove and discharge any such Lien within such twenty-five (25) day period, then Company may, in its sole discretion and in addition to any other rights that it has under this Purchase Order, at law or in equity, remove and discharge such Lien using whatever means that Company, in its sole discretion, deems appropriate. In such circumstance, Supplier shall be liable to Company for all damages, costs, losses and expenses (including all reasonable attorneys' fees, consultant fees and litigation expenses, and settlement payments) incurred by Company arising out of or relating to such removal and discharge of a Lien. All such damages, costs, losses and expenses shall be paid by Supplier no later than thirty (30) days after receipt of each invoice from Company, and, at Company's option, Company may withhold payment if it reasonably suspects that any Products do not comply with this Section 12 until it receives evidence in a form and substance satisfactory to it that Supplier and the Products are in compliance with this Section 12.

13) SUPPLIER COORDINATION REQUEST. A Supplier Coordination Request may be used by Supplier to request information, clarification or direction from Company regarding this Purchase Order, to request deviation from certain requirements set forth in this Purchase Order, to initiate a change request or to resolve a Supplier non-conformance to technical requirements. If Supplier wishes to submit a SCR to Company, it must complete and submit a Supplier Coordination Request form to Company detailing its request. The CA will provide the Supplier Coordination Request form, with instructions, to Supplier upon request. A Supplier Coordination Request form will formally document Supplier's SCR and Company's response. If the resolution of a SCR requires a change to this Purchase Order, then the CA will initiate a change in accordance with Section 14 (*Changes*) or an amendment to this Purchase Order in accordance with Section 1 (*Complete Agreement*).

14) CHANGES.

(a) Company shall have the right from time to time, upon written notice to Supplier, to make changes to the scope or contents of this Purchase Order, including changes to: (i) the drawings, designs, specifications, and/or technical attachments; (ii) schedule; (iii) additions to or deletions from quantities ordered; (iv) the method of delivery, shipment or packing of Products; or (v) the date or delivery destination specified in the SOW.



TerraPower, LLC Purchase Order Terms and Conditions

(b) Supplier may make, via SCR, a change request or non-conformance request to Company relating to the scope of the Work.

(c) If any requested or proposed change under paragraphs (a) or (b) above causes an increase or decrease in the cost or timing required to perform the Work, as Supplier's sole remedy an adjustment may be requested in the Price or the schedule, or both, and the Purchase Order shall be modified by a written Purchase Order revision executed by an authorized representative of each party. Any request by Supplier for adjustment must be asserted within thirty (30) days from the date of receipt by the Supplier of the notification of change from Company or discovery of circumstances prompting a Supplier-requested change via SCR.

(d) In the event that Supplier and Company disagree on any equitable adjustment in connection with this Section 10, such disagreement shall not excuse Supplier from performing its obligations with respect to any authorized Work and the Work as changed under this Purchase Order.

15) PERIODIC MEETINGS. During the term of this Purchase Order, the parties shall participate in periodic meetings as set forth in the SOW or as otherwise mutually agreed upon by the parties to discuss the progress and performance of the Work.

16) PRICE/TAXES.

(a) The Purchase Order price (the "**Price**") is the amount set forth as the "Total" or "Price Ceiling" on the cover page of this Purchase Order in United States dollars and, subject to Section 14 (*Changes*), shall apply during the term of this Purchase Order. Payment of the Price shall constitute full compensation for the Work and satisfactory performance of all of Supplier's obligations under this Purchase Order. The Price is deemed to include all Federal, state and local taxes (including fees and charges) levied with respect to the Work performed hereunder. If sales tax is included in the Price, it must be listed as a separate line item in the invoice provided by Supplier. If applicable, Company is responsible for Washington State use tax.

(b) If the Price is indicated as a "Price Ceiling" on the cover page of this Purchase Order, the following provisions shall apply:

(i) Supplier must notify the CA in writing when the value of the Work it has performed under this Purchase Order reaches 75% of the stated Price Ceiling;

(ii) Company will not be liable to pay any amount in excess of the Price Ceiling; and

(iii) Company has the right to issue a stop work order if the value of the Work performed equals the value of the Price Ceiling, at which time Supplier and Company will meet to discuss any adjustments to this Purchase Order. Any adjustments agreed shall be documented as a written Purchase Order revision in accordance with Section 14 (*Changes*). A stop work order under this Section 16(b) will not constitute a suspension under Section 24 (*Suspension; Extension of Time*).

17) PAYMENT. Unless otherwise expressly agreed by Company in writing, Supplier shall invoice Company for any amounts payable by Company within twenty (20) days of completing the Work under this Purchase Order. Supplier shall submit all invoices to Invoices@terrapower.com. All payments shall be made in United States dollars. The payment date shall be calculated from the date of receipt by Company of an acceptable invoice. Payment terms are net 30 days. If Supplier fails to deliver an invoice for Products within ninety (90) days after such Products are shipped, then Company shall have no obligation to pay such invoices, and Supplier's right to payment shall be deemed conclusively waived.

18) INDEPENDENT CONTRACTOR. The relationship of Supplier to Company shall be that of an independent contractor and not an agent of Company, and nothing herein shall be interpreted or construed as (a) creating or evidencing any association, joint venture, partnership or franchise between the parties; or (b) imposing any partnership or franchisor obligation or liability on either party.

19) CONFIDENTIAL INFORMATION. Supplier shall not disclose any Confidential Information to any third party or use it in any way except as specifically authorized by Company to perform Supplier's obligations under this Purchase Order. Supplier shall place appropriate safeguards on its operating activities to ensure protection of the Confidential



TerraPower, LLC Purchase Order Terms and Conditions

Information, sharing it only with those of its employees and contractors who need access to such Confidential Information to perform its obligations under this Purchase Order and who are bound by written confidentiality obligations at least as restrictive as this Section 19. Supplier is responsible for enforcing the terms of this Purchase Order as to its employees and contractors and for taking such action, including appropriate legal action, as may be necessary to prevent any unauthorized use or disclosure of Confidential Information by such employees or contractors. Supplier shall promptly notify Company following discovery of any unauthorized use or disclosure of any Confidential Information and will cooperate with Company to help the Company regain possession of the Confidential Information and prevent any further unauthorized use or disclosure. Upon Company's request or upon the completion, termination or cancellation of this Purchase Order, Supplier shall, within ten (10) days, either return all Confidential Information to Company or destroy all Confidential Information according to Company's direction. Supplier will certify in writing that it has fully complied with its obligations in the preceding sentence. To the extent any Confidential Information was disclosed by Company to Supplier during discussions or exchanges prior to the signing of this Purchase Order, this Section 19 shall apply to protect such Confidential Information unless a separate non-disclosure agreement was in place between Company and Supplier.

Notwithstanding anything to the contrary in this Purchase Order, all documents provided by Supplier to Company will be considered confidential or proprietary to Supplier only to the extent such documents are clearly marked in accordance with the guidance provided to Supplier by Company to indicate their confidential or proprietary nature relating to this Purchase Order. The CA will provide such guidance to Supplier for marking documents confidential or proprietary in nature.

Supplier will comply with the methods of communication invoked by Company to transmit and receive information that is deemed to be sensitive or might be subject to Section 32 (*Export Control*). Company has established a secure electronic information transfer system which may be used by Company, Supplier and any Company-authorized third parties to transfer data and other information. The CA will work with Supplier to establish the methods and access for secure file transfer.

20) PROPRIETARY RIGHTS. Company owns all right, title and interest in and to any and all equipment, tools, dies, jigs, fixtures, patterns, drawings, photographs, specifications, data, information and other items provided or to be provided by or on behalf of Company in connection with the Work, together with all modifications, changes, enhancements and other derivative works based on any such items and all patent, copyright, trade secret, trademark and other intellectual property rights in all of the foregoing (collectively, "**Company Materials**"). Company hereby grants Supplier a limited, non-exclusive, non-transferable license to use the Company Materials solely as and to the extent necessary to perform the Work under this Purchase Order during the term of this Purchase Order. Except for the foregoing license, no right, title or interest in or to any Company Materials is provided to Supplier under this Purchase Order, and Company reserves all right, title and interest in and to the Company Materials.

Company and its assigns, nominees and successors own exclusively all right, title and interest in and to all Deliverables and any related documents, reports, materials, techniques, ideas, concepts, know-how, algorithms, software, computer codes, routines or subroutines, specifications, plans, drawings, designs, pictures, images, text, audiovisual works, inventions, data, information and other items authored, collected, created, developed, discovered, made or produced by or on behalf of Supplier for Company in connection with the Work, together with any and all patent, copyright, trade secret, trademark and other intellectual property rights in the foregoing (collectively, the "**Work Product**"). The Work Product will constitute "works made for hire" for Company under the United States Copyright Act of 1976, as amended, and any other applicable copyright law. Supplier hereby waives any and all moral rights (including rights of integrity and attribution) in and to the Work Product. To the extent any Work Product does not constitute a "work made for hire", Supplier hereby assigns and transfers to Company, without separate compensation, all right, title and interest in and to what Supplier may have or acquire in the Work Product. Supplier will take such action as may be reasonably requested by Company from time to time (including the execution, acknowledgment and delivery of documents) to effect, perfect or evidence Company's ownership rights to the Work Product. Supplier will have no right to receive royalties from Company's exploitation of the Work Product.

21) ASSIGNMENT. Supplier shall not assign this Purchase Order or any rights, obligations, or monies due under this Purchase Order, directly, by operation of law or otherwise, without Company's prior written consent. Any attempted assignment without such consent shall be void and have no effect.



TerraPower, LLC Purchase Order Terms and Conditions

22) INDEMNITY. Supplier shall indemnify, hold harmless and, at Company's option, defend each Indemnitee from and against all Claims arising out of or relating to: (a) any breach of any obligation or warranty under this Purchase Order, whether arising before or after completion of the Work; (b) any bodily injury (including death) or property damage attributable to the fault, negligence or strict liability of Supplier, or any of Supplier's employees or contractors, permitted Subcontractors or anyone else under Supplier's direction, supervision or control; or (c) any claim of infringement, misappropriation or violation of any patent, copyright, trade name, trademark, trade secret or other proprietary right of a third party. If use of any Work provided under this Purchase Order is enjoined or threatened to be enjoined or is determined to be infringing of any rights, Supplier shall notify Company in writing and immediately, at Supplier's expense, (i) procure for Company the right to continue the use of such Work as contemplated under this Purchase Order, or (ii) replace or modify such Work so that such Work becomes non-infringing, provided that any replacement or modification is equivalent in function and meets the requirements and specifications of this Purchase Order to Company's satisfaction. If options (i) and (ii) are not available to Supplier, Company shall have the right to terminate this Purchase Order and Supplier shall refund all amounts paid by Company with respect to the infringing Work and shall reimburse Company all costs of the Company associated with transitioning the Work to a replacement supplier.

23) SECURITY INTEREST. In the event Company makes any payment to Supplier prior to delivery of any Products under this Purchase Order, for purposes of securing such payments, Supplier grants to Company a security interest in all Products (including all inventory, stock and trade, raw materials, work in progress and materials used or to be used in such Products). Company may execute such filings and take such additional acts as may be reasonably necessary to perfect such security interest as a first priority security interest and shall be entitled to all applicable rights and remedies of a secured party under Applicable Laws. Upon Company's request, Supplier will execute any statements or other documents necessary to perfect Company's security interest in the Products. Supplier also authorizes Company to execute, on Supplier's behalf, any statements or other documents necessary to perfect Company's security interest in the Products. None of the remedies under this Section 23 shall serve to foreclose or limit any other rights or remedies that may be available to Company under Applicable Laws or this Purchase Order.

24) SUSPENSION; EXTENSION OF TIME.

(a) Notwithstanding any other provisions of this Purchase Order, Company may at any time suspend or extend the time for Supplier's performance of the Work in accordance with Company's instructions and, in the case of suspension, resume performance as subsequently directed by Company. Provided that the suspension or extension does not result from any acts, omissions or delays of Supplier and provided further that Supplier timely complies with the requirements set forth below, Supplier shall be entitled to reimbursement for additional costs reasonably and necessarily incurred by Supplier, excluding profit, in implementing such suspension or extension. In the case of extension, Supplier must provide Company its written claim for the additional costs with supporting documentation within ten (10) days after receipt of the notice of extension.

(b) In the case of a suspension, Supplier must: (i) provide Company with written notice of its intent to claim additional costs together with an estimate of the elements and amounts of any cost within ten (10) days after receipt of the notice of suspension; (ii) provide Company written updates on the additional costs estimates on a bi-weekly basis during the period of suspension or as Company may otherwise reasonably request; and (iii) provide Company its written claim for additional costs with supporting documentation no later than thirty (30) days after receipt of Company's notice to resume work.

25) TERMINATION.

(a) *Breach; Default.* Company may terminate this Purchase Order, or any part thereof, by written notice: (i) in the event of any breach or default by Supplier of any of its obligations under this Purchase Order, (ii) if, following request by Company, Supplier fails to provide timely and acceptable assurance of Supplier's ability to meet all applicable QA Requirements and EH&S Requirements or the delivery date(s) of this Purchase Order, (iii) if Supplier fails to comply with Applicable Laws or (iv) if Supplier becomes insolvent, does not pay its debts as due, or makes a general assignment for the benefit of creditors or reasonable grounds for insecurity arise with respect to Supplier's ability to perform.



TerraPower, LLC Purchase Order Terms and Conditions

In the event of any occurrence of item (i), Company will provide Supplier with written notice of the nature of the default and Company's intention to terminate for default. Company may by written notice terminate this Purchase Order in the event Supplier does not correct the default within ten (10) days of such notice or such longer period of time as appropriate considering the circumstances and as specified in such notice of default to Supplier.

Upon the occurrence of any of items (ii), (iii) or (iv), Company may terminate this Purchase Order immediately upon written notice without any cure period.

(b) Company's Convenience. Company may terminate this Purchase Order, in whole or in part, at any time for its convenience by giving written notice to Supplier. Upon termination pursuant to this Section 25(b), Supplier may claim reasonable costs incurred for the Work completed prior to the effective date of such termination based on the percentage of Work complete, but not previously paid and a reasonable amount for any Products then in production (other than for Products which are Supplier's standard stock); provided, however, that the total sum payable to Supplier upon termination shall not exceed the Price had all Work been completed under this Purchase Order. The amounts to be paid to Supplier shall be set out in a written Purchase Order revision signed by Company's authorized representative. The payment will not include any consideration for loss of anticipated profits on the terminated Work, all claims for which Supplier agrees to waive. Furthermore, the total sum to be paid to Supplier for termination shall be subject to adjustment to the extent any Work contains defects as of the termination date. Supplier shall hold all partially completed Work or raw material in trust for Company to be disposed of or transferred in accordance with Company's instructions.

(c) Effect of Termination. Upon the completion, termination or cancellation of this Purchase Order pursuant to paragraph (a) or (b) above, (i) Supplier and Company shall cooperate to effect an orderly, efficient, effective and expeditious termination of the parties' respective activities under this Purchase Order; and (ii) Supplier shall, within ten (10) days of the effective termination date, return to Company or destroy all Confidential Information pursuant to Section 19 (*Confidential Information*).

Upon receipt of any notice of termination pursuant to this Section 25., Supplier shall in addition, unless the notice requires otherwise: (1) immediately discontinue the Work on the date and to the extent specified in the notice, (2) place no further orders for materials or services other than as may be necessarily required for completion of any portion of the Work that is not terminated; (3) obtain cancellation on terms satisfactory to Company of all contracts with sub-suppliers unless Supplier is directed by Company to take other actions with respect to the same, which may include assignment of all or some of those contracts to Company or Company's designee on terms satisfactory to such assignee; and (4) assist Company upon request in the maintenance, protection, and disposition of property acquired by Supplier under this Purchase Order.

In addition, in the event of a notice of termination pursuant to Section 25(a), Company may procure, under such terms and in such manner as Company may deem appropriate, items of the Work which are similar to the items so terminated and Supplier shall be liable to Company for: (A) any additional costs for such similar items of Work that exceed the amounts that Company would have paid Supplier for the terminated items of Work pursuant to this Purchase Order, including recovery of price paid for undelivered goods, (B) backcharges covering the costs of Company to complete the Work with respect to the terminated items of Work; and (C) any other costs incurred by Company for Supplier's non-delivery, repudiation and breach of this Purchase Order, including all fees and costs in exercising any remedy. Company may exercise any other rights or remedies available to Company at law or in equity. Supplier shall also be liable to Company for the cost of rework; repurchase and Company's backcharges related thereto in the event that any Work contains defects as of such termination date. If this Purchase Order is not terminated in its entirety, Supplier shall continue the performance of this Purchase Order to the extent not terminated by Company.

26) REPRESENTATIONS, CERTIFICATIONS.

Each party represents and warrants to the other that it has the full right and authority to enter into and to perform its obligations under this Purchase Order and that its performance of its obligations under this Purchase Order will not conflict with any other obligation it may have to any third party.

27) WARRANTY OF WORK.

(a) Supplier represents and warrants to Company that all Work furnished under this Purchase Order will be free from defects in design, material and workmanship, will conform to all requirements set forth in this Purchase Order, and will



TerraPower, LLC Purchase Order Terms and Conditions

be fit for its intended purpose and operate as intended for a period of one (1) year from the date of satisfactory completion of the Acceptance Procedures by Company or three (3) months after delivery by Supplier to final destination, whichever last occurs.

(b) Upon Company's discovery that any Work does not conform with the warranties set forth in Section 27(a), Company may elect, in its sole discretion, to: (i) have Supplier correct or repair the non-conforming Products, or to re-perform the defective or nonconforming Service, or (ii) receive a full refund from Supplier for all amounts paid by Company for the non-conforming Work. Any repairs, corrections, or re-performance by Supplier shall be at no cost to Company and shall be performed by Supplier within a reasonable time following Supplier's receipt of notice from Company regarding the applicable non-conformance. The warranties set forth in Section 27(a) shall apply to any work performed by Supplier to address a non-conformance in any Work under this Section 27(b), with the warranty period beginning upon the date of delivery of the corrected or reperfomed Work. If Supplier fails or refuses to correct or re-perform any Work, Company may, by contract or otherwise, correct or replace such Work with similar goods or services and charge to Supplier the cost occasioned to Company thereby, or make an equitable adjustment in the Price, at the election of Company in its sole discretion.

(d) Notwithstanding anything to the contrary herein, when Products are returned to Supplier, Supplier shall bear the transportation costs from the delivery destination specified in the SOW to Supplier's facility and return to Company.

(e) Notwithstanding the provisions of this Section 27, Company retains its rights under existing common and statutory law for any defective or non-conforming Products delivered or Services performed under this Purchase Order.

