

APPENDIX B-2

STANDARD TERMS AND CONDITIONS FOR

RESEARCH AND DEVELOPMENT SUBCONTRACTS

INCLUDING:

- (1) FIRM FIXED-PRICE**
- (2) FIXED UNIT-PRICE LEVEL OF EFFORT**

January 23, 2023

Subcontractor is hereby on notice that the contracting party to this subcontract is the Alliance for Sustainable Energy, LLC, in its capacity as the Managing and Operating Contractor for the National Renewable Energy Laboratory (NREL) under U.S. Department No. DE-AC36-08GO28308.

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

Appendix B-2 Clause Number	FAR/DEAR Reference	Title	FD	OnSite Clause = Y	Threshold (Award Amount)	Date/Req'd Version
Section I - Clauses Applicable to NREL Subcontracts						
1	52.202-1	Definitions			All	
2	NREL 08.100-01	Subcontract Issues and Disputes			All	
3	NREL 08.100-04	Lobbying Restrictions (Energy & Water Act)			All	2007
4	NREL 08.100-05	Subcontractor Acceptance of Notices of Violation or Alleged Violations, Fines, and Penalties			All	
5	NREL 08.100-06	Subcontractor Quality Representations			All	May 2009
6	52.204-7	System for Award Management			All	Oct 2016
7	52.204-13	System for Award Management Maintenance			All	
8	52.215-19	Notification of Ownership Changes	X		All	Oct 1997
9	52.219-8	Utilization of Small Business Concerns			All	
10	52.222-3	Convict Labor			All	
11	52.222-20	Contracts for Materials, Supplies, Articles and Equipment Exceeding \$15,000			All	
12	52.222-21	Prohibition of Segregated Facilities	X		All	Apr 2015
13	52.222-26	Equal Opportunity	X		All	Sep 2016
14	52.222-50	Combating Trafficking in Persons	X		All	Mar 2015
15	52.225-13	Restriction on Certain Foreign Purchases	X		All	Jun 2008
16	52.229-3	Federal, State, and Local Taxes			All	Feb 2013
17	52.229-6	Taxes - Foreign Fixed-Price Contracts			All	Feb 2013
18	52.232-2	Payments under Fixed-Price Research and Development Contracts			All	Apr 1984
19	52.232-24	Prohibition of Assignment of Claims			All	May 2014
20	52.232-33	Payment by Electronic Funds Transfer - System for Award Management			All	Jul 2013
21	52.232-39	Unenforceability of Unauthorized Obligations			All	
22	52.232-40	Providing Accelerated Payments to Small Business Subcontractors	X		All	Dec 2013
23	52.242-13	Bankruptcy			All	Jul 1995
24	52.242-15	Stop Work Order - Cost-Reimbursement - Alternate			All	Aug 1989
25	52.243-1	Changes - Fixed-Price - Alternates I-V			All	Aug 1987
26	52.244-2	Subcontracts - Alternate I			All	Oct 2010
27	52.244-6	Subcontracts for Commercial Items	X		All	Nov 2017
28	52.246-9	Inspection of Research and Development (Short Form)			All	Apr 1984
29	52.247-1	Commercial Bill of Lading Notations			All	Feb 2006
30	52.247-63	Preference for U.S.-Flag Air Carriers	X		All	Jun 2003
31	52.247-64	Preference for Privately Owned U.S.-Flag Commercial Vessels	X		All	Feb 2006
32	52.249-1	Termination for Convenience (Short Form) - Fixed Price			All	Apr 1984
33	52.249-2	Termination for Convenience - Fixed Price - Construction - Alternate I			All	Apr 2012

**Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price**

Appendix B-2 Clause Number	FAR/DEAR Reference	Title	FD	OnSite Clause = Y	Threshold (Award Amount)	Date/Req'd Version
34	52.249-5	Termination for Convenience - Educational and Other Non-Profit Institutions			All	Aug 2016
35	52.249-9	Default - Fixed Price - Research and Development			All	Apr 1984
36	952.204-71	Sensitive Foreign Nations Controls	X		All	Mar 2011
37	952.204-75	Public Affairs			All	Dec 2000
38	952.204-77	Computer Security	X		All	Aug 2006
39	952.235-71	Research Misconduct	X		All	Jul 2005
40	952.247-70	Foreign Travel	X		All	Most Current
41	970.5208-1	Printing	X		All	Dec 2000
42	970.5225-1	Compliance with Export Control Laws and Regulations	X		All	Nov 2015
43	970.5232-3	Accounts, Records, and Inspection - Alternate I	X		All	Clause Dec 2010; Alt Dec 2000
44	970.5245-1	Property - Alternate I	X		All	Aug 2016
45	52.222-54	Employment Eligibility Verification	X		>\$3.5K	Oct 2015
46	52.222-40	Notification of Employee Rights under the National Labor Relations Act	X		>\$10K	Dec 2010
47	52.223-18	Encouraging Contractor Policies to Ban Text Messaging while Driving	X		>\$10K (2018 mpt)	Aug 2011
48	52.222-36	Equal Opportunity for Workers with Disabilities	X		>\$15K	Jul 2014
49	52.225-8	Duty-Free Entry	X		>\$15K*	Oct 2010
50	52.209-6	Protecting the Government's Interest when Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment	X		>\$35K	Oct 2015
51	52.203-6	Restrictions on Subcontractor Sales to the Government	X		>SAT	Sep 2006
52	52.203-7	Anti-Kickback Procedures	X		>SAT	Apr 2014
53	52.203-12	Limitation on Payments to Influence Certain Federal Transactions	X		>SAT	Oct 2010
54	52.203-17	Contractor Employee Whistleblower Rights and Requirement to Inform Employees of Whistleblower Rights	X		>SAT	Apr 2014
55	52.203-19	Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements	X		>SAT	Jan 2017
56	52.204-4	Printed or Copied Double-Sided on Postconsumer Fiber Content Paper			>SAT	
57	52.222-35	Equal Opportunity for Veterans	X		\$150K	Oct 2015

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

Appendix B-2 Clause Number	FAR/DEAR Reference	Title	FD	OnSite Clause = Y	Threshold (Award Amount)	Date/Req'd Version
58	52.222-37	Employment Reports on Veterans	X		\$150K	Feb 2016
59	952.226-74	Displaced Employee Hiring Preference	X		>\$500K	Jun 1997
Section II - Clauses Applicable to Subcontracts that Require Performance on NREL-Operated Facilities						
60	NREL 08.100-02	Security and Access Requirements		Y	All	
61	NREL 09.100-02	Worker Safety and Health Requirements		Y	All	
62	52.223-6	Drug-Free Workplace		Y	All	May 2001
63	52.228-5	Insurance - Work on a Government Installation and Alt I - Architect/Engineer Subcontracts		Y	All	Jan 1997
64	952.203-70	Whistleblower Protection for Contractor Employees	X	Y	All	Dec 2000
65	970.5223-1	Integration of Environment, Safety, and Health into Work Planning and Execution	X	Y	All	Dec 2000
Section III - Sustainable Acquisition Clauses						
66	970.5223-7	Sustainable Acquisition Program	X	Y	>SAT	Oct 2010
67	52.223-11	Ozone-Depleting Substances and High Global Warming Potential Hydrofluorocarbons				Jun 2016
68	52.223-12	Maintenance, Service, Repair, or Disposal of Refrigeration Equipment and Air Conditioners				Jun 2016
69	52.223-15	Energy Efficiency in Energy-Consuming Products	X	Y	All	Dec 2007
Section IV - Cybersecurity Clauses						
70	N/A	General Requirements			All	Oct 2021
71	N/A	General Requirements for University Affiliates			All	Oct 2021
72	N/A	Data Protection			All	Oct 2021
73	N/A	Data Protection for University Affiliates			All	Oct 2021
74	N/A	Commercial Products			All	Oct 2021
75	N/A	Application Security			All	Oct 2021
76	N/A	System Design and Implementation			All	Oct 2021
77	N/A	Cloud, Hosted, or Outsourced Systems and Related Services			All	Oct 2021
78	N/A	Subcontractor Network Access and Subcontractor Employee Criminal Background Checks and Drug Testing			All	Feb 2022
79	N/A	University Affiliate Network Access and Affiliate Criminal Background Checks and Drug Testing			All	Aug 2021
80	N/A	Custodianship of Sensitive NREL Data			All	Oct 2021
82	N/A	Cardholder Data Environments			All	Aug 2021

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

DEFINITIONS (SPECIAL) (JUL 2014)

Derived from FAR 52.202-1 (NOV 2013) as modified by DEAR 902.101

(Applies to all subcontracts that exceed the Simplified Acquisition Threshold.)