28) VERIFYING COMPLIANCE. Company shall have the right, at reasonable times and upon advance notice, to enter the facilities of the Supplier and its sub-tier suppliers or permitted Subcontractors (if any) for the purpose of verifying compliance with the requirements of this Purchase Order. Verification may include such activities as witnessing operations in progress, witnessing inspections and tests, performing product inspections, reviewing quality assurance and EH&S-related documents and records, and performing audits. Upon request by Company, Supplier shall provide Company with any and all quality information, documents, and records related to this Purchase Order or the performance of Supplier's obligations under this Purchase Order.

29) NON-WAIVER. The failure of Company to insist upon or enforce strict performance of any provisions of this Purchase Order, or to exercise any right or remedy granted to Company under this Purchase Order, shall not be construed as a waiver or relinquishment to any extent of Company's right to assert or rely upon any such provision, right or remedy in that or any other instance; rather, the same shall be and continue in full force and effect.

30) SUBCONTRACTING. Supplier shall not subcontract to any third party, or use any third party to perform, any Work (each, a "*permitted Subcontractor*") without Company's prior written consent in each instance. In the event Company approves the use of a permitted Subcontractor, Supplier shall continue to be fully responsible for all Work provided by such permitted Subcontractor, and Supplier's use of the permitted Subcontractor shall not relieve Supplier of any of its obligations or liabilities under this Purchase Order. Supplier is primarily, fully and independently responsible to Company for all acts and omissions of all permitted Subcontractors. For purposes of this Purchase Order, the term "Subcontractor" shall include all tiers of permitted Subcontractors. Without relieving Supplier of any of its obligations under this Purchase Order, Supplier shall assign in full, and without cost to Company, all warranties from Supplier's permitted Subcontractors, including, without limitation, any manufacturers warranties, that are applicable to the Products, and shall deliver such assigned warranties to Company prior to Final Acceptance.

31) COMPLIANCE WITH LAWS. Supplier represents and warrants that (a) it shall comply with all Applicable Laws in connection with the Work and the performance of Supplier's obligations under this Purchase Order, and that it shall ensure that the Work and its sub-tier suppliers and permitted Subcontractors (if any) comply with all Applicable Laws; and (b) it is aware of, understands and shall comply with, and will ensure that any sub-tier suppliers and permitted Subcontractors are aware of, understand and shall comply with, all applicable U.S. and foreign anti-corruption laws, including the U.S. Foreign Corrupt Practices Act, as such laws may be amended from time to time.

32) EXPORT CONTROL. 1) Supplier acknowledges that performance of this Purchase Order is subject to compliance with applicable United States laws, regulations, and/or orders, including but not limited to those that relate to the export



TerraPower, LLC Purchase Order Terms and Conditions

of nuclear materials, equipment, software, and technology, such as the U.S. Department of Energy regulations found in 10 C.F.R. Part 810, the U.S. Nuclear Regulatory Commission regulations in 10 C.F.R. Part 110, and the U.S. Department of Commerce's Export Administration Regulations found in 15 C.F.R. Part 730 et seq., as may be amended (collectively, "**Export Control Laws**"). Supplier agrees to comply with all Export Control Laws. Supplier shall not export, reexport, transfer or retransfer, directly or indirectly, any Confidential Information, except as permitted by such Export Control Laws. Notwithstanding anything to the contrary in this Purchase Order, and in order to ensure compliance with Export Control Laws, (a) Supplier shall not, absent prior written approval by Company, use, directly or indirectly, Confidential Information in any application involving a military use, missile technology, nuclear proliferation/nuclear explosive device, chemical and biological weapons proliferation and (b) the Supplier shall not, absent prior written approval by Company, disclose or furnish Confidential Information to any Foreign Nationals who are of a different nationality than the Supplier (including any of its employees, agents or other representatives).

Supplier shall identify and mark all documents that contain information controlled for export under Export Control Laws, with appropriate and conspicuous export control markings, prior to transmittal to the Company. Supplier also shall provide to the Company export control classification numbers (ECCNs) for any items, technology, or software, controlled for export under the EAR, that Supplier delivers or transmits to the Company under this Purchase Order.

33) RECORDS AND AUDIT. Supplier shall maintain records and accounts in connection with the performance of this Purchase Order which will accurately document incurred costs, both direct and indirect, of whatever nature for a period of three (3) years from final payment unless a longer period is otherwise specified by Applicable Law. Company or its representatives shall have the right to examine and copy, at all reasonable times and with advance notification, such records and accounts for the purposes of confirming compliance with Purchase Order provisions, verifying payments or requests for payment when costs are the basis of such payment or evaluating the reasonableness of proposed Purchase Order price adjustments and claims. If Company establishes uniform codes of accounts for the project the subject of this Purchase Order, Supplier shall use such codes in identifying its records and accounts. Supplier shall cooperate fully with Company during the audits performed hereunder, including furnishing Company with copies of all requested documents.

34) REMEDIES. All of the remedies specified in this Purchase Order shall be cumulative and in addition to any other remedies provided in law or equity.

35) GOVERNING LAW AND COURTS. This Purchase Order shall be interpreted and construed in accordance with the laws of the State of Washington, without regard to choice of law principles to the contrary. Supplier irrevocably consents to the exclusive jurisdiction of the state and federal courts located in King County, Washington.

36) ALTERNATIVE DISPUTE RESOLUTION. Each of Supplier and Company shall make good-faith efforts to initially resolve any dispute or claim that arises in connection with this Purchase Order through discussions and negotiations between the parties within thirty (30) days. If such efforts fail to result in a mutually agreeable resolution, the parties shall consider the use of alternative dispute resolution ("**ADR**"). In the event non-binding mediation or arbitration is agreed upon, the site of the proceedings shall be King County, Washington. The mediator or arbitrator shall allocate costs as part of the final resolution or award, and each party shall bear its discretionary costs. In the event that ADR fails or is not pursued, either party may bring a claim in the courts specified in Section 35 (*Governing Law and Courts*).

37) GOVERNMENT CONTRACTS. If this Purchase Order is issued in connection with Work to be performed pursuant to a U.S. Government contract or grant award, to the extent applicable and as required by Applicable Laws, Supplier acknowledges and agrees or certifies to each of the following:

- (a) None of Supplier nor its principals is debarred, suspended, or proposed for debarment or suspension by the U.S. Government;
- (b) No federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress on its behalf in connection with the awarding of this Purchase Order;
- (c) The required contractual flowdown provisions set forth in **Exhibit A** (*Required Flowdowns*) to this Purchase Order are incorporated into and form an integral part of this Purchase Order and Supplier shall be bound by the same to the extent applicable; and



TerraPower, LLC Purchase Order Terms and Conditions

(d) Supplier's System for Award Management (SAM) registration (<https://uscontractorregistration.com/>) and certification in connection therewith is current.

38) INSURANCE; SUPPLEMENTAL TERMS; EXCEPTIONS. If any insurance requirements apply to the Work, Company shall specify the applicable insurance coverages and policy requirements in *Exhibit A* hereto. If any supplemental terms or any exceptions to these Terms and Conditions apply to the Work, Company shall also specify the same in *Exhibit B* hereto. Supplier acknowledges and agrees that it shall be bound by the insurance requirements, supplemental terms and/or exceptions (as applicable) set forth in *Exhibit B* hereto.

39) SEVERABILITY. If any provision of this Purchase Order is deemed invalid or unenforceable by a court of competent jurisdiction, such provision: (a) will be severable from the remaining provisions of this Purchase Order and (b) shall not affect any other term or provision of this Purchase Order, which will otherwise continue in full force and effect.

40) FORCE MAJEURE. Neither Company nor Supplier shall be liable to the other for failure to perform in accordance with the provisions of this Purchase Order, other than to make payments due hereunder, if such failure is due to catastrophic acts of God (such as earthquake or tornado); war; riot; epidemic or pandemic; civil commotion; strike by labor other than that employed by Company or Supplier; insurrection; government orders, rules, regulations, suspensions or requisitions of any kind; or fire; provided that such act or event (a) renders impossible the affected party's performance of its obligations under this Purchase Order, (b) is beyond the control of the affected party and not due to its fault or negligence, and (c) could not have been prevented or avoided by the affected party through the exercise of due diligence, including the expenditure of any reasonable sum taking into account the Price. An event satisfying all of the requirements of this Section 40 shall be referred to as a "Force Majeure Event." If either party is entitled to relief under this Section 40 for a Force Majeure Event, the affected party must notify the other party in writing within five (5) days of the occurrence of the Force Majeure Event or forfeit its exclusion from liability under this Section. The notice must contain reasons for the delay and, if provided by Supplier, an estimate of the delay in shipment of the Products or performance of the services. The party relying upon this Section must use due diligence and all reasonable efforts (including reasonable expenditure of money) to overcome the cause and effects of a Force Majeure Event. If a Force Majeure Event prevents or, in Company's reasonable estimation, is likely to prevent Supplier from delivering the Products by the delivery date, Company may terminate this Purchase Order immediately by giving written notice to Supplier, and such termination will be treated as a Termination for Convenience pursuant to Section 25 hereof.

41) SURVIVAL. Obligations under this Purchase Order, including any Exhibits hereto, of a continuing nature shall survive the completion, termination or cancellation of this Purchase Order.



TerraPower, LLC Purchase Order Terms and Conditions

EXHIBIT A

REQUIRED FLOWDOWNS

(See following pages)

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

REQUIRED FLOWDOWNS. As a Supplier to Company in connection with Batelle Energy Alliance (BEA) Contract No. 215209 (Re-Establishing Liquid Metal-Cooled Transient Fuel Safety) with the Company, the required BEA flowdowns (“**Required Flowdowns**”) set out in this Exhibit A – Required Flowdowns, to the extent reasonably applicable to Supplier’s scope of work, are incorporated into and made a material part of the Purchase Order. In the event of a conflict between these Required Flowdowns and any Purchase Order Terms & Conditions, the relevant Required Flowdown(s) will take precedence.

Note: For purposes of interpretation and implementation of this Exhibit A by Supplier:

- all references to “Subcontractor” shall be considered a reference to Supplier;
- all references to “Contractor” shall be considered a reference to Company;
- all references to “Subcontract” shall be considered a reference to the Order;
- all references to “DOE” mean the U.S. Department of Energy;
- if no date is stated with respect to certain Required Flowdowns, the relevant provisions will be those in effect on the date of the BEA-TerraPower Contract (3/12/2019); and
- if no threshold Subcontract value is stated with respect to a Required Flowdown, such Required Flowdown shall be considered applicable to all Orders regardless of value.

A.1 Federal Acquisition Regulations; Department of Energy Acquisition Regulations

Supplier shall, to the extent applicable, comply with the following select Federal Acquisition Regulations (“FARs”) and Department of Energy Acquisition Regulations (“DEAR”):

- a) FAR 52.203-12, Limitations on Payments to Influence Certain Federal Transactions (Byrd Amendment), if subcontract value exceeds \$150,000;
- b) FAR 52.203-13, Contractor Code of Business Ethics and Conduct (Oct 2015) (41 U.S.C. 3509) (if Subcontract value exceeds \$5.5 million and has a performance period of more than 120 days);
- c) FAR 52.203-15, Whistleblower Protections Under the American Recovery and Reinvestment Act of 2009 (JUN 2010) (Section 1553 of Pub. L. 111-5), if Subcontract is funded under the Recovery Act;
- d) FAR 52.203-19, Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements (JAN 2017);
- e) FAR 52.204-23, Prohibition on Contracting for Hardware, Software, and Services Developed or Provided by Kaspersky Lab and Other Covered Entities (JUL 2018) (Section 1634 of Pub. L. 115-91);
- f) FAR 52.215-10, Price Reduction for Defective Cost or Pricing Data, if Subcontract exceeds \$750,000;
- g) FAR 52.215-11, Price Reduction for Defective Cost or Pricing Data – Modifications, if Subcontract exceeds \$750,000;
- h) FAR 52.215-12, Subcontractor Cost or Pricing Data, if Subcontract exceeds \$750,000;
- i) FAR 52.215-13, Subcontractor Cost or Pricing Data Modifications, if Subcontract exceeds \$750,000;
- j) FAR 52.219-8, Utilization of Small Business Concerns (Oct 2018) (15 U.S.C. 637(d)(2) and (3)), if the subcontract offers further subcontracting opportunities. If the Subcontract (except subcontracts to small business concerns) exceeds \$700,000 (\$1.5 million for construction of any public facility), the Subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities;
- k) FAR 52.222-21, Prohibition of Segregated Facilities;
- l) FAR 52.222-26, Equal Opportunity (Sept 2016) (E.O. 11246), if Subcontract value exceeds \$10,000;
- m) FAR 52.222-37, Employment Reports on Special Disabled Veterans and Veterans of the Vietnam Era, if Subcontract value exceeds \$25,000;
- n) FAR 52.222-40, Notification of Employee Rights Under the National Labor Relations Act (DEC 2010) (E.O. 13496), if Subcontract exceeds \$10,000 and will be performed wholly or partially in the United States, unless exempted by the rules, regulations, or orders of the Secretary of Labor issued pursuant to section 3 of Executive Order 13496 of January 30, 2009; Contractor shall not procure supplies or services in a way designed to avoid the applicability of Executive Order 13496 or this clause;
- o) FAR 52.222-50, Combating Trafficking in Persons (Mar 2015) (22 U.S.C. chapter 78 and E.O. 13627), Alternate I (Mar 2015) of 52.222-50 (22 U.S.C. chapter 78 and E.O. 13627), compliance plan requirements apply if Subcontract value exceeds \$500,000;

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

- p) FAR 52.222-55, Minimum Wages under Executive Order 13658 (DEC 2015), if Subcontract is subject to Service Contract Labor Standards statute or Wage Rate Requirements (Construction) statute;
- q) FAR 52.222-62, Paid Sick Leave Under Executive Order 13706 (JAN 2017) (E.O. 13706), if Subcontract is subject to Service Contract Labor Standards statute or Wage Rate Requirements (Construction) statute;
- r) FAR 52.223-6, Drug-Free Workplace (if Subcontract exceeds \$100,000);
- s) FAR 52.224-3, Privacy Training (JAN 2017) (5 U.S.C. 552a) if Subcontractor employees will have access to a system of records; create, collect, use, process, store, maintain, disseminate, disclose, dispose or otherwise handle personally identifiable information; or design, develop, maintain or operate a system of records;
- t) FAR 52.225-13, Restrictions of Certain Foreign Purchases;
- u) FAR 52.225-26, Contractors Performing Private Security Functions Outside the United States (Oct 2016) (Section 862, as amended, of the National Defense Authorization Act for Fiscal Year 2008; 10 U.S.C. 2302 Note), if Subcontract will be performed outside the US in areas of combat operations, as designated by the Secretary of Defense; or other significant military operations, upon agreement of the Secretaries of Defense and State that the clause applies in that area.
- v) FAR 52.230-2, Cost Accounting Standards (if Subcontract value exceeds \$650,000);
- w) FAR 52.230-5, Cost Accounting Standards – Educational Institutions (if Subcontractor is an educational institution and Subcontract value exceeds \$750,000);
- x) FAR 52.230-6, Administration of Cost Accounting Standards (if Subcontractor's subcontract includes FAR 52.230-2 or FAR 52.230-5 or Subcontractor is a large business);
- y) FAR 52.232-40, Providing Accelerated Payments to Small Business Subcontractors (DEC 2013), if Subcontractor is a small business;
- z) FAR 52.242-3, Penalties for Unallowable Costs (if Subcontract value exceeds \$650,000);
- aa) FAR 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (Feb 2006);
- bb) DEAR 952.204-77, Computer Security (AUG 2006), if Subcontract may provide access to computers owned, leased or operated on behalf of DOE;
- cc) DEAR 952.247-70, Foreign Travel;
- dd) DEAR 952.250-70, Nuclear Hazards Indemnity Agreement, applies in any Subcontract which may involve the risk of public liability, as that term is defined in the Atomic Energy Act of 1954 as amended (Act) and as further described in DEAR 952.250-70. However, this clause does not apply to Subcontracts in which the Subcontractor is subject to Nuclear Regulatory Commission (NRC) financial protection requirements under subsection 170b of the Act or NRC agreements of indemnification under subsection 170c or k of the Act for the activities under this Subcontract;
- ee) DEAR 970.5204-1, Counterintelligence;
- ff) DEAR 970.5227-7, Royalties;
- gg) DEAR 970.5227-8, Refund of Royalties;
- hh) DEAR 970.5229-1, State and Local Taxes: This clause applies except for the last sentence of subparagraph (b) and the first sentence of subparagraph (c) of the clause. (For purposes of this clause, "Government" shall mean Government, not Batelle Energy Alliance, LLC);
- ii) DEAR 970.5232-3, Accounts, Records & Inspections with Alternate I;
- jj) DEAR 970.5245-1, Property Alternate 1 (Dec 2000);
- kk) FAR 52.237-2, Protection of Government, Buildings, Equipment and Vegetation (if Subcontractor personnel, or lower-tier subcontractor personnel, are present at premises owned, leased or controlled by Contractor or the U.S. Government, regardless of price);
- ll) FAR 52.204-21, Basic Safeguarding of Covered Contractor Information Systems (JUN 2016), other than subcontracts for commercially available off-the-shelf items, if Subcontractor may have Federal contract information residing or transiting through its information systems:

(a) Definitions. As used in this clause -

Covered contractor information system means an information system that is owned or operated by a contractor that processes, stores, or transmits Federal contract information.

Federal contract information means information, not intended for public release, that is provided by or generated for the Government under a contract to develop or deliver a product or service to the

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

Government, but not including information provided by the Government to the public (such as on public Web sites) or simple transactional information, such as necessary to process payments.

Information means any communication or representation of knowledge such as facts, data, or opinions, in any medium or form, including textual, numerical, graphic, cartographic, narrative, or audiovisual (Committee on National Security Systems Instruction (CNSSI) 4009).

Information system means a discrete set of information resources organized for the collection, processing, maintenance, use, sharing, dissemination, or disposition of information (44 U.S.C. 3502).

Safeguarding means measures or controls that are prescribed to protect information systems.

(b) Safeguarding requirements and procedures.

(1) The Contractor shall apply the following basic safeguarding requirements and procedures to protect covered contractor information systems. Requirements and procedures for basic safeguarding of covered contractor information systems shall include, at a minimum, the following security controls:

- (i) Limit information system access to authorized users, processes acting on behalf of authorized users, or devices (including other information systems).
- (ii) Limit information system access to the types of transactions and functions that authorized users are permitted to execute.
- (iii) Verify and control/limit connections to and use of external information systems.
- (iv) Control information posted or processed on publicly accessible information systems.
- (v) Identify information system users, processes acting on behalf of users, or devices.
- (vi) Authenticate (or verify) the identities of those users, processes, or devices, as a prerequisite to allowing access to organizational information systems.
- (vii) Sanitize or destroy information system media containing Federal Contract Information before disposal or release for reuse.
- (viii) Limit physical access to organizational information systems, equipment, and the respective operating environments to authorized individuals.
- (ix) Escort visitors and monitor visitor activity; maintain audit logs of physical access; and control and manage physical access devices.
- (x) Monitor, control, and protect organizational communications (i.e., information transmitted or received by organizational information systems) at the external boundaries and key internal boundaries of the information systems.
- (xi) Implement subnetworks for publicly accessible system components that are physically or logically separated from internal networks.
- (xii) Identify, report, and correct information and information system flaws in a timely manner.
- (xiii) Provide protection from malicious code at appropriate locations within organizational information systems.
- (xiv) Update malicious code protection mechanisms when new releases are available.
- (xv) Perform periodic scans of the information system and real-time scans of files from external sources as files are downloaded, opened, or executed.

(2) Other requirements. This clause does not relieve the Contractor of any other specific safeguarding requirements specified by Federal agencies and departments relating to covered contractor information systems generally or other Federal safeguarding requirements for controlled unclassified information (CUI) as established by Executive Order 13556.

(c) Subcontracts. The Contractor shall include the substance of this clause, including this paragraph (c), in subcontracts under this contract (including subcontracts for the acquisition of commercial items, other than commercially available off-the-shelf items), in which the subcontractor may have Federal contract information residing in or transiting through its information system.

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

mm) FAR 52.222-35, Equal Opportunity for Veterans (OCT 2015), if Subcontract value exceeds \$150,000:

(a) Definitions. As used in this clause -

“Active duty wartime or campaign badge veteran,” “Armed Forces service medal veteran,” “disabled veteran,” “protected veteran,” “qualified disabled veteran,” and “recently separated veteran” have the meanings given at FAR 22.1301.

(b) Equal opportunity clause. The Contractor shall abide by the requirements of the equal opportunity clause at 41 CFR 60-300.5(a), as of March 24, 2014. This clause prohibits discrimination against qualified protected veterans, and requires affirmative action by the Contractor to employ and advance in employment qualified protected veterans.

(c) Subcontracts. The Contractor shall insert the terms of this clause in subcontracts of \$150,000 or more unless exempted by rules, regulations, or orders of the Secretary of Labor. The Contractor shall act as specified by the Director, Office of Federal Contract Compliance Programs, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

nn) FAR 52.222-36, Equal Opportunity for Workers with Disabilities (July 2014) (29 U.S.C. 793), if Subcontract value equals or exceeds \$15,000

(a) Equal opportunity clause. The Contractor shall abide by the requirements of the equal opportunity clause at 41 CFR 60-741.5(a), as of March 24, 2014. This clause prohibits discrimination against qualified individuals on the basis of disability, and requires affirmative action by the Contractor to employ and advance in employment qualified individuals with disabilities.

(b) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order in excess of \$15,000 unless exempted by rules, regulations, or orders of the Secretary, so that such provisions will be binding upon each subcontractor or vendor. The Contractor shall act as specified by the Director, Office of Federal Contract Compliance Programs of the U.S. Department of Labor, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

A.2 Prohibition on Personally Identifiable Information

1. To the extent that the work under this Contract requires the Subcontractor to have access to personally identifiable information about an individual (hereinafter referred to as “PII”), Subcontractor shall after receipt thereof, treat such PII as confidential and safeguard such information from unauthorized use and disclosure. Further, Subcontractor agrees not to appropriate such PII for its own use or to disclose such information to third parties unless specifically authorized in writing by Contractor.

2. Subcontractor agrees to allow access only to those employees who need the PII to perform services under this Contract and agrees that PII will be used solely for the purpose of performing services under this Contract. The Subcontractor shall ensure that its employees will not discuss, divulge or disclose any such PII to any person or entity except those persons within the Subcontractor’s organization directly concerned with performance under the Contract.

3. The Subcontractor shall administer a monitoring process to ensure compliance with the provisions of the clause. Immediately upon discovery of a real or suspected loss of PII promptly report any breaches to the BEA Contract Specialist, and implement immediate, appropriate corrective actions to contain and prevent recurrence.

4. PII is an individual’s first name or first initial and last name in combination with any one or more of the following data elements including, but not limited to, social security number, passport number, credit card numbers, clearances, bank numbers, biometrics, date and place of birth, mother’s maiden name, criminal, medical and financial records, educational transcripts, etc.

5. Contractor may terminate this Contract for default if Subcontractor or an employee of the Subcontractor fails to comply with the provisions of this clause. Contractor may also exercise any other rights and remedies provided by law or this Contract, including criminal and civil penalties.

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

6. The Subcontractor shall include this clause in all appropriate lower-tier subcontracts. However, such provision in the subcontracts shall not relieve Subcontractor of its obligation to assure compliance with the provisions of this clause.

A.3 Compliance with DOE Procurement Standards and Federal Statutes

Subcontractor shall comply with the following in its performance of the Work:

- (i) Subcontractor shall not subcontract any Work under this Agreement except in accordance with the terms of the Order;
- (ii) If Subcontract value exceeds \$150,000, Supplier shall comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q.) and Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended, and report any violations to the Federal awarding agency; and
- (iii) Debarment and Suspension (2 CFR 180.220, implementing Executive Orders 12549 and 12689): A contract award must not be made to parties listed on the government-wide exclusions in the System for Award Management (SAM).

A.4 Public Release of Information

Information, data, photographs, sketches, and advertising relating to the work under this Subcontract, which Subcontractor desires to release or publish, shall be submitted to the Contractor for approval eight weeks prior to the desired release date. As part of the approval request, Subcontractor shall identify the specific media to be used as well as other pertinent details of the proposed release. All releases, regardless of tier or supplier, must have the prior approval of the Contractor. Subcontractor shall include all provisions of this Article, including this sentence, in all Lower-tier Subcontracts under this Subcontract.

A.5 Government Property

1. This Article A.5 applies only when the Contractor authorizes use of Government property for performance of this Contract. For all cost reimbursable subcontracts this Article A.5 is to be applied with DEAR 970-5245-1, Property (Aug. 2016) in conjunction with DEAR 970-5245-1, Alternate 1 (December 2000).

2. The Contractor shall deliver to the Subcontractor, or the Subcontractor shall acquire, for use in connection with and under the terms of this Subcontract, Government property, together with such related data and information as the Subcontractor may request and as may be reasonably required for the intended use of such property.

- a. The delivery or performance dates for this Subcontract are based upon the expectation that Government property suitable for use will be delivered to the Subcontractor, or acquired by the Subcontractor, at the times stated in the schedule or, if not so stated, in sufficient time to enable the Subcontractor to meet the Subcontract delivery or performance dates.
- b. If the property is received by the Subcontractor in a condition not suitable for the intended use, the Subcontractor shall, upon receipt, notify the Company, detailing the facts. If the Government Property is Contractor-furnished, the Contractor will effect any repairs, modification, or replacement required or cause the Subcontractor to have it corrected at the Contractor's expense. If the Government Property is Subcontractor-acquired, the Subcontractor will effect any repairs, modification, or replacement required at the Subcontractor's expense.
- c. If said Contractor-furnished property is not delivered to the Subcontractor by the required time or times, the Company shall, upon the Subcontractor's written request, make a determination of the delay, if any, caused the Subcontractor and shall make an equitable adjustment in accordance with this Subcontract.
- d. Changes in Government Property.
 - i. The Contractor may, by written notice:
 - 1. Decrease the Government property provided or to be provided under this Subcontract; or
 - 2. Substitute other Government property for the property to be provided under this Subcontract.

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

ii. The Subcontractor shall promptly take such action as the Company may direct regarding the removal, preparation for shipment, or disposal of the property covered by this notice.

iii. Upon the Subcontractor's written request to the Company, the Contractor shall make an equitable adjustment to this Subcontract, if the Contractor has agreed in the schedule to make such property available for performing this Subcontract and there is any:

1. Decrease or substitution in such property pursuant to subparagraph 2.d.i above; or
2. Withdrawal of authority to use such property if provided under other subcontract or lease.

e. Title and Access

i. Title to Government property shall remain in the Government. All Government property, title to which vests in the Government under this paragraph (collectively referred to as "Government property"), is subject to the provisions of this Article. Title to Government property shall not be affected by its incorporation into or attachment to any property not owned by the Contractor, nor shall Government property become a fixture or lose its identity as personal property by being attached to any real property.

ii. Subcontractor shall use the Government property only in connection with this Subcontract. Subcontractor shall maintain adequate property control records in accordance with sound industrial practice and shall make such records available for Contractor or Government inspection at all reasonable times.

iii. Subcontractor shall provide its property control procedure(s) for Contractor review and approval, upon request from Contractor.

iv. Subcontractor shall comply with any Contractor direction to enable Subcontractor's property control activities to provide compliance as follows: under cost-reimbursable Subcontracts, 48 CFR 970-21; under fixed-price contracts, 41 CFR 109-1.5203.

v. The Contractor and the Government and all its designees shall have access at all reasonable times to the premises in which any Government property is located for the purpose of inspecting the Government property.

vi. Title to each item of facilities and special test equipment acquired by the Subcontractor for the Contractor under this Subcontract shall pass to and vest in the Government when its use in performing this Subcontract commences or when the Contractor has paid for it, whichever is earlier, whether or not title previously vested in the Government.

vii. If this Subcontract contains a provision directing the Contractor to purchase material for which the Contractor will reimburse the Subcontractor as a direct item of cost under this Subcontract:

1. Title to material purchased shall pass to and vest in the Government upon delivery of such material; and
2. Title to all other material shall pass to and vest in the Government upon:
 - a. Issuance of the material for use in Subcontract performance;
 - b. Commencement of processing of the material or its use in Subcontract performance; or
 - c. Reimbursement of the cost of the material by the Contractor, whichever occurs first.

viii. Upon completion of the Work, or the termination of this Subcontract, the Subcontractor shall render an accounting, as prescribed by the Contractor, of all Government property which had come into the possession or custody of the Subcontractor under this Subcontract.

f. Risk of Loss

i. Upon delivery of Government property to Subcontractor, Subcontractor assumes the risk and responsibility for its loss or damage, except:

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

1. For reasonable wear and tear;
 2. To the extent such property is consumed in performing this Subcontract; or
 3. As otherwise provided for by the provisions of this Subcontract.
- ii. Under cost reimbursement Subcontracts, the Subcontractor shall not be reimbursed for, and shall not include as an item of overhead, the cost of insurance or of any reserve covering risk of loss or destruction of, or damage to, Government property, except to the extent that the Contractor may have expressly required the Subcontractor to carry such insurance under another provision of this Subcontract.
- iii. The Subcontractor shall do nothing to prejudice the Contractor's and/or the Government's rights to recover against third parties for any loss or destruction of, or damage to, Government property. Upon the request of the Contractor, the Subcontractor shall, at the Contractor's expense, furnish to the Contractor all reasonable assistance and cooperation (including the prosecution of suit and the execution of instruments of assignment in favor of the Contractor and/or the Government) in obtaining recovery.
- iv. Upon completing this Subcontract, or at such earlier dates as may be fixed by the Contractor, the Subcontractor shall submit, in a form acceptable to the Contractor, inventory schedules covering all items of Government property not consumed in performing this Subcontract or delivered to the Contractor. Subcontractor shall follow the instructions of Contractor regarding the disposition of all Government property not consumed in performing this Subcontract or previously delivered to Contractor. Subcontractor shall prepare for shipment, delivery F.O.B. origin, or dispose of the Government property, as may be directed by Contractor. The net proceeds of any such disposal shall be credited to the Subcontract price or shall be paid to Contractor, as directed by Contractor.
- v. If this Subcontract is to be performed outside the United States of America, its territories, or possessions, the words "Government", "Government Property", "Contractor-Furnished Government Property", and "Contractor-Furnished and Subcontractor-Acquired Government Property" (wherever they appear in this Article) shall be construed as "United States Government" and "United States Government Property" and "Contractor-Furnished United States Government Property" and "Contractor-Furnished and Subcontractor-Acquired United States Government property," respectively.
- vi. All communications under this Article shall be in writing.

A.6 Rights in Data

1. Definitions

- a. Computer databases, as used in this Article, means a collection of data in a form capable of, and for the purpose of, being stored in, processed, and operated on by a computer. The term does not include computer software.
- b. Computer Software, as used in this Article, means:
- (i) computer programs that are data comprising a series of instructions, rules routines, or statements, regardless of the media in which recorded, that allow or cause a computer to perform a specific operation or series of operations; and
 - (ii) data comprising source code listings, design details, algorithms, processes, flow charts, formulae, and related material that would enable the computer program to be produced, created, or compiled. The term does not include computer databases.
- c. Data, as used in this Article, means recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. For the purposes of this Article, the term does not include data incidental to the administration of this Subcontract, such as financial, administrative, cost and pricing, or management information.

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

d. Form, fit, and function data, as used in this Article, means data relating to items, components, or processes that are sufficient to enable physical and functional interchangeability, as well as data identifying source, size, configuration, mating, and attachment characteristics, functional characteristics, and performance requirements; except that for computer software it means data identifying source, functional characteristics, and performance requirements but specifically excludes the source code, algorithm, process, formulae, and flow charts of the software.

e. Limited rights data, as used in this Article, means data, other than computer software, developed at private expense that embody trade secrets or are commercial or financial and confidential or privileged. The Government's rights to use, duplicate, or disclose limited rights data are as set forth in the Limited Rights Notice, if included in this Article.

f. Restricted computer software, as used in this Article, means computer software developed at private expense and that is a trade secret; is commercial or financial and is confidential or privileged; or is published copyrighted computer software, including minor modifications of any such computer software. The Government's rights to use, duplicate, or disclose restricted computer software are as set forth in the Restricted Rights Notice, if included in this Article.

g. Technical data, as used in this Article, means recorded data, regardless of form or characteristic, that are of a scientific or technical nature. Technical data does not include computer software, but does include manuals and instructional materials and technical data formatted as a computer database.

h. Unlimited rights, as used in this Article, means the rights of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, including by electronic means, and perform publicly and display publicly, in any manner, including by electronic means, and for any purpose whatsoever, and to have or permit others to do so.

2. Allocation of rights

a. Except as provided in Paragraph 3 of this Article regarding copyright, the Government shall have unlimited rights in:

- (i) Data first produced in the performance of this Subcontract;
- (ii) Form, fit, and function data delivered under this Subcontract;
- (iii) Data delivered under this Subcontract (except for restricted computer software) that constitute manuals or instructional and training material for installation, operation, or routine maintenance and repair of items, components, or processes delivered or furnished for use under this Subcontract; and
- (iv) All other data delivered under this Subcontract, unless provided otherwise for limited rights data or restricted computer software in accordance with Paragraph 7 of this Article.

b. The Subcontractor shall have the right to:

- (i) Use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Subcontractor in the performance of this Subcontract, unless provided otherwise in Paragraph 4 of this Article;
- (ii) Protect from unauthorized disclosure and use those data that are limited rights data or restricted computer software to the extent provided in Paragraph 7 of this Article;
- (iii) Substantiate use of, add or correct limited rights, restricted rights, or copyright notices and to take other appropriate action, in accordance with Paragraphs 5 and 6 of this Article; and
- (iv) Establish claim to copyright subsisting in data first produced in the performance of this Subcontract to the extent provided in subparagraph 3.a of this Article.

3. Copyright

a. Data first produced in the performance of this Subcontract. Unless provided otherwise in Paragraph 4 of this Article, the Subcontractor may establish, without prior approval of the Contractor or Department

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

of Energy (DOE), claim to copyright subsisting in scientific and technical articles based on or containing data first produced in the performance of this Subcontract and published in academic, technical or professional journals, symposia proceedings or similar works. The prior, expressly written permission of the DOE Contracting Officer, through the Contractor, is required to establish claim to copyright subsisting in all other data first produced in the performance of this Subcontract. When claim to copyright is made, the Subcontractor shall affix the applicable copyright notices of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including subcontract number) to the data when such data are delivered to the Government, as well as when the data are published or deposited for registration as a published work in the U.S. Copyright Office. For data other than computer software the Subcontractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable worldwide license in such copyrighted data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government. For computer software, the Subcontractor grants to the Government and others acting in its behalf, a paid-up nonexclusive, irrevocable worldwide license in such copyrighted computer software to reproduce, prepare derivative works, and perform publicly and display publicly by or on behalf of the Government.

b. Data not first produced in the performance of this Subcontract. The Subcontractor shall not, without prior written permission of the DOE Contracting Officer, through the Contractor, incorporate in data delivered under this Subcontract any data not first produced in the performance of this Subcontract and which contains the copyright notice of 17 U.S.C. 401 or 402, unless the Subcontractor identifies such data and grants to the Government, or acquires on its behalf, a license of the same scope as set forth in subparagraph 3.a of this Article; provided, however, that if such data are computer software the Government shall acquire a copyright license as set forth in Paragraph 7 of this Article, or as otherwise may be provided in a collateral agreement incorporated in or made part of this Subcontract.

c. Removal of copyright notices. The Government agrees not to remove any copyright notices placed on data pursuant to this Paragraph 3, and to include such notices on all reproductions of the data.

4. Release, publication, and use of data

a. The Subcontractor shall have the right to use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Subcontractor in the performance of this Subcontract, except to the extent prohibited by the Federal export control or national security laws or regulations.

b. The Subcontractor agrees that to the extent it receives or is given access to data necessary for the performance of this Subcontract which contain restrictive markings, the Subcontractor shall treat the data in accordance with such markings unless otherwise specifically authorized in writing by the DOE Contracting Officer, through the Contractor.

c. The Subcontractor agrees not to assert copyright in computer software first produced in the performance of this Subcontract without prior written permission of the DOE Patent Counsel assisting the subcontracting activity. When such permission is granted, the DOE Patent Counsel shall specify appropriate terms, conditions and submission requirements to assure utilization, dissemination, and commercialization of the data. The Subcontractor, when requested, shall promptly deliver to Patent Counsel a duly executed and approved instrument fully confirmatory of all rights to which the Government is entitled.