- (a) When a solicitation provision or subcontract clause uses a word or term that is defined in the Federal Acquisition Regulation (FAR), the word or term has the same meaning as the definition in FAR [2.101](#) in effect at the time the solicitation was issued, unless—
 - (1) The solicitation, or amended solicitation, provides a different definition;
 - (2) The subcontracting parties agree to a different definition;
 - (3) The part, subpart, or section of the FAR where the provision or clause is prescribed provides a different meaning; or
 - (4) The word or term is defined in FAR [Part 31](#), for use in the cost principles and procedures.
- (b) The FAR Index is a guide to words and terms the FAR defines and shows where each definition is located. The FAR Index is available via the Internet at <http://www.acquisition.gov/far> at the end of the FAR, after the FAR Appendix.
- (c) When a solicitation provision or subcontract clause uses a word or term that is defined in the Department of Energy Acquisition Regulation (DEAR) (48 CFR chapter 9), the word or term has the same meaning as the definition in 48 CFR 902.101 or the definition in the part, subpart, or section of 48 CFR chapter 9 where the provision or clause is prescribed in effect at the time the solicitation was issued, unless an exception in (a) applies.
- (d) The following words and terms are in addition to paragraph (a) of this section—
 - (1) “Head of the Agency” means the Secretary, Deputy Secretary, or Under Secretary of the Department of Energy (DOE).
 - (2) “DOE Contracting Officer” means a person with the authority to enter into, administer, and/or terminate DOE Prime Contracts and make related determinations and findings. The term includes certain authorized representatives of the DOE Contracting Officer acting within the limits of their authority as delegated by the DOE Contracting Officer.
 - (3) “NREL Subcontract Administrator” means an employee of the entity that manages and operates the National Renewable Energy Laboratory (NREL) with the authority to enter into, administer, and/or terminate subcontracts and make related determinations and findings. The term includes certain authorized representatives of the NREL acting within the limits of their authority as delegated by the NREL.
 - (4) Except as otherwise provided in this subcontract, the terms “subcontracts and lower-tier subcontracts” includes, but is not limited to, purchase orders and changes and modifications to purchase orders and changes and modifications to purchase orders.
 - (5) “DOE” means the Department of Energy.
 - (6) “Contractor” or “DOE Prime Contractor” means the entity managing and operating the National Renewable Energy Laboratory under prime contract to the U.S. Department of Energy (DOE). The National Renewable Energy Laboratory (NREL) is a Department of Energy-owned national laboratory, managed and operated by the DOE Prime Contractor.
 - (7) “DOE Directive” means DOE Orders and Notices, modifications thereto, and other forms of directives, including for purposes of this subcontract those portions of DOE’s accounting and procedures handbook applicable to

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

Contractors, issued by DOE. The term does not include temporary written instructions by the DOE Contracting Officer or the NREL Subcontract Administrator for the purpose of addressing short-term or urgent DOE and NREL concerns relating to health, safety, or the environment.

SUBCONTRACT ISSUES AND DISPUTES (SPECIAL) (SEP 2007)

Derived from NREL 08.100-01

(Applies to all subcontracts.)