5. Unauthorized marking of data

a. Notwithstanding any other provisions of this Subcontract concerning inspection or acceptance, if any data delivered under this Subcontract are marked with restrictive or limiting markings not authorized by this Subcontract, the Contractor with DOE approval may at any time either return the data to the Subcontractor, or cancel or ignore the markings. However, the following procedures shall apply prior to canceling or ignoring the markings:

(i) The Contractor, in coordination with DOE, shall make written inquiry to the Subcontractor affording the Subcontractor 30 days from receipt of the inquiry to provide written justification to substantiate the propriety of the markings;

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

- (ii) If the Subcontractor fails to respond or fails to provide written justification to substantiate the propriety of the markings within the 30-day period (or a longer time not exceeding 90 days approved in writing by the Contractor, in coordination with DOE, for a good cause shown), the Government, and Contractor, shall have the right to cancel or ignore the markings at any time after said period and the data will no longer be made subject to any disclosure prohibitions;
 - (iii) If the Subcontractor provides written justification to substantiate the propriety of the markings within the period set in subparagraph 5.a.(i) of this Article, the Contractor, in coordination with DOE, shall consider such written justification and determine whether or not the markings are to be cancelled or ignored. If the DOE Contracting Officer determines that the markings are authorized, the Subcontractor shall be notified in writing. If the Contractor determines, with concurrence of the DOE Contracting Officer, that the markings are not authorized, the Contractor shall furnish the Subcontractor a written determination, which determination shall become the final decision regarding the appropriateness of the markings, unless the Subcontractor files suit in a court of competent jurisdiction within 90 days of receipt of the Contractor's decision. The Contractor and DOE shall continue to abide by the markings under this subparagraph 5.a.(iii) until final resolution of the matter either by the Contractor's determination becoming final (in which instance the Government and the Contractor shall thereafter have the right to cancel or ignore the markings at any time and the data will no longer be made subject to any disclosure prohibitions), or by final disposition of the matter by court decision if suit is filed.
 - b. The time limits in the procedures set forth in subparagraph 5.a of this Article may be modified in accordance with agency regulations implementing the Freedom of Information Act (5 U.S.C. 552) if necessary to respond to a request thereunder.
 - c. This Paragraph 5 does not apply if this Subcontract is for a major system or for support of a major system by a civilian agency other than NASA and the U.S. Coast Guard agency subject to the provisions of Title In of the Federal Property and Administrative services Act of 1949.
 - d. Except to the extent the Contractor's action occurs as the result of the final disposition of the matter by a court competent jurisdiction, the Subcontractor is not precluded by this Paragraph 5 from bringing a claim pursuant to the Disputes Article of this Subcontract, as applicable, that may arise as the result of the Contractor removing or ignoring authorized markings on data delivered under this Subcontract.
6. Omitted or incorrect marking
- a. Data delivered to the Contractor without either the limited rights or restricted rights notice as authorized by Paragraph 7 of this Article, or the copyright notice required by Paragraph 3 of this Article, shall be deemed to have been furnished with unlimited rights, and the Government and Contractor assume no liability for the disclosure, use, or reproduction of such data. However, to the extent the data has not been disclosed without restriction outside the Government, the Subcontractor may request, within six (6) months (or a longer time approved by the Contractor for good cause shown) after delivery of such data, permission to have notices placed on qualifying data at the Subcontractor's expense, and the Contractor, in coordination with DOE, may agree to do so if the Subcontractor:
 - (i) Identifies the data to which the omitted notice is to be applied;
 - (ii) Demonstrates that the omission of the notice was inadvertent;
 - (iii) Establishes that the use of the proposed notice is authorized; and
 - (iv) Acknowledges that the Government and the Contractor have no liability with respect to the disclosure, use, or reproduction of any such data made prior to the addition of the notice or resulting from the omission of the notice.
 - b. The Contractor, in coordination with DOE, may also:

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

(i) Permit correction at the Subcontractor's expense of incorrect notices if the Subcontractor identifies the data on which correction of the notice is to be made, and demonstrates that the correct notice is authorized, or

(ii) Correct any incorrect notices.

7. Protection of limited rights data and restricted computer software

a. When data other than that listed in subparagraphs 2.a. (i), (ii), and (iii) of this Article are specified to be delivered under this Subcontract and qualify as either limited rights data or restricted computer software, if the Subcontractor desires to continue protection of such data, the Subcontractor shall withhold such data and not furnish them to the Contractor under this Subcontract. As a condition to this withholding, the Subcontractor shall identify the data being withheld and furnish form, fit, and function data in lieu thereof. Limited rights data that are formatted as a computer database for delivery to the Contractor are to be treated as limited rights data and not restricted computer software.

b. Notwithstanding subsection 7.a of this Article, the contract may identify and specify the delivery of limited rights data, or Contractor's Contract Specialist may require by written request the delivery of limited rights data that has been withheld or would otherwise be withholdable. If delivery of such data is so required, the Subcontractor may affix the following "Limited Rights Notice" to the data and the Contractor will thereafter treat the data, subject to the provisions of sections 5 and 6 of this Article, in accordance with such Notice:

"LIMITED RIGHTS NOTICE

a. These data are submitted with limited rights under Contract No. _____ between _____ (Subcontractor) and Battelle Energy Alliance, LLC (Contractor), acting in its capacity as a Management and Operating Contractor to the U.S. Department of Energy at the Idaho National Laboratory. These data may be reproduced and used by the Government and Contractor with the express limitation that they will not, without written permission of the Subcontractor, be used for purposes of manufacture nor disclosed outside the Government or Contractor; except that the Government or Contractor may disclose these data outside the Government or Contractor for the following purposes, if any; provided the Government or Contractor make such disclosure subject to prohibition against further use and disclosure:

(1) use (except for manufacture) by support services contractors or subcontractors within the scope of their contracts or subcontracts;

(2) this "limited rights data" may be disclosed for evaluation purposes under the restriction that the "limited rights data" be retained in confidence and not be further disclosed;

(3) this "limited rights data" may be disclosed to other contractors or subcontractors participating in the Government's program of which this Contract is a part for information or use (except for manufacture) in connection with the work performed under their contracts or subcontracts and under the restriction that the "limited rights data" be retained in confidence and not be further disclosed;

(4) this "limited rights data" may be used by the Government or others on its behalf for emergency repair or overhaul work under the restriction that the "limited rights data" be retained in confidence and not be further disclosed;

(5) release to a foreign government, or instrumentality thereof, as the interests of the United States Government may require, for information or evaluation, or for emergency repair or overhaul work by such government.

(b) This Notice shall be marked on any reproduction of these data, in whole or in part." (End of Notice)

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

8. Subcontracting

The Subcontractor has the responsibility to obtain from its Lower-tier Subcontractors all data and rights therein necessary to fulfill the Subcontractor's obligations under this Subcontract. If a Lower-tier Subcontractor refuses to accept terms affording the Government and the Contractor such rights, the Subcontractor shall promptly bring such refusal to the attention of the Contractor and not proceed with the lower-tier subcontract award without written authorization by the Contractor.

9. Relationship to patents

Nothing contained in this Article shall imply a license to the Government under any patent or be construed as affecting the scope of any license or other right otherwise granted to the Government.

10. Inspection

The Subcontractor agrees, except as may be otherwise specified in this Subcontract for specific data items listed as not subject to this paragraph, that the DOE Contracting Officer or an authorized representative may, up to three (3) years after acceptance of all items to be delivered under this Subcontract, inspect at Subcontractor's facility any data withheld pursuant to Paragraph 7 of this Article for purposes of verifying Subcontractor's assertion pertaining to the limited rights or restricted rights status of the data or for evaluating work performance. Where the Subcontractor whose data are to be inspected demonstrates to the DOE Contracting Officer that there would be a possible conflict of interest if the inspection were made by a particular representative, the DOE Contracting Officer shall designate an alternate inspector.

A.7 Patent Rights – Small Business Firms or Nonprofit Organizations

This Article A.10 applies in subcontracts for experimental, developmental, demonstration or research work to be performed by a small business or domestic nonprofit organization. (In this Article only, "Contracting Officer" means the DOE Contracting Officer and does not refer to any Contractor personnel.)

1. Definitions

- a. "Invention" means any invention or discovery that is or may be patentable or otherwise protectable under title 35 of the United States Code, or any novel variety of plant which is or may be protected under the Plant Variety Protection Act (7 U.S.C. 2321, et seq.).
- b. "Made" when used in relation to any invention means the conception or first actual reduction to practice of such invention.
- c. "Nonprofit organization" means a university or other institution of higher education or an organization of the type described in section 501 (c) (3) of the Internal Revenue Code of 1954 (26 U.S.C. 501 (c) and exempt from taxation under section 501(a) of the Internal Revenue Code (26 U.S.C. 501(a) or any nonprofit scientific or educational organization qualified under a state nonprofit organization statute.
- d. "Practical application" means: to manufacture, in the case of a composition or product; to practice, in the case of a process or method; or to operate, in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or Government regulations, available to the public on reasonable terms.
- e. "Small business firm" means a small business concern as defined at section 2 of Pub. L. 85-536(15 U.S.C. 632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this article, the size standards for small business concerns involved in Government, procurement and Subcontracting at 13 CFR 121.3-8 and 13 CFR 121.3-12, respectively, will be used.
- f. "Subject invention" means any invention of the Subcontractor conceived or first actually reduced to practice in the performance of work under this Subcontract, provided that in the case of a variety of plant, the date of determination (as defined in section 41(d) of the Plant Variety Protection Act, 7 U.S.C. 2401(d) must also occur during the period of contract performance.

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

g. “Agency licensing regulations” and “agency regulations concerning the licensing of Government-owned inventions” mean the Department of Energy patent licensing regulations at 10 CFR Part 781.

h. “Patent Counsel”, as used in this Article, means the Department Energy Patent Counsel assisting the procuring activity.

2. Allocation of principal rights

The Subcontractor may retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this Article and 35 U.S.C. 203. With respect to any subject invention in which the Subcontractor retains title, the Federal Government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice, or have practiced for or on behalf of the United States, the subject invention throughout the world.

3. Invention disclosure, election of title, and filing of patent application by Subcontractor

a. The Subcontractor will disclose each subject invention to the DOE within two (2) months after the inventor discloses it in writing to its personnel responsible for patent matters. The disclosure shall be in the form of a written report and shall identify the contract under which the invention was made and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding, to the extent known at the time of the disclosure, of the nature, purpose, operation, and the physical, chemical, biological or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure, the Subcontractor will promptly notify that agency of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the Subcontractor.

b. The Subcontractor will elect in writing whether or not to retain title to any such invention by notifying DOE and Contractor within two (2) years of disclosure. However, in any case where publication, on sale or public use has initiated the one (1) year statutory period wherein valid patent protection can still be obtained in the United States, the period for election of title may be shortened by DOE to a date that is no more than 60 days prior to the end of the statutory period.

c. The Subcontractor will file its initial patent application on a subject invention to which it elects to retain title within one (1) year after election of title or, if earlier, prior to the end of any statutory period wherein valid patent protection can be obtained in the United States after a publication, on sale, or public use. The Subcontractor will file patent applications in additional countries or international patent offices within the earlier of 10 months of the corresponding initial patent application or six (6) months from the date permission is granted by the Commissioner of Patents and Trademarks to file foreign patent applications where such filing has been prohibited by a Secrecy Order.

d. Requests for extension of the time for disclosure, election, and filing under subparagraphs 3.a, b and c of this Article may, at the discretion of the DOE, be granted.

4. Conditions when the Government may obtain title. The Subcontractor will convey to DOE, upon written request, title to any subject invention:

a. If the Subcontractor fails to disclose or elect title to the subject invention within the times specified in Paragraph 3 of this Article, or elects not to retain title; provided, that DOE may only request title within 60 days after learning of the failure of the Subcontractor to disclose or elect within the specified times.

b. In those countries in which the Subcontractor fails to file applications within the times specified in Paragraph 3 of this Article; provided, however, that if the Subcontractor has filed a patent application in a country after the times specified in Paragraph 3 of this Article, but prior to its receipt of the written request from DOE, the Subcontractor shall continue to retain title in that country.

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

c. In any country in which the Subcontractor decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in reexamination or opposition proceeding on, a patent on a subject invention.

5. Minimum rights to Subcontractor and protection of the Subcontractor right to file.

a. The Subcontractor will retain a nonexclusive royalty-free license throughout the world in each subject invention to which the Government obtains title, except if the Subcontractor fails to disclose the invention within the times specified in Paragraph 3 of this Article. The Subcontractor's license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the Subcontractor is a party and includes the right to grant sublicenses of the same scope to the extent the Subcontractor was legally obligated to do so at the time the contract was awarded. The license is transferable only with the approval of DOE; except when transferred to the successor of the part of the Subcontractor's business to which the invention pertains.

b. The Subcontractor's domestic license may be revoked or modified by DOE to the extent necessary to achieve expeditious practical application of subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions at 37 CFR Part 404 and DOE licensing regulations. This license will not be revoked in that field of use or the geographical areas in which the Subcontractor has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of DOE to the extent the Subcontractor, its licensees, or domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.

c. Before revocation or modification of the license, DOE will furnish the Subcontractor a written notice of its intention to revoke or modify the license, and the Subcontractor will be allowed 30 days (or such other time as may be authorized by DOE for good cause shown by the Subcontractor) after the notice to show cause why the license should not be revoked or modified. The Subcontractor has the right to appeal, in accordance with applicable regulations in 37 CFR Part 404 and agency regulations concerning the licensing of Government-owned inventions, any decision concerning the revocation or modification of the license.

6. Subcontractor action to protect the Government's interest

a. The Subcontractor agrees to execute or to have executed and promptly deliver to DOE all instruments necessary to:

(i) Establish or confirm the rights the Government has throughout the world in those subject inventions to which the Subcontractor elects to retain title; and

(ii) Convey title to DOE when requested under Paragraph 4 of this Article and to enable the Government to obtain patent protection throughout the world in that subject invention.

b. The Subcontractor agrees to require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly, in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the Subcontractor, each subject invention made under this Subcontract in order that the Subcontractor can comply with the disclosure provisions of Paragraph 3 of this Article, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. This disclosure format should require, as a minimum, the information required by subparagraph 3.a of this Article. The Subcontractor shall instruct such employees, through employee agreements or other suitable educational programs, on the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.

c. The Subcontractor will notify DOE and the Contractor of any decision not to continue the prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than 30 days before the expiration of the response period required by the relevant patent office.

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

d. The Subcontractor agrees to include, within the specification of any United States patent application and any patent issuing thereon covering a subject invention, the following statement, "This invention was made with Government support under (identify the Subcontract) awarded by the United States Department of Energy. The Government has certain rights in the invention."

7. Subcontracts

a. The Subcontractor will include this Article, suitably modified to identify the parties, in all Lower-tier Subcontracts, regardless of tier, for experimental, developmental, or research work to be performed by a small business firm or domestic nonprofit organization. The Lower-tier Subcontractor will retain all rights provided for the Subcontractor in this Article, and the Subcontractor will not, as part of the consideration for awarding a Subcontract, obtain rights in a Lower-tier Subcontractor's subject invention.

b. The Subcontractor shall include in all other Lower-tier Subcontracts, regardless of tier, for experimental, developmental, demonstration, or research work the patent rights article at DEAR 952.227-13.

c. In the case of Lower-tier Subcontracts, at any tier, DOE, the Lower-tier Subcontractor, and the Subcontractor agree that the mutual obligations of the parties created by this Article constitute a contract between the Lower-tier Subcontractor and DOE with respect to the matters covered by this Article; provided, however, that nothing in this paragraph is intended to confer any jurisdiction under the Contract Disputes Act in connection with proceedings under Paragraph 10 of this Article.

8. Reporting on utilization of subject inventions

The Subcontractor agrees to submit, on request, periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by the Subcontractor or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Subcontractor, and such other data and information as DOE may reasonably specify. The Subcontractor also agrees to provide additional reports as may be requested by DOE in connection with any march-in proceeding undertaken by that agency in accordance with Paragraph 10 of this Article. As required by 35 U.S.C. 202 (c)(5), DOE agrees it will not disclose such information to persons outside the Government without permission of the Subcontractor.

9. Preference for United States Industry

Notwithstanding any other provision of this Article, the Subcontractor agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell any subject invention in the United States, unless such person agrees that any product embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement for such an agreement may be waived by DOE upon a showing by the Subcontractor or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

10. March-in-rights

The Subcontractor agrees that, with respect to any subject invention in which it has acquired title, DOE has the right in accordance with the procedures in 37 CFR 401.6 and any supplemental regulations of the agency to require the Subcontractor, an assignee or exclusive licensee of a subject invention to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and, if the Subcontractor, assignee, or exclusive licensee refuses such a request, DOE has the right to grant such a license itself if DOE determines that:

a. Such action is necessary because the Subcontractor or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use;

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

- b. Such action is necessary to alleviate health or safety needs that are not reasonably satisfied by the Subcontractor, assignee, or their licensees;
- c. Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the Subcontractor, assignee, or licensees; or
- d. Such action is necessary because the agreement required by Paragraph 9 of this Article has not been obtained or waived or because a licensee of the exclusive right to use or sell any subject invention in the United States is in breach of such agreement.

11. Special provisions for subcontracts with nonprofit organizations

If the Subcontractor is a nonprofit organization, it agrees that:

- a. Rights to a subject invention in the United States may not be assigned without the approval of DOE, except where such assignment is made to an organization which has as one of its primary functions the management of inventions; provided, that such assignee will be subject to the same provisions as the Subcontractor;
- b. The Subcontractor will share royalties collected on a subject invention with the inventor, including Federal employee co-inventors (when DOE deems it appropriate), when the subject invention is assigned in accordance with 35 U.S.C. 202(e) and 37 CFR 401.10;
- c. The balance of any royalties or income earned by the Subcontractor with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of subject inventions will be utilized for the support of scientific research or education; and
- d. It will make efforts that are reasonable under the circumstances to attract licensees of subject inventions that are small business firms, and that it will give a preference to a small business firm when licensing a subject invention, if the Subcontractor determines that the small business firm has a plan or proposal for marketing the invention which, if executed, is equally as likely to bring the invention to practical application as any plans or proposals from applicants that are not small business firms; provided, that the Subcontractor is also satisfied that the small business firm has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of the Subcontractor. However, the Subcontractor agrees that the Secretary of Commerce may review the Subcontractor's licensing program and decisions regarding small business applicants, and the Subcontractor will negotiate changes to its licensing policies, procedures, or practices with the Secretary of Commerce when that Secretary's review discloses that the Subcontractor could take reasonable steps to more effectively implement the requirements of this subparagraph 11.d.

12. Communications

- a. The Subcontractor shall direct any notification, disclosure, or request to DOE provided for in this Article to the DOE Patent Counsel assisting the procuring activity, with a copy of the communication to the Contracting Officer and the Contractor.
- b. Each exercise of discretion or decision provided for in this Article, except subparagraph 11.d, is reserved for the DOE Patent Counsel and is not a claim or dispute and is not subject to the Contract Disputes Act of 1978.
- c. Upon request of the DOE Patent Counsel or the Contracting Officer, the Subcontractor shall provide any or all of the following:
 - (i) A copy of the patent application, filing date, serial number and title, patent number, and issue date for any subject invention in any country in which the Subcontractor has applied for a patent;
 - (ii) A report, not more often than annually, summarizing all subject inventions which were disclosed to DOE individually during the reporting period specified; or
 - (iii) A report, prior to close-out of this Subcontract, listing all subject inventions or stating that there were none.

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

A.8 Patent Rights – Other than Small Business Firms or Nonprofit Organizations

This Article A.11 applies in subcontracts, for experimental, developmental, demonstration or research work to be performed by other than a small business or domestic nonprofit organization. (In this Article only, “Contracting Officer” means the DOE Contracting Officer and does not refer to any Contractor personnel.)

1. Definitions

- a. "Invention" as used in this Article, means any invention or discovery that is or may be patentable or otherwise protectable under title 35 of the United States Code or any novel variety of plant that is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321, et seq.).
- b. "Practical application" as used in this Article, means: to manufacture, in the case of a composition or product; to practice, in the case of a process or method; or to operate, in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or Government regulations, available to the public on reasonable terms.
- c. "Subject invention" as used in this Article, means any invention of the Subcontractor conceived or first actually reduced to practice in the course of or under this Subcontract.
- d. "Patent Counsel" as used in this Article, means the Department of Energy Patent Counsel assisting the procuring activity.
- e. "DOE patent waiver regulations" as used in this Article, means the Department of Energy patent waiver regulations at 41 CFR 9-9.109- 6 or successor regulations. See 10 CFR part 784.
- f. "Agency licensing regulations" and "applicable agency licensing regulations" as used in this Article, mean the Department of Energy patent licensing regulations at 10 CFR Part 781.
- g. “Made” when used in relation to any invention means the conception or first actual reduction to practice of such invention.

2. Allocations of principal rights

- a. Assignment to the Government. The Subcontractor agrees to assign to the Government the entire right, title, and interest throughout the world in and to each subject invention, except to the extent that rights are retained by the Subcontractor under subparagraph 2.b and Paragraph 4 of this Article.
- b. Greater rights determinations.
 - (i) The Subcontractor, or an employee-inventor after consultation with the Subcontractor, may request greater rights than the nonexclusive license and the foreign patent rights provided in Paragraph 4 of this Article on identified inventions in accordance with the DOE patent waiver regulations. A request for a determination of whether the Subcontractor or the employee-inventor is entitled to acquire such greater rights must be submitted to the Patent Counsel with a copy to the Contracting Officer and the Contractor at the time of the first disclosure of the invention pursuant to subparagraph 5.b of this Article, or not later than eight (8) months thereafter, unless a longer period is authorized in writing by the Contracting Officer for good cause shown in writing by the Subcontractor. Each determination of greater rights under this contract shall be subject to Paragraph 3 of this Article, unless otherwise provided in the greater rights determination, and to the reservations and conditions deemed to be appropriate by the Secretary of Energy or designee.
 - (ii) Within two (2) months after the filing of a patent application, the Subcontractor shall provide the filing date, serial number and title, a copy of the patent application (including an English-language version if filed in a language other than English), and, promptly upon issuance of a patent, provide the patent number and issue date for any subject invention in any country for which the Subcontractor has been granted title or the right to file and prosecute on behalf of the United States by the Department of Energy.

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

(iii) Not less than 30 days before the expiration of the response period for any action required by the Patent and Trademark Office, Subcontractor or inventor must notify the Patent Counsel and the Contractor of any decision not to continue prosecution of the application.

(iv) Upon request, the Subcontractor shall furnish the Government an irrevocable power to inspect and make copies of the patent application file.

3. Minimum rights acquired by the Government

a. With respect to each subject invention to which the Department of Energy grants the Subcontractor principal or exclusive rights, the Subcontractor agrees as follows:

(i) The Subcontractor hereby grants to the Government a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced each subject invention throughout the world by or on behalf of the Government of the United States (including any Government agency).

(ii) The Subcontractor agrees that with respect to any subject invention in which DOE has granted it title, DOE has the right, in accordance with the procedures in the DOE patent waiver regulations (10 CFR part 784), to require the Subcontractor, an assignee, or exclusive licensee of a subject invention to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and if the Subcontractor, assignee, or exclusive licensee refuses such a request, DOE has the right to grant such a license itself if it determines that: (1) such action is necessary because the Subcontractor or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use; (2) such action is necessary to alleviate health or safety needs, which are not reasonably satisfied by the Subcontractor, assignee, or their licensees; (3) such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the Contractor, assignee, or licensees; or (4) such action is necessary because the agreement required by Paragraph 9 of this Article has neither been obtained nor waived or because a licensee of the exclusive right to use or sell any subject invention in the United States is in breach of such agreement.

(iii) The Subcontractor agrees to submit, on request, periodic reports, no more frequently than annually, on the utilization of a subject invention or on efforts at obtaining such utilization of a subject invention or on efforts at obtaining such utilization that are being made by the Subcontractor or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Subcontractor, and such other data and information as DOE may reasonably specify. The Subcontractor also agrees to provide additional reports as may be requested by DOE in connection with any march-in proceedings undertaken by that agency in accordance with subparagraph 3.a(ii) of this Article. To the extent data or information supplied under this section is considered by the Subcontractor, its licensee, or assignee to be privileged and confidential and is so marked, the Department of Energy agrees that, to the extent permitted by law, it will not disclose such information to persons outside the Government.

(iv) The Subcontractor agrees, when licensing a subject invention, to arrange to avoid royalty charges on acquisitions involving Government funds, including funds derived through a Military Assistance Program of the Government or otherwise derived through the Government, to refund any amounts received as royalty charges on a subject invention in acquisitions for, or on behalf of, the Government, and to provide for such refund in any instrument transferring rights in the invention to any party.

(v) The Subcontractor agrees to provide for the Government's paid-up license pursuant to subparagraph 3.a(i) of this Article in any instrument transferring rights in a subject invention and to provide for the granting of licenses as required by subparagraph 3.a(ii) of this Article, and for the reporting of utilization information as required by subparagraph 3.a(iii) of this Article, whenever the instrument transfers principal or exclusive rights in a subject invention.

b. Nothing contained in this Paragraph 3 shall be deemed to grant to the Government any rights with respect to any invention other than a subject invention.

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

4. Minimum rights to the Subcontractor

a. The Subcontractor is hereby granted a revocable, nonexclusive, royalty-free license in each patent application filed in any country on a subject invention and any resulting patent in which the Government obtains title, unless the Subcontractor fails to disclose the subject invention within the times specified in subparagraph 5.b of this Article. The Subcontractor's license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the Subcontractor is a part and includes the right to grant sublicenses of the same scope to the extent the Subcontractor was legally obligated to do so at the time the contract was awarded. The license is transferable only with the approval of DOE except when transferred to the successor of that part of the Subcontractor's business to which the invention pertains.

b. The Subcontractor's domestic license may be revoked or modified by DOE to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions in 37 CFR Part 404 and agency licensing regulations. This license will not be revoked in that field of use or the geographical areas in which the Subcontractor has achieved practical applications and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of DOE to the extent the Contractor, its licensees, or its domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.

c. Before revocation or modification of the license, DOE will furnish the Subcontractor a written notice of its intention to revoke or modify the license, and the Subcontractor will be allowed 30 days (or such other time as may be authorized by DOE for good cause shown by the Subcontractor) after the notice to show cause why the license should not be revoked or modified. The Subcontractor has the right to appeal, in accordance with applicable agency licensing regulations and 37 CFR Part 404 concerning the licensing of Government-owned inventions, any decision concerning the revocation or modification of its license.

d. The Subcontractor may request the right to acquire patent rights to a subject invention in any foreign country where the Government has elected not to secure such rights, subject to the conditions in subparagraphs 4.d.(i) through 4.d.(vii) of this Article. Such request must be made in writing to the Patent Counsel as part of the disclosure required by subparagraph 5.b of this Article, with a copy to the DOE Contracting Officer and the Contractor. DOE approval, if given, will be based on a determination that this would best serve the national interest.

(i) The recipient of such rights, when specifically requested by DOE, and three years after issuance of a foreign patent disclosing the subject invention, shall furnish DOE a report stating:

- The commercial use that is being made, or is intended to be made, of said invention; and
- The steps taken to bring the invention to the point of practical application or to make the invention available for licensing.

(ii) The Government shall retain at least an irrevocable, nonexclusive, paid-up license to make, use, and sell the invention throughout the world by, or on behalf of, the Government (including any Government agency) and States and domestic municipal governments, unless the Secretary of Energy or designee determines that it would not be in the public interest to acquire the license for the States and domestic municipal governments.

(iii) If noted elsewhere in this Subcontract as a condition of the grant of an advance waiver of the Government's title to inventions under this subcontract, or, if no advance waiver was granted but a waiver of the Government's title to an identified invention is granted pursuant to subparagraph 2.b of this Article upon a determination by the Secretary of Energy that it is in the Government's best interest, this license shall include the right of the Government to sublicense foreign governments pursuant to any existing or future treaty or agreement with such foreign governments.

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

(iv) Subject to the rights granted in subparagraphs 4.a, b and c of this Article, the Secretary of Energy or designee shall have the right to terminate the foreign patent rights granted in this subparagraph 4.d in whole or in part, unless the recipient of such rights demonstrates to the satisfaction of the Secretary of Energy or designee that effective steps necessary to accomplish substantial utilization of the invention have been taken or within a reasonable time will be taken.

(v) Subject to the rights granted in subparagraphs 4.a, b and c of this Article, the Secretary of Energy or designee shall have the right, commencing four years after foreign patent rights are accorded under this subparagraph 4.d to require the granting of a nonexclusive or partially exclusive license to a responsible applicant or applicants, upon terms reasonable under the circumstances, and in appropriate circumstances to terminate said foreign patent rights in whole or in part, following a hearing upon notice thereof to the public, upon a petition by an interested person justifying such hearing:

- If the Secretary of Energy or designee determines, upon review of such material as he deems relevant, and after the recipient of such rights or other interested person has had the opportunity to provide such relevant and material information as the Secretary or designee may require, that such foreign patent rights have tended substantially to lessen competition or to result in undue market concentration in any section of the United States in any line of commerce to which the technology relates; or
- Unless the recipient of such rights demonstrates to the satisfaction of the Secretary of Energy or designee at such hearing that the recipient has taken effective steps, or within a reasonable time thereafter is expected to take such steps, necessary to accomplish substantial utilization of the invention.

(vi) If the Subcontractor is to file a foreign patent application on a subject invention, the Government agrees, upon written request, to use its best efforts to withhold publication of such invention disclosures for such period of time as specified by Patent Counsel, but in no event shall the Government or its employees be liable for any publication thereof.

(vii) Subject to the license specified in subparagraphs 4.a, b, and c of this Article, the Subcontractor or inventor agrees to convey to the Government, upon request, the entire right, title, and interest in any foreign country in which the Subcontractor or inventor fails to have a patent application filed in a timely manner or decides not to continue prosecution or to pay any maintenance fees covering the invention. To avoid forfeiture of the patent application or patent, the Subcontractor or inventor shall, not less than 60 days before the expiration period for any action required by any patent office, notify the Patent Counsel, with copy to Contractor, of such failure or decision, and deliver to the Patent Counsel, the executed instruments necessary for the conveyance specified in this paragraph.

5. Invention identification, disclosures, and reports

a. The Subcontractor shall establish and maintain active and effective procedures to assure that subject inventions are promptly identified and disclosed to Subcontractor personnel responsible for patent matters within six (6) months of conception and/or first actual reduction to practice, whichever occurs first in the performance of work under its contract. These procedures shall include the maintenance of laboratory notebooks or equivalent records and other records as are reasonably necessary to document the conception and/or the first actual reduction to practice of subject inventions, and records that show that the procedures for identifying and disclosing the inventions are followed. Upon request, the Subcontractor shall furnish the Contracting Officer a description of such procedures for evaluation and for determination as to their effectiveness.

b. The Subcontractor shall disclose each subject invention to the DOE Patent Counsel with a copy to the Contracting Officer and Contractor, within two (2) months after the inventor discloses it in writing to Subcontractor personnel responsible for patent matters or, if earlier, within six (6) months after the Subcontractor becomes aware that a subject invention has been made, but in any event before any on sale, public use, or publication of such invention known to the Subcontractor. The disclosure shall be in the form of a written report and shall identify the subcontract under which the invention was made and

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding, to the extent known at the time of the disclosure, of the nature, purpose, operation, and physical, chemical, biological, or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale, or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to DOE, the Subcontractor shall promptly notify Patent Counsel, with copy to the Contractor, of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the Subcontractor. The report should also include any request for a greater rights determination in accordance with subparagraph 2.b of this Article. When an invention is disclosed to DOE under this paragraph, it shall be deemed to have been made in the manner specified in Sections (a)(1) and (a)(2) of 42 U.S.C. 5908, unless the Contractor contends in writing at the time the invention is disclosed that was not so made.

c. The Subcontractor shall furnish the Contracting Officer, with a copy to the Contractor, the following:

(i) Interim reports every 12 months (or such longer period as may be specified by the Contracting Officer) from the date of this Subcontract, listing all subject inventions during that period, and including a statement that all subject inventions have been disclosed (or that there are not such inventions), and that such disclosure has been made in accordance with the procedures required by subparagraph 5.a of this Article.

(ii) A final report, within three (3) months after completion of the work, listing all subject inventions or containing a statement that there were no such inventions, and listing all Lower-tier Subcontracts at any tier containing a patent rights article or containing a statement that there were no such Lower-tier Subcontracts.

d. The Subcontractor agrees to require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly, in writing, to personnel identified as responsible for the administration of patent matters and in a format suggested by the Subcontractor, each subject invention made under this Subcontract, in order that the Subcontractor can comply with the disclosure provisions of Paragraph 3 of this Article, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. This disclosure format should require, as a minimum, the information required by subparagraph 5.b of this Article.

e. The Subcontractor agrees, subject to FAR 27.302(j), that the Government may duplicate and disclose subject invention disclosures and all other reports and papers furnished or required to be furnished pursuant to this Article.

6. Examination of records relating to inventions.

a. The Contracting Officer or any authorized representative shall, until three (3) years after final payment under this Subcontract, have the right to examine any books (including laboratory notebooks), records, and documents of the Subcontractor relating to the conception or first actual reduction to practice of inventions in the same field of technology as the work under this Subcontract to determine whether:

(i) Any such inventions are subject inventions;

(ii) The Subcontractor has established and maintains the procedures required by subparagraphs 5.a and d of this Article; and

(iii) The Contractor and its inventors have complied with the procedures.

b. If the Contracting Officer learns of an unreported Subcontractor invention that the Contracting Officer believes may be a subject invention, the Subcontractor may be required to disclose the invention to DOE for a determination of ownership rights.

c. Any examination of records under this paragraph will be subject to appropriate conditions to protect the confidentiality of the information involved.

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

7. Withholding of payment

a. Any time before final payment under this Subcontract, the Contractor may, withhold payment until a reserve not exceeding \$50,000 or 5% of the amount of this Subcontract, whichever is less, shall have been set aside if, in the Contractor's opinion, the Subcontractor fails to:

- (i) Convey to the Government, using a DOE-approved form, the title and/or rights of the Government in each subject invention as required by this Article;
- (ii) Establish, maintain, and follow effective procedures for identifying and disclosing subject inventions pursuant to subparagraph 5.a of this Article;
- (iii) Disclose any subject invention pursuant to subparagraph 5.b of this Article;
- (iv) Deliver acceptable interim reports pursuant to subparagraph 5.c(i) of this Article; or
- (v) Provide the information regarding subcontracts pursuant to subparagraph 8.d of this Article.

b. Such reserve or balance shall be withheld until the Contractor has determined that the Subcontractor has rectified whatever deficiencies exist and has delivered all reports, disclosures, and other information required by this Article.

c. Final payment under this Subcontract shall not be made before the Subcontractor delivers to the Contractor or DOE Contracting Officer all disclosures of subject inventions required by subparagraph 5.b of this Article, and an acceptable final report pursuant to subparagraph 5.c(ii) of this Article, and the Patent Counsel has issued a patent clearance certification.

d. The Contractor may decrease or increase the sums withheld up to the maximum authorized above. No amount shall be withheld under this paragraph while the amount specified by this paragraph is being withheld under other provisions of this Subcontract. The withholding of any amount or the subsequent payment thereof shall not be construed as a waiver of any Contractor rights under this Subcontract.

8. Subcontracts

a. The article at 48 CFR 952.227-11 (suitably modified to identify the parties) is incorporated into, and shall be incorporated into all Lower-tier Subcontracts, regardless of tier, for experimental, developmental, demonstration, or research work to be performed by a small business firm or domestic nonprofit organization, except where the work of the Lower-tier Subcontract is subject to an Exceptional Circumstances Determination by DOE. The Subcontractor shall not, as part of the consideration for awarding a Lower-tier Subcontract, obtain rights in its Lower-tier Subcontractor's subject inventions.

b. In the event of a refusal by a prospective Lower-tier Subcontractor to accept such an article, the Subcontractor:

- (i) Shall promptly submit a written notice to the Contracting Officer setting forth the Lower-tier Subcontractor's reasons for such refusal and other pertinent information that may expedite disposition of the matter; and
- (ii) Shall not proceed with such Lower-tier Subcontract without the written authorization of the Contracting Officer.

c. In the case of Lower-tier Subcontracts at any tier, DOE, the Subcontractor, and Contractor agree that the mutual obligations of the parties created by this Article constitute a contract between the Lower-tier Subcontractor(s) and DOE with respect to those matters covered by this Article.

d. The Subcontractor shall promptly notify the Contracting Officer in writing upon the award of any Lower-tier Subcontract at any tier containing a patent rights article by identifying the Lower-tier Subcontractor, the applicable patent rights article, the work to be performed under the Lower-tier Subcontract, and the dates of award and estimated completion. Upon request of the Contracting Officer, the Subcontractor shall furnish a copy of such Lower-tier Subcontract, and, no more frequently than annually, a listing of the Lower-tier Subcontracts that have been awarded.

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

e. The Subcontractor shall identify all subject inventions of a Lower-tier Subcontractor of which it acquires knowledge in the performance of this Subcontract and shall notify the Patent Counsel, with a copy to the Contracting Officer, promptly upon identification of the inventions.

9. Preference for United States Industry

Unless provided otherwise, no Subcontractor that receives title to any subject invention and no assignee of any such Subcontractor shall grant to any person the exclusive right to use or sell any subject invention in the United States, unless such person agrees that any products embodying the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement may be waived by the Government upon a showing by the Subcontractor or assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

10. Atomic energy

a. No claim for pecuniary award of compensation under the provisions of the Atomic Energy Act of 1954, as amended, shall be asserted with respect to any invention or discovery made or conceived in the course of, or under, this Subcontract.

b. Except as otherwise authorized in writing by the Contracting Officer, the Subcontractor will obtain patent agreements to effectuate the provisions of subparagraph 5.a of this Article from all persons who perform any part of the work under this contract, except nontechnical personnel, such as clerical employees and manual laborers.