- (a) It is NREL's practice to try to resolve all contractual issues by mutual agreement at the NREL Subcontract Administrator's level, without litigation. Both parties hereby agree to explore all reasonable avenues for negotiations in order to avoid a dispute. Either party may provide written notice to the other party to conduct negotiations for a period not to exceed sixty (60) calendar days. After sixty calendar days, if possibilities for negotiations have failed, either party shall have thirty (30) calendar days to request that the potential dispute be moved to Alternative Dispute Resolution (ADR). Within fifteen (15) calendar days after receiving a request to move to ADR, if ADR procedures are not acceptable to the non-moving party, a written explanation citing specific reasons for rejecting ADR as inappropriate for resolution of the dispute shall be provided to the moving party. If the parties are unable to agree on the application of ADR procedures to resolve the potential dispute or are unable to satisfactorily resolve the dispute using ADR procedures for a period not to exceed ninety (90) calendar days (or such longer period as mutually agreed in writing), the parties shall resume the formal process authorized in this clause.
- (b) The parties agree that the appropriate forum for litigation of any dispute pertaining to this subcontract shall be a court of competent jurisdiction as follows:
 - (1) Subject to paragraph (b) (2) of this clause, any such litigation shall be brought and prosecuted exclusively in Federal District Court; with venue in the United States District Court of Colorado in Denver, Colorado.
 - (2) Provided, however, that in the event the requirements for jurisdiction in any Federal District Court are not present, such litigation shall be brought in a court of competent jurisdiction in the county of Jefferson and State of Colorado.
- (c) Any substantive issue of law in such litigation shall be determined in accordance with the body of applicable Federal law relating to the interpretation and application of clauses derived from Federal Acquisition Regulation (FAR) and the Department of Energy Acquisition Regulation that implement and supplement the FAR. If there is no applicable Federal law, the law of the State of Colorado shall apply in the determination of such issues. Conflict of law provisions shall not determine applicable governing law. Nothing in this clause shall grant the Subcontractor by implication any statutory rights or remedies not expressly set forth in this subcontract.
- (d) There shall be no interruption in the prosecution of the work, and the Subcontractor shall proceed diligently with the performance of this subcontract pending final resolution of any contractual issues, disputes, or litigation arising under or related to this subcontract between the parties hereto or between the Subcontractor and lower-tier Subcontractors or suppliers.
- (e) The Contract Disputes Act of 1978 (41 U.S.C. Sections 601-613) shall not apply to this subcontract; provided, however, that nothing in this clause shall prohibit NREL, in its sole discretion, from sponsoring a dispute of the Subcontractor for resolution under the provision of its prime contract with DOE. In the event that NREL so sponsors a dispute at the request of the Subcontractor, the Subcontractor shall be bound by the decision of the cognizant DOE Contracting Officer to the same extent and in the same manner as NREL.

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- (f) Any disputes relative to intellectual property matters will be governed by other provisions of this subcontract.

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firmed Fixed Price and Fixed Unit Price

LOBBYING RESTRICTIONS (ENERGY & WATER ACT) (SPECIAL) (2007)

Derived from NREL 08.100-04

(Applies to all subcontracts.)

The Subcontractor or awardee agrees that none of the funds obligated on this award shall be expended, directly or indirectly, to influence Congressional action on any legislative or appropriation matters pending before Congress, other than to communicate to Members of Congress as described in 18 U.S.C. 1913. This restriction is in addition to those prescribed elsewhere in statute and regulation.

SUBCONTRACTOR ACCEPTANCE OF NOTICES OF VIOLATION OR ALLEGED VIOLATIONS, FINES, AND PENALTIES (SPECIAL) (MAY 2003)

Derived from NREL 08.100-05

(Applies to all subcontracts.)

- (a) The Subcontractor shall immediately notify the NREL Subcontract Administrator of any notice the Subcontractor may receive including Notice of Violations (NOV) or Notice of Alleged Violations (NOAV) issued by federal, state, or local regulators associated with the operations of NREL and/or performance of work under the Subcontract.
- (b) When deemed appropriate by the NREL Subcontract Administrator, the Subcontractor shall conduct negotiations with regulators regarding NOV/NOAVs, fines and penalties, including, if the NREL Subcontract Administrator so requires, accepting NOV/NOAVs in its own name. The Subcontractor shall make no commitments or offers to regulators binding NREL/Government unless approved in advance and in writing by the NREL Subcontract Administrator. Failure to obtain such advance written approval may result in otherwise allowable costs being declared unallowable and/or the Subcontractor being liable for any excess costs to NREL/Government associated with or resulting from such offers/commitments.
- (c) The Subcontractor shall support and provide assistance to the NREL/Government concerning any matter arising under a NOV/NOAV.

SUBCONTRACTOR QUALITY REPRESENTATIONS (SPECIAL) (MAY 2009)

Derived from NREL 08.100-06

(Applies to all subcontracts, including construction subcontracts, where items or parts are supplied or delivered.)