11. Background Patents

a. Background Patent means a domestic patent covering an invention or discovery which is not a subject invention and which is owned or controlled by the Subcontractor at any time through the completion of this Subcontract:

(i) Which the Subcontractor, but not the Government, has the right to license to others without obligation to pay royalties thereon; and

(ii) Infringement of which cannot reasonably be avoided upon the practice of any specific process, method, machine, manufacture, or composition of matter (including relatively minor modifications thereof) which is a subject of the research, development, or demonstration work performed under this Subcontract.

b. The Subcontractor agrees to and does hereby grant to the Government a royalty-free, nonexclusive license under any background patent for purposes of practicing a subject of this Subcontract by or for the Government in research, development, and demonstration work only.

c. The Subcontractor also agrees that upon written application by DOE, it will grant to responsible parties, for purposes of practicing a subject of this Subcontract, nonexclusive licenses under any background patent on terms that are reasonable under the circumstances. If, however, the Subcontractor believes that exclusive rights are necessary to achieve expeditious commercial development or utilization, then a request may be made to DOE by the Subcontractor for DOE approval of such licensing.

d. Notwithstanding subparagraph 11.c of this Article, the Subcontractor shall not be obligated to license any background patent if the Subcontractor demonstrates to the satisfaction of the Secretary of Energy or designee that:

(i) A competitive alternative to the subject matter covered by said background patent is commercially available or readily introducible from one or more other sources; or

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

(ii) The Subcontractor or its licensees are supplying the subject matter covered by said background patent in sufficient quantity and at reasonable prices to satisfy market needs, or have taken effective steps or within a reasonable time are expected to take effective steps to so supply the subject matter.

12. Publication. It is recognized that during the course of the work under this contract, the Subcontractor or its employees may from time to time desire to release or publish information regarding scientific or technical developments conceived or first actually reduced to practice in the course of or under this Subcontract. In order that public disclosure of such information will not adversely affect the patent interests of DOE, the Contractor, or the Subcontractor, patent approval for release of publication shall be secured from Patent Counsel prior to any such release or publication.

13. Forfeiture of rights in unreported subject inventions

a. The Subcontractor shall forfeit and assign to the Government, at the request of the Secretary of Energy or designee, all rights in any subject invention which the Subcontractor fails to report to Patent Counsel within six months after the time the Subcontractor:

(i) Files or causes to be filed a United States or foreign patent application thereon; or

(ii) Submits the final report required by subparagraph 5.c.(ii) of this Article, whichever is later.

b. However, the Subcontractor shall not forfeit rights in a subject invention if, within the time specified in subparagraph 13.a of this Article, the Subcontractor:

(i) Prepares a written decision based upon a review of the record that the invention was neither conceived nor first actually reduced to practice in the course of, or under, this Subcontract and delivers the decision to Patent Counsel, with a copy to the Contracting Officer and the Contractor; or

(ii) Contending that the invention is not a subject invention, the Subcontractor nevertheless discloses the invention and all facts pertinent to this contention to the Patent Contracting Officer or Counsel, with a copy to the Contracting Officer and the Contractor; or

(iii) Establishes that the failure to disclose did not result from the Subcontractor's fault or negligence.

c. Pending written assignment of the patent application and patents on a subject invention determined by the Secretary of Energy or designee to be forfeited (such determination to be a final decision under the Disputes Article of this Subcontract), the Subcontractor shall be deemed to hold the invention and the patent applications and patents pertaining thereto in trust for the Government. The forfeiture provision of this Paragraph 13 shall be in addition to and shall not supersede other rights and remedies which the Government may have with respect to subject inventions.]

A.9 Allowable Cost and Payment

1. Invoicing

Contractor shall make payments to Subcontractor when requested, as work progresses, but not more often than once each calendar month, (except for small business concerns) in amounts determined to be allowable by Contractor in accordance with FAR 31.2 or FAR 31.1 for Educational Institutions or FAR 31.7 for Nonprofit Organizations and DEAR 931.2 (not applicable to Educational Institutions and Nonprofit Organizations) in effect on the date of this Subcontract, and the terms of this Subcontract. Subcontractor may submit to Contractor, in such form and in reasonable detail as Contractor may require, an invoice supported by a statement of the claimed allowable cost for performing this Subcontract. Reasonable detail of costs includes, but is not limited to:

a. Labor categories used;

b. Hours expended for each category;

c. Direct labor rate(s) for each category;

d. Direct labor cost for each category;

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

- e. Overhead rate(s) and total;
- f. G&A (if applicable);
- g. Travel costs (number of trips, number of days in a travel status; location of travel); and
- h. Material costs and other direct costs (with identification of purchases >\$5,000 per Unit).

2. Reimbursing Costs

a. For the purpose of reimbursing allowable costs (except as provided in subparagraph 2.b, with respect to pension, deferred profit sharing, and employee stock ownership plan contributions), the term “costs” includes only:

(i) Those recorded costs that, at the time of the request for reimbursement, Subcontractor has paid by cash, check, or other form of actual payment for items or services purchased directly for this Subcontract performance in the ordinary course of business;

(ii) Cost incurred, but not necessarily paid, for:

- Materials issued from Subcontractor’s inventory and placed in the production process for use on this Subcontract,
- Direct labor,
- Direct travel,
- Other direct in-house costs, and
- Properly allocable and allowable indirect costs, as shown in the records maintained by Subcontractor for purposes of obtaining reimbursement under subcontracts; and

(iii) The amount of progress payments that have been paid to Subcontractor’s Lower-tier Subcontractors under similar cost standards.

b. Subcontractor’s contributions to any pension, profit-sharing, or employee stock ownership plan funds that are paid quarterly, or more often, may be included in indirect costs for payment purposes; provided that Subcontractor pays the contribution to the fund within 30 days after the close of the period covered. Payments made 30 days or more after the close of a period shall not be included until Subcontractor actually makes the payment. Accrued costs for such contribution that are paid less often than quarterly shall be excluded from indirect costs for payment purposes until Subcontractor actually makes the payment.

c. Notwithstanding the audit and adjustment of invoices or vouchers under Paragraph 7 of this Article, allowable indirect costs under this Subcontract shall be obtained by applying indirect cost rates established in accordance with Paragraph 4.

d. Any statements in specifications or other documents incorporated in this Subcontract by reference designating performance of services or furnishing of materials at Subcontractor’s expense or at no cost to Contractor shall be disregarded for purpose of cost reimbursement under this Article.

3. Small Business Concerns

A small business concern may be paid every 2 weeks and may invoice and be paid for recorded costs for items or services purchased directly for this Subcontract, even though the concern has not yet paid for the items or services.

4. Final Indirect Cost Rates

a. Final annual indirect cost rates and the appropriate bases shall be established in accordance with FAR 42.7 and DEAR 942.7 in effect for the period covered by the indirect cost rate proposal.

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

b. Subcontractor shall, within 90 days after the expiration of each of its fiscal years, or by a later date approved by Contractor, submit to the cognizant Contracting Officer responsible for negotiating its final indirect cost rates and, if required by DOE procedures, to the cognizant audit activity, proposed final indirect cost rates for that period and supporting cost data specifying the Subcontract and any Lower-tier Subcontract(s) to which the rates apply. The proposed rates shall be based on Subcontractor's actual cost experience for that period. The appropriate Government representative and Subcontractor shall establish the final indirect cost rates as promptly as practical after receipt of Subcontractor's proposal.

c. Subcontractor and Contractor shall execute a written understanding setting forth the final indirect cost rates. The understanding shall specify:

- (i) The agreed-upon final annual indirect cost rates;
- (ii) The bases to which the rates apply;
- (iii) The periods for which the rates apply;
- (iv) Any specific indirect cost items treated as direct costs in the settlement; and
- (v) The affected Subcontract and/or Lower-tier Subcontract(s), identifying any with advance agreements or special terms and the applicable rates.

The understanding shall not change any monetary ceiling, contract obligation, or specific cost allowance or disallowance provided for in this Subcontract. The understanding is incorporated into this Subcontract upon execution.

d. Failure by the parties to agree on a final annual indirect cost rate shall be a dispute within the meaning of the Disputes Article.

5. Billing Rates

Until final annual indirect cost rates are established for any period, Contractor shall reimburse Subcontractor at billing rates established by Contractor or by any authorized representative (the cognizant auditor), subject to adjustment when the final rates are established. These billing rates shall be the anticipated final rates and may be prospectively or retroactively revised by mutual agreement, at either party's request, to prevent substantial overpayment or underpayment.

6. Quick-closeout Procedures

When Subcontractor and Contractor agree, the quick-closeout procedures of FAR 42.7 may be used.

7. Audit

At any time or times before final payment, Contractor may have Subcontractor's invoices or vouchers and statements of cost audited. Any payment may be reduced by amounts found by Contractor not to constitute allowable costs or adjusted for prior overpayments.

8. Final Payment

a. Subcontractor shall submit a completion invoice, designated as such, promptly upon completion of the work, but no later than 1 year (or longer, as Contractor may approve in writing) from the completion date. Upon approval of that invoice, and upon Subcontractor's compliance with all terms of this Subcontract, Contractor shall promptly pay any balance of allowable costs and that part of the fee (if any) not previously paid.

b. Subcontractor shall pay to Contractor any refunds, rebates, credits, or other amounts (including interest, if any) accruing to or received by Subcontractor or any assignee under this Subcontract, to the extent that those amounts are properly allocable to costs for which Subcontractor has been reimbursed by Contractor. Reasonable expenses incurred by Subcontractor for securing refunds, rebates, credits, or other amounts shall be allowable costs if approved by Contractor. Before final payment under this Subcontract, Subcontractor and each assignee whose assignment is in effect at the time of final payment shall execute and deliver—(i) An assignment to Contractor, in form and substance satisfactory to

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

Contractor, of refunds, rebates, credits, or other amounts (including interest, if any) properly allocable to costs for which Subcontractor has been reimbursed by Contractor under this Subcontract; and (ii) A release discharging the Contractor and the Government, their officers, agents, and employees, from all liabilities, obligations, and claims arising out of or under this Subcontract, except: specified claims stated in exact amounts, or in estimated amounts when the exact amounts are not known; claims including reasonable incidental expenses, based upon liabilities of Subcontractor to third parties arising out of the performance of this Subcontract, provided, that the claims are not known to Subcontractor on the date of the execution of the release, and that Subcontractor gives notice of the claims in writing to Contractor within six years following the release date or notice of final payment date, whichever is earlier; and claims for reimbursement of costs, including reasonable incidental expenses, incurred by Subcontractor under the patent clauses of this Subcontract, excluding, however, any expenses arising from Subcontractor's indemnification of Contractor or the Government against patent liability.

9. Determination of Allowability

In no case, however, shall the foregoing arrangement and provisions preclude determination by the Contractor of the allowability or unallowability of Subcontractor costs claimed for reimbursement by the Subcontractor.

A.10 Limitation of Cost

1. The parties estimate that performance of this Subcontract, exclusive of any fee, will not cost Contractor more than the total estimated cost specified. Subcontractor agrees to use its best efforts to perform the work and all obligations under this Subcontract within the total estimated cost.
2. Subcontractor shall notify Contractor in writing whenever it has reason to believe that:
 - a. The cost Subcontractor expects to incur under this Subcontract in the next 60 days when added to all costs previously incurred, will exceed 75% of the total estimated cost specified; or
 - b. The total estimated cost for the performance of this Subcontract, exclusive of any fee, will be either greater or substantially less than had been previously estimated.
3. As part of the notification, Subcontractor shall provide Contractor a revised estimate of the total cost of performing this Subcontract.
4. Except as required by other provisions of this Subcontract, specifically citing and stated to be an exception to this Article:
 - a. Contractor is not obligated to reimburse Subcontractor for costs incurred in excess of the total estimated cost specified; and
 - b. Subcontractor is not obligated to continue performance under this Subcontract (including actions under the Termination Article of this Subcontract) or otherwise incur costs in excess of the total estimated cost specified, until Contractor:
 - (i) Notifies Subcontractor by written modification of this Subcontract, that the total estimated cost has been increased and
 - (ii) Provides a revised total estimated cost of performing this Subcontract.
5. No notice, communication, or representation in any form other than that specified in subparagraph 4.b or from any person other than Contractor, shall affect the total estimated cost of this Subcontract to Contractor. In the absence of the specified notice, Contractor is not obligated to reimburse Subcontractor for any costs in excess of the total estimated cost, whether those excess costs were incurred during the course of this Subcontract or a result of termination.
- 6 If the total estimated cost is increased, any costs Subcontractor incurs before the increase that are in excess of the previously estimated cost shall be allowable to the same extent as if incurred afterward, unless

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

Contractor issues a termination or other notice directing that the increase is solely to cover termination or other specified expenses.

7. Change orders shall not be considered an authorization to exceed the total estimated cost unless they contain a statement specifically increasing the total estimated cost.

8. If this Subcontract is terminated or the total estimated cost is not increased, Contractor and Subcontractor shall negotiate an equitable distribution of all property produced or purchased under this Subcontract, based upon the share of costs incurred by each.

A.11 Payment for Overtime Premiums

1. The use of overtime is authorized under this Subcontract only for work:

- a. Necessary to cope with emergencies such as those resulting from accidents, natural disasters, breakdowns of production equipment, or occasional production bottlenecks of a sporadic nature;
- b. By indirect labor employees such as those performing duties in connection with administration, protection, transportation, maintenance, standby plant protection, operation of utilities, or accounting;
- c. To perform tests, industrial processes, laboratory procedures, loading or unloading of transportation conveyances, and operations in flight or afloat that are continuous in nature and cannot reasonably be interrupted or completed otherwise; or
- d. That will result in lower overall costs to Contractor.

2. Any request for estimated overtime premiums that does not involve the work specified in Paragraph 1 of this Article shall include all estimated overtime for Subcontract completion and shall:

- a. Identify the work unit, e.g., department or section in which the requested overtime will be used, together with present workload, staffing, and other data of the affected unit sufficient to permit Contractor to evaluate the necessity for the overtime;
- b. Demonstrate the effect that denial of the request will have on the Subcontract delivery or performance schedule;
- c. Identify the extent to which approval of overtime would affect the performance or payments in connection with other Government-related contracts, together with identification of each affected contract; and
- d. Provide reasons why the required work cannot be performed by using multi-shift operations or by employing additional personnel.

A.12 Subcontracting

Subcontractor shall select its Lower-tier Subcontractors on a competitive basis to the maximum practicable extent consistent with the objectives and requirements of this Subcontract.

A.13 Acquisition of Real Property

1. Notwithstanding any other provision of this Subcontract, the prior approval of the Contractor shall be obtained when, in performance of this Subcontract, the Subcontractor acquires or proposes to acquire use of real property by:

- a. Purchase, on the Contractor's behalf or in the Subcontractor's own name, with title eventually vesting in the Government.
- b. Lease, and the Contractor assumes liability for, or will otherwise pay for, the obligation under the lease as a reimbursable subcontract cost.

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

- c. Acquisition of temporary interest through easement, license or permit, and the Contractor funds the entire cost of the temporary interest.
2. Justification of and execution of any real property acquisitions shall be in compliance with directions provided by the Contractor.
3. The substance of this Article, including this Paragraph 3, shall be included in any Lower-tier Subcontract occasioned by this Subcontract, under which property described in Paragraph 1 of this Article will be acquired.

A.14 Legal Costs

1. Regarding any Legal Costs that Subcontractor proposes for reimbursement under this subcontract –
 - a. Subcontractor agrees to provide to Contractor (i) prior notice with regard to non-litigation Legal Costs, and (ii) prior or contemporaneous notice with regard to Legal Costs related to litigation; and
 - b. Subcontractor agrees to comply with Contractor's direction for managing such Legal Costs, including, without limitation, compliance with Contractor's Legal Management Plan.
2. For purposes of this clause, "Legal Costs" include, without limitation, administrative expenses associated with the provision of legal services by retained legal counsel or in-house attorneys; the costs of legal services provided by retained legal counsel; the costs of the services of accountants, consultants, or others retained by the Subcontractor or by retained legal counsel to assist retained legal counsel; and any similar costs incurred by or in connection with the services of retained legal counsel.

A.15 Cooperation with the Office of Inspector General (OIG)

1. The Subcontractor must ensure that all their employees understand that they must:
 - (i) Comply with requests for interviews and briefings and must provide affidavits or sworn statements, if so requested by an employee of the OIG so designated to take affidavits or sworn statements.
 - (ii) Not impede or hinder another employee's cooperation with the OIG.
 - (iii) Ensure that reprisals are not taken against employees who cooperate with or disclose information to the OIG or other lawful appropriate authority.

A.16 Compliance with Internet Protocol Version 6 (IPv6) in Acquiring Information Technology

1. If this Subcontract involves the acquisition of Information Technology (IT) that uses Internet Protocol (IP) technology, the Subcontractor agrees that: (1) all deliverables that involve IT that uses IP (products, services, software, etc.) will comply with IPv6 standards and interoperate with both IPv6 and IPv4 systems and products; and (2) it has IPv6 technical support for development and implementation and fielded product management available.
2. Should the Subcontractor find that the statement of work or specifications of this Subcontract do not conform to the IPv6 standard, it must notify the Contractor of such nonconformance and act in accordance with instructions of the Contractor.

A.17 Compliance with Laws

Subcontractor shall procure all necessary permits or licenses and abide by all applicable laws, regulations, and ordinances of the United States and of the state, territory, and political subdivision in which the Work under this Subcontract is performed.

A.18 Organizational Conflicts of Interest (if Subcontract exceeds \$100,000)

(This Article applies when the Subcontract involves any work or effort, the principal purpose of which is to provide advisory and assistance services as defined at 48 CFR 37.201. Such services typically include: assistance in preparing program plans; evaluation, monitoring or review of Contractor's activities or

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

proposals submitted by prospective Subcontractors; and preparation of preliminary designs, specifications, or statements of work.)

The purpose of this Article is to ensure that the Subcontractor is not biased because of its financial, contractual, organizational, or other interests which relate to the work under this Subcontract, and does not obtain any unfair competitive advantage over other parties by virtue of its performance of this Subcontract.

The restrictions described herein shall apply to performance or participation by the Subcontractor and any of its affiliates or their successors in interest (hereinafter collectively referred to as the "Subcontractor") in the activities covered by this Article as a prime subcontractor, lower-tier subcontractor, cosponsor, joint venturer, consultant, or in any similar capacity. For the purpose of this Article, affiliation occurs when a business concern is controlled by or has the power to control another or when a third party has the power to control both.

The Subcontractor shall be ineligible to participate in any capacity in Contractor's subcontracts or proposals therefore (solicited and unsolicited), which stem directly from the Subcontractor's performance of work under this Subcontract for a period of one (1) year after the completion of this Subcontract. Furthermore, unless so directed in writing by the Contractor, the Subcontractor shall not perform any advisory and assistance services work under this Subcontract on any of its products or services or the products or services of another firm, if the Subcontractor is, or has been substantially involved in their development or marketing. Nothing in this Paragraph 3 shall preclude the Subcontractor from competing for follow-on subcontracts for advisory and assistance services.

If, under this Subcontract, the Subcontractor prepares a complete, or essentially complete, statement of work or specifications to be used in competitive acquisitions, the Subcontractor shall be ineligible to perform, or participate in any capacity, in any contractual effort which is based on such statement of work or specifications. The Subcontractor shall not incorporate its products or services in such statement of work or specifications, unless so directed in writing by the Contractor, in which case the restriction in this Paragraph 4 shall not apply.

Nothing in this Article shall preclude the Subcontractor from offering or selling its standard commercial items to the Government.

If the Subcontractor, in the performance of this Subcontract, obtains access to information, such as Contractor plans, policies, reports, studies, financial plans, internal data protected by the Privacy Act of 1974 (5 U. S. C. 552a), or data which have not been released or otherwise made available to the public, the Subcontractor agrees that, without prior written approval of the Contractor, it shall not:

- Use such information for any private purpose unless the information has been released or otherwise made available to the public;
- Compete for work for the Contractor, based on such information for a period of six (6) months after either the completion of this Subcontract or until such information is released or otherwise made available to the public, whichever is first;
- Submit an unsolicited proposal to the Government, which is based on such information until one (1) year after such information is released or otherwise made available to the public; and
- Release such information unless such information has previously been released or otherwise made available to the public by the Contractor or DOE.

Subcontractor also agrees that to the extent it receives or is given access to proprietary data, data protected by the Privacy Act of 1974 (5 U. S. C. 552a), or other confidential or privileged technical, business, or financial information under this Subcontract, it shall treat such information in accordance with any restrictions imposed on such information.

Subcontractor may use technical data it first produces under this Subcontract for its private purposes consistent with this Article and the patent, rights in data, and security provisions of this Subcontract.

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

Subcontractor agrees that, if changes, including additions, to the facts disclosed by it prior to award of this Subcontract, occur during the performance of this Subcontract, it shall make an immediate and full disclosure of such changes in writing to the Contractor. Such disclosure may include a description of any action which the Subcontractor has taken or proposes to take to avoid, neutralize, or mitigate any resulting conflict of interest. The Contractor may, however, terminate this Subcontract for convenience, if it deems such termination to be in the best interest of the Government.

In the event that Subcontractor was aware of facts required to be disclosed, or the existence of an actual or potential organizational conflict of interest, and did not disclose such facts or such conflict of interest to the Contractor, Contractor may terminate this Subcontract for default.

For breach of any of the foregoing restrictions or for nondisclosure or misrepresentation of any facts required to be disclosed concerning this Subcontract, including the existence of an actual or potential organizational conflict of interest at the time of or after award, the Contractor may terminate this Subcontract for default, disqualify the Subcontractor from subsequent related contractual efforts, and pursue such other remedies as may be permitted by law or this Subcontract.

Requests for waiver under this Article shall be directed in writing to the Contractor and shall include a full description of the requested waiver and the reasons in support thereof. If it is determined to be in the best interests of the Contractor and the Government, the Contractor shall grant such a waiver in writing.

A.19 Export Control

1. The Subcontractor is responsible to ensure the proper identification, access, control and disposition of all commodities, technology, technical data and items subject to export control laws. These laws include, without limitation, the Arms Export Control Act, the Export Administration Act, the International Economic Emergency Powers Act, the Atomic Energy Act, the Nuclear Non-Proliferation Act and regulations issued pursuant to these including the Export Administration Regulations (EAR) (15 CFR Parts 730-774), the International Traffic in Arms Regulations (ITAR) (22 CFR Parts 120-130), and the Nuclear Regulatory Commission and Department of Energy export regulations (10 CFR Parts 110 and 810). The parties acknowledge that export control requirements may change and that the export of goods, technical data or services from the U.S. without an export license or other governmental authorization may result in criminal and/or other liability. In the performance of this Subcontract, Subcontractor agrees that it will not export, reexport or otherwise transfer, directly or indirectly, commodities, technology or technical data in violation of U.S. export control laws and regulations.

2. The Subcontractor is responsible for its own compliance with laws and regulations governing export controls in the performance of this Subcontract and acknowledges that it can contact the U.S. Departments of Commerce, State, Energy and Treasury for guidance as to applicable licensing requirements and other restrictions. This Subcontract does not provide the Subcontractor any express or implied governmental export authorization or license.

3. The Subcontractor understands and agrees to comply with the U.S. Foreign Corrupt Practices Act (FCPA) which prohibits the Subcontractor from providing items of value to a foreign public official, members of a foreign political party or certain relatives of such persons in order to obtain or retain business. Subcontractor agrees not to give anything of value, including, but not limited to business gratuities and reimbursement for travel, to any such persons in violation of the FCPA. Subcontractor shall comply with all requirements relevant to its business arrangement with Contractor, including any registration requirements and warrants its performance under this Subcontract shall comply with all applicable laws and regulations of the country or countries in which it performs any services for the Contractor.

4. The Subcontractor agrees to identify in writing for each item it produces or provides to the Contractor under this subcontract the applicable Export Control Classification Number (ECCN), if any, under the EAR, the applicable United States Munitions List (USML) category, if any, under the ITAR and other applicable export classification, if any.

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

A.20 Compliance with INL Computer Hardware and Software Standards

If, in the performance of this Order, computer connectivity to the INL (e.g., VPN, network access) is necessitated, the Subcontractor shall recognize that INL maintains and uses a Standard Set of Computer Hardware and Software for all common desktop computers and laptops. It is the Subcontractor's responsibility to work within the INL Standard Set of Computer Hardware and Software for all common desktop computers and laptops, or request an exception when performance of this Order necessitates connecting to the INL network or equipment. The list of computer standards can be found at: <https://im.inl.gov/SitePages/Home.aspx>.

A.21 Notice and Assistance Regarding Patent and Copyright Infringement (if Subcontract exceeds \$100,000)

1. The Subcontractor shall report to the Contractor, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement, based on the performance of this Subcontract, of which Subcontractor has knowledge.
2. In the event of any claim or suit against the Contractor or the Government on account of any alleged patent or copyright infringement arising out of the performance of this Subcontract, or out of the use of any supplies furnished or work or services performed hereunder, Subcontractor shall furnish to the Contractor or the Government upon request all evidence and information in possession of Subcontractor pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the Government except in those cases in which Subcontractor has agreed to indemnify the Contractor and the Government.
3. This Article shall be included in all Lower-tier Subcontracts and purchase orders priced greater than \$100,000.

A.22 Restrictions on Subcontractor Sales to the Government (if Subcontract exceeds \$100,000)

1. Except as provided in Paragraph 2, the Subcontractor shall not enter into any agreement with an actual or prospective Lower-tier Subcontractor(s), nor otherwise act in any manner, which has or may have the effect of restricting sales by such Lower-tier Subcontractor(s) directly to the Government of any item or process (including computer software) made or furnished by the Lower-tier Subcontractor for this Subcontract or under any follow-on production order.
2. The prohibition in Paragraph 1 does not preclude the Subcontractor from asserting rights that are otherwise authorized by law or regulation.
3. The Subcontractor agrees to incorporate the substance of this Article, including this Paragraph 3, in all Lower-tier Subcontracts under this Subcontract priced greater than \$100,000.

A.23 Anti-Kickback Procedures (if Subcontract exceeds \$150,000)

1. Definitions

"Kickback," as used in this Article, means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided, directly or indirectly, to any prime contractor, prime contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a subcontract relating to a prime contract.

"Person," as used in this Article, means a corporation, partnership, business association of any kind, trust, joint stock company, or individual.

"Prime contract," as used in this Article, means a contract or contractual action entered into by the United States for the purpose of obtaining supplies, materials, equipment, or services of any kind.

"Prime Contractor," as used in this Article, means a person who has entered into a prime contract with the United States.

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

“Prime Contractor employee” as used in this Article, means any officer, partner, employee, or agent of a prime contractor.

“Subcontract,” as used in this Article means a contract or contractual action entered into by a prime contractor or subcontractor at any tier, for the purpose of obtaining supplies, materials, equipment, or services of any kind under a prime contract.

“Subcontractor,” as used in this Article, means any person, other than the Prime Contractor, who offers to furnish or furnishes any supplies, materials, equipment, or services of any kind under a prime contract or a lower-tier subcontract entered in connection with such prime contract, and includes any person who offers to furnish or furnishes general supplies to the Prime Contractor or a higher-tier subcontractor.

“Subcontractor employee,” as used in this Article, means any officer, partner, employee or agent of a subcontractor.

2. The Anti-Kickback Act of 1986 (41 U.S.C. 51-58) (the Act), prohibits any person from:

- Providing or attempting to provide or offering to provide any kickback;
- Soliciting, accepting, or attempting to accept any kickback; or
- Including, directly or indirectly, the amount of any kickback in the subcontract price charged by a Subcontractor to a Prime Contractor or higher-tier subcontractor.

3. When the Subcontractor has reasonable grounds to believe that a violation described in Paragraph 2 of this Article may have occurred, the Subcontractor shall promptly report, in writing, the possible violation. Such reports shall be made to Contractor and to the Inspector General of the U.S. DOE or to the U.S. Department of Justice.

4. The Subcontractor shall cooperate fully with any federal agency investigating a possible violation described in Paragraph 2 of this Article.

5. Contractor may withhold from sums owed to Subcontractor the amount of the kickback, which may be paid to the Government.

6. The Subcontractor agrees to incorporate the substance of this Article, including this Paragraph 6, in all Lower-tier Subcontracts under this Subcontract priced greater than \$150,000.

A.24 Notice of Radioactive Materials

1. The Subcontractor shall notify the Contractor or designee, in writing, thirty (30) days prior to the delivery of, or prior to completion of any servicing required by this Subcontract of, items containing either-

- a. radioactive material requiring specific licensing under the regulations issued pursuant to the Atomic Energy Act of 1954, as amended, as set forth in Title 10 of the Code of Federal Regulations, in effect on the date of this Subcontract, or
- b. other radioactive material not requiring specific licensing in which the specific activity is greater than 0.002 microcuries per gram or the activity per item equals or exceeds 0.01 microcuries.

Such notice shall specify the part or parts of the items which contain radioactive materials, a description of the materials, the name and activity of the isotope, the manufacturer of the materials, and any other information known to the Subcontractor which will put users of the items on notice as to the hazards involved (OMB No. 9000-0107).

2. If there has been no change affecting the quantity of activity, or the characteristics and composition of the radioactive material from deliveries under this Subcontract or prior subcontracts, the Subcontractor may request that the Contractor waive the notice requirement in Paragraph 1. of this Article. Any such request shall -

- a. be submitted in writing,

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

b. state that the quantity of activity, characteristics, and composition of the radioactive material have not changed, and

c. cite the subcontract number on which the prior notification was submitted and the contracting office to which it was submitted.

3. All items, parts, or subassemblies which contain radioactive materials in which the specific activity is greater than 0.002 microcuries per gram or activity per item equals or exceeds 0.01 microcuries, and all containers in which such items, parts or subassemblies are delivered to the Contractor shall be clearly marked and labeled as required by the latest revision of MIL-STD 129 in effect on the date of the Subcontract.

4. This Article, including this Paragraph 4. shall be inserted in all Lower-tier Subcontracts for radioactive materials meeting the criteria in Paragraph 1. of this Article.

A.25 Classified Inventions (if Subcontractor will have access to classified information, unclassified sensitive information or special nuclear material or authorized unrestricted access to areas containing these)

The Subcontractor shall not file, or cause to be filed, on any invention or discovery conceived or first actually reduced to practice in the course of, or under, this Subcontract, in any country other than the United States, an application or registration for a patent without obtaining written approval of Contractor.

When filing a patent application in the United States on any invention or discovery conceived or first actually reduced to practice in the course of, or under, this Subcontract, the subject matter of which is classified for reasons of security, the Subcontractor shall observe all applicable security regulations covering the transmission of classified subject matter. In transmitting the patent application to the United States Patent and Trademark Office, the Subcontractor shall, by separate letter, identify, by agency and number, the Subcontract(s) that require security classification markings to be placed on the application.

The Subcontractor is responsible to ensure the proper identification, access, control and disposition of all commodities and technical data protected as export-controlled, as defined in, and controlled by: the Arms Export Control Act; Assistance to Foreign Atomic Energy Activities, 10 CFR 810; Atomic Energy Act of 1954; Export Administration Regulations, 15 CFR 730-799; Export and Import of Nuclear Equipment and Material, 10 CFR 110; International Traffic in Arms Regulations, 22 CFR 120-130; Missile Technology Control Regime, 22 CFR 120.29; the Nuclear Non-proliferation Act of 1978; and associated laws and regulations.

A.26 Displaced Employee Hiring Preference (if Subcontract exceeds \$500,000)

1. Definition. "Eligible employee" means a current or former employee of a contractor or subcontractor employed at a Department of Energy Defense Nuclear Facility:

- Whose position of employment has been, or will be, involuntarily terminated (except if terminated for cause);
- Who has also met the eligibility criteria contained in the Department of Energy guidance for contractor work force restructuring, as may be amended or supplemented from time to time; and
- Who is qualified for a particular job vacancy at the time the particular position is available.

2. Consistent with Department of Energy guidance for contractor work force restructuring, as may be amended or supplemented from time to time, the Subcontractor agrees that it will provide a preference in hiring to an eligible employee, to the extent practicable, for work performed under this Subcontract.

3. The requirements of this Article shall be included in Lower-tier Subcontracts at any tier (except for subcontracts for commercial items pursuant to 41 U.S.C. 403), expected to exceed \$500,000.

A.27 Classification of Unclassified Sensitive Information (if Subcontractor will have access to classified information, unclassified sensitive information or special nuclear material or authorized unrestricted access to areas containing these)

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

In the performance of the work under this Subcontract, the Subcontractor shall ensure that all documents, material, and equipment originated or generated under this Subcontract involving a classified or potentially classified subject, or unclassified sensitive or potentially unclassified sensitive subject, are reviewed by a Federal Government Original Classifier or a Federal Government or Contractor Derivative Classifier and Authorized Reviewing Official in accordance with classification and unclassified sensitive information regulations and guidance furnished to the Subcontractor by the Contractor.

- A.28 Control of Controlled Unclassified Information (CUI) (if Subcontractor will have access to classified information, unclassified sensitive information or special nuclear material or authorized unrestricted access to areas containing these)

Subcontractor shall handle and control information designated as controlled unclassified controlled information (CUI) in accordance with 10 CFR Part 1017.

- A.29 Small Business and Small Disadvantaged Business Subcontracting Plan (if Subcontract exceeds \$650,000)

1. "Commercial product," as used in this Article, means a product in regular production that is sold in substantial quantities to the general public and/or industry at established catalog or market prices. It also means a product which, in the opinion of the Contractor, differs only insignificantly from the Subcontractor's commercial product.
2. Subcontract," as used in this Article, means any agreement (other than one involving an employer-employee relationship) entered into by Subcontractor calling for supplies or services required for performance of this Subcontract.
3. Subcontractor shall comply with, and shall include in all Subcontracts that offer further subcontracting opportunities and require all Lower-tier Subcontractors (except small business concerns) who receive subcontracts in excess of \$650,000 to comply with, the contents of Attachment 1 (*Utilization of Small, Small Disadvantaged and Women-Owned Small Business Concerns*), and shall adopt a plan similar to the plan agreed to by the Subcontractor.
4. Subcontractor shall: (i) cooperate in any studies or surveys as may be required; (ii) submit periodic reports, to allow the Contractor to determine the extent of compliance with the Subcontracting Plan; (iii) submit semiannual subcontracting reports current as of the last day of March and of September and a subcontracting report at the completion of this Subcontract, in accordance with the requirements of the U.S. DOE's internet-based Electronic Subcontract Reporting System (eSRS); and (iv) ensure that its Lower-tier Subcontractors agree to submit subcontracting reports in accordance with the instructions at (iii) of this Paragraph 4. Subcontracting reports required by subparagraphs (iii) and (iv) of this Paragraph 4 shall be submitted within 30 days following the end of each reporting period.
5. Subcontractor shall perform the following functions:
 - a. Assist small business and small disadvantaged business concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns. Where the Subcontractor's lists of potential small and small disadvantaged lower-tier subcontractors are excessively long, reasonable effort shall be made to give all such business concerns an opportunity to compete over a period of time.
 - b. Provide adequate and timely consideration of the potential of small business and small disadvantaged business concerns in all "make-or-buy" decisions.
 - c. Counsel and discuss lower-tier subcontracting opportunities with representatives of small and small disadvantaged business firms.
 - d. Provide notice to Lower-tier Subcontractors concerning penalties for misrepresentation of business status as small business or small disadvantaged business for the purpose of obtaining a Lower-tier Subcontract that is to be included as part or all of a goal contained in the Subcontracting Plan.
6. The failure of the Subcontractor or a Lower-tier Subcontractor to comply in good faith with the Article of this Subcontract entitled "Utilization of Small Disadvantaged and Women Owned Small Business

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

Concerns," or Subcontractor's approved Subcontracting Plan required by this Article, shall be a material breach of this Subcontract.

A.30 Liability for Increased Costs or Interest (if Subcontract exceeds \$650,000)

The Subcontractor is liable to the Government for any increased costs or interest resulting from Subcontractor's failure to comply with FAR 52.230-2, "Cost Accounting Standards," FAR 52.230-5, "Administration of Cost Accounting Standards-Educational Institutions," or FAR 52.230-6, "Administration of Cost Accounting Standards-General." The subcontract price is subject to adjustment by the Contractor to cover any increased costs or interest resulting from such failure.

NOTE: The following Articles A.31 through and including A.41 shall apply if Subcontractor will be performing work at premises owned, leased or controlled by BEA or the U.S. Government (regardless of price):

A.31 Occurrence Notification and Reporting by Subcontractor

Subcontractor shall report to Contractor any unusual occurrence or unplanned event occurring within the boundaries of the INL during the performance of this Subcontract. The report shall be provided, either orally or in writing, to the Contractor's Procurement Agent or Technical Representative. Occurrence/events which require reporting include any out-of-the-ordinary situations which occur. A list of situations that require reporting will be provided to Subcontractor by Contractor prior to Subcontractor's arrival on site. The list will not be all-inclusive, but will provide necessary guidance.

A.32 Environmental, Health and Safety

The Subcontractor shall take all reasonable precautions in the performance of the work under this Subcontract to protect the safety and health of employees and of members of the public and shall comply with all applicable safety and health regulations and requirements (including, reporting requirements) of Contractor and DOE. The Contractor shall notify the Subcontractor, in writing, of any noncompliance with the provisions of this Article and what corrective action is to be taken. After receipt of such notice, the Subcontractor shall immediately take the corrective action. Under subcontracts to provide construction, maintenance, installation, fabrication or related services, or under any subcontract when directed by the Contractor, Subcontractor shall accept and implement the INL ES&H management program and implementation plan, which is available from the Contractor. In the event that the Subcontractor fails to comply with the aforementioned regulatory requirements of Contractor and DOE, the Contractor may, without prejudice to any other legal or contractual rights of the Contractor, issue an order stopping all or any part of the work; thereafter, a start order for resumption of the work may be issued at the discretion of the Contractor. The Subcontractor shall make no claim for an extension of time or for compensation of damages by reason of, or in connection with, such work stoppage.

A.33 Whistle Blower Protection for Subcontractor Employees

The Subcontractor shall comply with the requirements of the "DOE Contractor Employee Protection Program" in 10 CFR Part 708.

The Subcontractor shall insert, or have inserted, the substance of this Article, including this paragraph, in Lower-tier Subcontracts at all tiers, with respect to work performed on site at a DOE-owned or-leased facility, as provided for in 10 CFR Part 708.

A.34 Stop Work Authority

1. Contractor or the Government may stop all, or any part of, the Work in the event the following occurs, or if comparable situations are encountered:

- a. Observation and determination of conditions that present an immediate threat to the life and/or health of employees, workers, or the general public.

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

- b. Observation of any activity or action, which is determined to be a threat to the environment or surrounding ecology.
 - c. Observation and determination of any activity that could result in the potential or actual damage to Government material, property, facilities, or equipment.
 - d. Subcontractor fails to comply with the Quality requirements of this Subcontract.
 - e. Subcontractor fails to comply or fails to provide resolution to a noncompliance with applicable ES&H requirements.
2. If Work is stopped by a representative of Contractor or the Government, other than the technical point-of-contact or the procurement agent, the Subcontractor shall immediately notify the procurement agent or his/her supervisor.
 3. Contractor may issue a work stoppage for an indefinite period to time, i.e., time necessary to effect corrective action or to resolve a specifically identified condition.
 4. Subcontractor's failure to comply with "Stop Work" direction pursuant to this Article may result in termination of this Subcontract for default.
 5. Any stop work order issued under this clause shall be without prejudice to any legal or contractual rights of Contractor. The Subcontractor shall not be entitled to an extension of time or additional costs, compensation or damages by reason of, or in connection with, any work stoppage ordered as a result of Subcontractor's fault or failure to comply with any Subcontract requirements.

A.35 Radiological Control Requirements for Subcontractor and/or Lower-Tier Subcontractor Personnel

Subcontractor shall conduct its radiological control operations in accordance with the Subcontractor Requirements Manual (SRM), including the Radiological Control Information Management System (RCIMS), and all other restrictions established by Contractor.

Subcontractor shall take all reasonable precautions in the performance of its work at the INL to protect the health and safety of its employees and members of the public and to minimize danger from all hazards to life and property. Contractor's Radiological Control Technicians (RCT's) shall assist in identifying and resolving radiological control problems. The RCT's will provide radiological surveillance over all work activities and advise Contractor on matters concerning radiation safety related to plant activities or conditions affecting the Work. Subcontractor shall comply with all directions relative to radiological safety given by Contractor.

A.36 REAL ID Act

Subcontractor personnel requiring access to Contractor or U. S. Government owned, leased, or controlled facilities must present proof of identity that is compliant with the REAL ID Act. If Subcontractor personnel do not have compliant identification, the following forms of current identification may be accepted, subject to Contractor approval:

- U.S. Passport or U.S. Passport Card
- Military ID card or Military dependent's ID card
- HSPD-12 credential or Common Access Card
- Permanent Resident Card or Alien Registration Receipt Card (Form I-551)
- Foreign Passport that contains a temporary I-551 stamp or temporary I-551 printed notation on a machine-readable immigrant visa
- Employment Authorization Document that contains a photograph (Form I-766).

A.37 Subcontractor Requirements Manual

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

The Subcontractor and all lower-tiers shall perform work in accordance with the Subcontractor Requirements Manual (SRM) to the extent specified in Section 3, APPLICABLE DOCUMENTS of the BEA-TerraPower Contract. The Contract Specialist shall notify TerraPower of changes to the SRM and TerraPower shall inform Subcontractor of the same. The Subcontractor shall notify TerraPower within 15 days of the notification if any material impact on cost or schedule results from the SRM change. The notice shall include an assessment of the cost or schedule impact associated with the SRM change. TerraPower shall forward such notification to the Contract Specialist who shall then provide direction to proceed or not proceed with the SRM change. If direction is provided to proceed, the Subcontractor must proceed with the execution of the work as modified by the SRM change and a request for equitable adjustment may be submitted by the Subcontractor consistent with the Changes clause of the Purchase Order.

A.38 Worker Safety and Health Program

The Subcontractor shall ensure that all work performed under this Contract (inclusive of lower-tier subcontractors) is performed in accordance with the Department of Energy's Worker Safety and Health Rule codified at 10 C.F.R. Part 851. The Subcontractor is subject to all applicable procedures for investigating violations, enforcing compliance with requirements, and assessing civil penalties or fee reductions for violations under the DOE's Worker Safety and Health Rule.

A.39 Security Requirements

1. Subcontractor personnel performing on-site services under this Contract shall have a Building Access Only (BAO) clearance. Unless otherwise approved by BEA in writing, Subcontractor personnel (including lower-tier Subcontractors) must be U. S. citizens to gain admittance to the site. Subcontractor shall request the number of security packets, from Nicolas Woolstenhulme at (208) 526-1412, needed for this Contract.
 - a. Subcontractor's failure to obtain sufficient BAO clearances to have a crew of sufficient size BAO-cleared in time to meet completion/delivery requirements may result in termination of the Contract for default.
 - b. The Subcontractor must obtain a sufficient number of BAO clearances to provide a margin for illnesses, personnel terminations and individuals whose clearances require extended processing time.
 - c. Within one week after placement of the Contract, Subcontractor must submit to BEA Security a completed security packet for each person requiring BAO clearance. Approximately three weeks are required to process a BAO clearance after BEA's receipt of an acceptable security packet.
2. All badges are the responsibility of the Subcontractor. Final payment under this Contract may be withheld until all badges are returned to the BEA badging office.
3. Idaho National Laboratory Environmental Policy: Subcontractor shall adhere to the INL Environmental Policy found at https://www.inl.gov/wp-content/uploads/2014/09/16-50070-R2_ENV_Policy-1.pdf.
4. Lower-tier Subcontractors: Subcontractor shall not subcontract performance of any portion of the work being performed at BEA without the advanced written approval of BEA (excluding material deliveries). Lower-tier subcontracts and purchase orders must include provisions to secure all rights and remedies of BEA and the Government provided under this Contract, and must impose upon the lower-tier subcontractor all of the general duties and obligations required to fulfill this Contract. Subcontractor is responsible for the performance and oversight of all lower-tier subcontractors.

A.40 Travel Expenses

1. The Subcontractor shall be reimbursed for travel expenses, e.g., airfare, per diem, lodging, and car rental, associated with BEA-authorized travel, in accordance with FAR 31.205-46 (excluding travel expenses for local travel, which includes travel to and from the INL site).
2. The Subcontractor shall be reimbursed for airfare as follows: Airfare costs in excess of the lowest customary standard, coach, or equivalent airfare offered during normal business hours are unallowable

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

except when such accommodations require circuitous routing, require travel during unreasonable hours, excessively prolong travel, result in increased cost that would offset transportation savings, are not reasonably adequate for the physical or medical needs of the traveler, or are not reasonably available to meet mission requirements. However, in order for airfare costs in excess of the above standard airfare to be allowable, the applicable condition(s) set forth above must be documented and justified. The Subcontractor shall be reimbursed for mileage between office, home, or motel and airports. The Subcontractor shall also be reimbursed for taxi services between office, home, or motel and airports and parking expenses of personal car at airports. For these purposes only, travel by personal car will be reimbursed at the maximum rate per mile allowed under the Federal Travel Regulations (FTRs) in effect at the time such travel is performed. The allowance for the first and last day of travel is 75% of the per diem amount for the geographical area being visited. Travel expense receipts must be submitted for airfare, lodging, and car rental.

3. Temporary Living Expenses: A Subcontracted employee on temporary assignment shall receive full per diem in accordance with the prevailing FTR for the first 60 calendar days for lodging and first 30 calendar days for M&IE of the temporary assignment or until semi-permanent housing is obtained. After the first 60 days for lodging and first 30 days for M&IE, or after semi-permanent housing is obtained (whichever comes first), reimbursement for lodging shall be reduced to the lesser of the actual cost, or 55% of the Federal per diem rate and reimbursement for M&IE shall be reduced to 55% of the Federal per diem rate, for the location of the assignment. While on per diem, receipts for lodging expenses are required. No receipts will be required for M&IE.
4. Travel costs, if applicable, must be supported by receipts and must include number of trips, number of days in travel status, and location of travel. Travel, if applicable, must be summarized on a travel expense report, signed by the traveling employee, depicting the location of travel, days in travel status, and expenses incurred. Travel expenses must be supported by receipts in accordance with the travel clause of this Contract. If an invoice is not proper when received, it will either be returned to the Subcontractor for correction, or missing information/documentation will be requested - the invoice received date will be reset to the date the corrections are complete or the corrected invoice is received.

A.41 Foreign Government Talent Recruitment Program (FGTRP)

1. Subcontractor shall comply with the contents of DOE Order 486.1 – Department of Energy Foreign Government Talent Recruitment Programs, a copy of which is set out in Attachment 2 to this Exhibit A. Pursuant to DOE Order 486.1, the Subcontractor shall not participate in a Foreign Government Talent Recruitment Program of a Foreign Country of Risk while performing work under the Subcontract. “Foreign Government Talent Recruitment Program” shall have the meaning specified in DOE Order 486.1. Countries currently identified as a “Foreign Country of Risk” are People’s Republic of China, Russia, North Korea and Iran (subject to change upon DOE request).
2. The Subcontractor shall comply with the contents of the Contractor Requirements Document set out in “Attachment 1” to DOE Order 486.1, including, but not limited to submitting to Contractor the Foreign Government Talent Recruitment Program certification in the form set out in Attachment 3 to this Exhibit A.
3. The Subcontractor may, in its discretion and for its own records, obtain from each of its employees engaged in work under the Subcontract a signed Confirmation Regarding Foreign Government Talent Recruitment Programs, in the form set out in Attachment 4 to this Exhibit A.

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

Attachment 1

Utilization of Small, Small Disadvantaged and Women-Owned Small Business Concerns

Small business concerns, small business concerns owned and controlled by socially and economically disadvantaged individuals and small business concerns owned and controlled by women shall have the maximum practicable opportunity to participate in this Subcontract. Subcontractor shall establish procedures to ensure the timely payment of amounts due, pursuant to the terms of its subcontracts with small business concerns, small business concerns owned and controlled by socially and economically disadvantaged individuals and small business concerns owned and controlled by women.

Subcontractor hereby agrees to award subcontracts and purchase orders pursuant to FAR 52.222-35, FAR 52.2223-6 and FAR 52.232-17 to the fullest extent consistent with efficient Subcontract performance. Subcontractor further agrees to cooperate in any studies or surveys as may be conducted by the United States Small Business Administration or the Contractor, as may be necessary to determine the extent of Subcontractor's compliance with this Article.

As used in this Subcontract, the term "small business concern" shall mean a small business as defined pursuant to Section 3 of the Small Business Act and relevant regulations promulgated thereto. The term "small business concern owned and controlled by socially and economically disadvantaged individuals" shall mean a small business concern which is at least 51 percent unconditionally owned by one or more socially and economically disadvantaged individuals, or, in the case of any publicly-owned business, at least 51 percent of the stock of which is unconditionally owned by one or more socially and economically disadvantaged individuals; and whose management and daily business operations are controlled by one or more of such individuals. This term also means a small business concern that is at least 51 percent unconditionally owned by an economically disadvantaged Indian Tribe or Native Hawaiian Organization, or a publicly-owned business having at least 51 percent of its stock unconditionally owned by one of these entities and which has its management and daily business controlled by members of an economically disadvantaged Indian Tribe or Native Hawaiian Organization, and which meets the requirements of 13 CFR 124. The Contractor shall presume that socially and economically disadvantaged individuals include Black Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans, Subcontinent Asian Americans, and other minorities, or any other individual found to be disadvantaged by the Administration pursuant to section 8(a) of the Small Business Act. The Subcontractor shall presume that socially and economically disadvantaged entities also include Indian Tribes and Native Hawaiian Organizations.

The term "small business concern owned and controlled by women" shall mean a small business concern:

- Which is at least 51 percent owned by one or more women, or, in the case of a publicly-owned business, at least 51 percent of the stock of which is owned by one or more women; and
- Whose management and daily business operations are controlled by one or more women.

EXHIBIT A: REQUIRED FLOWDOWNS
Subcontracts relating to BEA-TerraPower Contract No. 215209

Attachment 2

DOE Order 486.1

EXHIBIT A: REQUIRED FLOWDOWNS

Subcontracts relating to BEA-TerraPower Contract No. 215209

Attachment 3

Foreign Government Talent Recruitment Program (FGTRP) Certification (Active Subcontracts, Purchase Orders)

Foreign Government Talent Recruitment Program (FGTRP) (Active Subcontracts, Purchase Orders)

TerraPower, LLC (TerraPower) is obligated to report in a timely manner to Battelle Energy Alliance, LLC (BEA) if any employees of either a "Demonstration subcontract" or "R&D subcontract" of BEA, where the subcontracted work in question is performed on or at a DOE/NNSA site or facility (including space/facility leased by a contractor), participates in a "foreign government talent recruitment program" (FGTRP) – all three of these terms are defined, respectively, in sections 7.b, 7.i, and 7.g of DOE Order 486.1, Department of Energy Foreign Government Talent Recruitment Programs (FGTRP), which is found at <https://www.directives.doe.gov/directives-documents/400-series/0486-1-border/@@images/file>. Countries that are identified as "Foreign Country of Risk" are People's Republic of China, Russia, North Korea, and Iran and is subject to change upon DOE request.

Therefore, TerraPower, as a Subcontractor to BEA, has agreed to make an affirmative disclosure to BEA of its compliance with DOE Order 486.1, Department of Energy Foreign Government Talent Recruitment Programs, for Contract No. 215209 (TREAT Contract). Pursuant to DOE Order 486.1, [insert Supplier name] likewise agrees to make an affirmative disclosure to TerraPower of its compliance with said Order, in connection with Purchase Order [insert PO number] which supports TerraPower's performance under the TREAT Contract.

Select one:

_____ As of September 4, 2019 and hereafter, [insert Supplier name] certifies that **NO** employee(s) or Supplier employee(s) who are working under this Purchase Order on or at a DOE/NNSA site or facility (including space/facility leased by a contractor) are participating in an FGTRP with a Foreign Country of Risk. If, at any time, an employee or sub-tier employee working on this Purchase Order on or at a DOE/NNSA site or facility (including space/facility leased by a contractor) is identified as a participating in an FGTRP with a Foreign Country of Risk, TerraPower shall be notified with 5 business days and Supplier will provide the following additional information requirements.

_____ As of _____ there **ARE** employee(s) working under this Purchase Order on or at a DOE/NNSA site or facility (including space/facility leased by a contractor) that are participating in a FGTRP with a Foreign Country of Risk and the following disclosure is being provided:

- (a) The name of the government that is sponsoring the FGTRP [Click or tap here to enter text.](#);
- (b) The name of the organization or talent recruitment program with which the employee is working [Click or tap here to enter text.](#) ;
- (c) The nature of the employee's responsibilities under this FGTRP [Click or tap here to enter text.](#) ;
- (d) The duration of the employee's commitment under the FGTRP [Click or tap here to enter text.](#); and
- (e) The amount of compensation the employee(s) is receiving as a result of participating in the FGTRP [Click or tap here to enter text.](#).

EXHIBIT A: REQUIRED FLOWDOWNS
Subcontracts relating to BEA-TerraPower Contract No. 215209

A completed copy of any agreement that the employee(s) have signed under the FGTRP shall be provided to TerraPower and attached to this certification.

BEA reserves the right to direct TerraPower to direct Supplier to remove the employee(s) participating in an FGTRP from performing any work under this Purchase Order from any facility on the Idaho National Laboratory (INL) or from any other DOE/NNSA site/facility (including DOE/NNSA contractor leased facilities). To the extent the U.S. Department of Energy requires the Supplier's employee(s), participating in the FGTRP, be precluded from performing any further work under this Purchase Order, Supplier agrees to do so unless such employee(s) agree to discontinue his/her/their participation in the FGTRP. Furthermore, Supplier agrees that it shall not submit any request for claim or request for equitable adjustment against TerraPower or BEA as a result of direction under this paragraph.

Supplier Representative

Date

EXHIBIT A: REQUIRED FLOWDOWNS
Subcontracts relating to BEA-TerraPower Contract No. 215209

Attachment 4

Confirmation Regarding Foreign Government Talent Recruitment Programs
(Supplier Employees)

Confirmation Regarding Foreign Government Talent Recruitment Programs

The undersigned hereby confirms to **[insert name of Supplier]**, the following:

- A copy of DOE Order 486.1 – Department of Energy Foreign Government Talent Recruitment Programs (FG RTP) has been provided to me. I have reviewed and am familiar with the contents of DOE Order 486.1 (capitalized terms in this Confirmation have the meanings set forth therein);
- I understand that countries currently identified as a “Foreign Country of Risk” are People’s Republic of China, Russia, North Korea and Iran, and that these are subject to change upon DOE request;
- I am not involved in any Foreign Government Talent Recruitment Program with a currently identified Foreign Country of Risk;
- I will promptly report in advance, and seek prior approval from my manager, any offer or request that could fall under the definition of a Foreign Government Talent Recruitment Program with a currently identified Foreign Country of Risk; and
- I will immediately notify my manager if my confirmation becomes incorrect and in such case take such action as directed by **[insert name of Supplier]**, which may involve, without limitation, promptly providing all requested information by **[insert name of Supplier]**, discontinuing involvement in the Foreign Government Talent Recruitment Program, and/or discontinuing work under subcontract(s) with TerraPower, LLC in support of the TREAT Contract. This includes notification to my manager in the case where DOE expands the definition of a Foreign Country of Risk, and as a result, updates the aforementioned DOE Order 486.1.

By: _____

Name (Print):_____

Date:_____