- (a) New Materials. Unless otherwise specified in this subcontract, all items or parts supplied or delivered by the Subcontractor, or its lower-tier Subcontractors, shall consist of new materials. "New materials" means previously unused. The Subcontractor shall not deliver any item or part that is residual inventory resulting from terminated Government contracts/subcontracts or former Government surplus property.
- (b) Recycled or Recovered Materials. The requirement for supply or delivery of items or parts consisting of new materials does not exclude the delivery of recycled or recovered materials as defined by the Environmental Protection Agency in 40 CFR 247.
- (c) Used, Refurbished, or Rebuilt Items or Parts. In the event that items or parts consisting of new materials are not reasonably available to the Subcontractor, with prior NREL Subcontract Administrator written approval, the Subcontractor may supply or deliver either: used; or refurbished; or rebuilt items or parts that are not of such an age or so deteriorated as to impair their usefulness or safety and conform to government or industry-accepted specifications or national consensus standards.
- (d) Suspect or Counterfeit Items or Parts. "Suspect or counterfeit items or parts" mean (1) items or parts that may be of new manufacture but labeled to represent a different class of items or parts or (2) used and/or refurbished items or parts complete with false labeling, that are represented as new items or parts.
- (e) Indemnification of NREL/DOE. The Subcontractor shall indemnify NREL and the DOE, their officers, agents, and employees, and third parties for any financial loss, injury, or property damage resulting directly or indirectly from items or parts that are not genuine, original, and unused, or not otherwise suitable for the intended purpose. This includes, but is not limited to, items or parts that are defective, suspect, or counterfeit; items or parts that have been provided under false pretenses; and items or parts that are materially altered, damaged, deteriorated, degraded, or result in product failure.
- (f) Quality Representations. The Subcontractor represents that items and parts supplied or delivered under this Subcontract shall not include suspect or counterfeit items or parts nor shall counterfeit or suspect items or parts be used in performing any work under this Subcontract whether on or off the NREL operated facility. In the event that the Subcontractor or its lower-tier Subcontractors supplies or delivers suspect or counterfeit items or parts, such items or parts shall be impounded by NREL, or the Subcontractor shall remove the items or parts as directed by the NREL Subcontract Administrator. The Subcontractor shall promptly replace the counterfeit or suspect items or parts with supplies acceptable to NREL and the Subcontractor shall be liable for all costs relating to impoundment, removal, and replacement.
- (g) NREL Rights. The rights of NREL under this clause are in addition to any other rights provided by law or under this Subcontract and such rights shall survive the termination or natural completion of the period of performance of this Subcontract.

SYSTEM FOR AWARD MANAGEMENT (NOV 2019)

Derived from FAR 52.204-7 (OCT 2018)

Applies to all subcontracts and solicitations.

- (a) **Definitions.** As used in this provision—
- “Electronic Funds Transfer (EFT) indicator means a four-character suffix to the unique entity identifier. The suffix is assigned at the discretion of the commercial, nonprofit, or Government entity to establish additional System for Award Management records for identifying alternative EFT accounts (see subpart 32.11) for the same entity.
- “Registered in the System for Award Management (SAM)” means that—
- (1) The Offeror has entered all mandatory information, including the unique entity identifier and the EFT indicator, if applicable, the Commercial and Government Entity (CAGE) code, as well as data required by the Federal Funding Accountability and Transparency Act of 2006 (see subpart 4.14) into SAM
 - (2) The offeror has completed the Core, Assertions, and Representations and Certifications, and Points of Contact sections of the registration in SAM;
 - (3) The Government has validated all mandatory data fields, to include validation of the Taxpayer Identification Number (TIN) with the Internal Revenue Service (IRS). The offeror will be required to provide consent for TIN validation to the Government as a part of the SAM registration process; and
 - (4) The Government has marked the record “Active”.
- “Unique entity identifier” means a number or other identifier used to identify a specific commercial, nonprofit, or Government entity. See www.sam.gov for the designated entity for establishing unique entity identifiers.
- (b)
- (1) An Offeror is required to be registered in SAM when submitting an offer or quotation, and shall continue to be registered until time of award, during performance, and through final payment of any contract, basic agreement, basic ordering agreement, or blanket purchasing agreement resulting from this solicitation.
 - (2) The Offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation “Unique Entity Identifier” followed by the unique entity identifier that identifies the Offeror’s name and address exactly as stated in the offer. The Offeror also shall enter its EFT indicator, if applicable. The unique entity identifier will be used by the NREL Subcontract Administrator to verify that the Offeror is registered in the SAM.
- (c) If the Offeror does not have a unique entity identifier, it should contact the entity designated at www.sam.gov for establishment of the unique entity identifier directly to obtain one. The Offeror should be prepared to provide the following information:
- (1) Company legal business name.
 - (2) Tradestyle, doing business, or other name by which your entity is commonly recognized.
 - (3) Company Physical Street Address, City, State, and Zip Code.
 - (4) Company Mailing Address, City, State and Zip Code (if separate from physical).
 - (5) Company telephone number.
 - (6) Date the company was started.
 - (7) Number of employees at your location.
 - (8) Chief executive officer/key manager.
 - (9) Line of business (industry).

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- (10) Company Headquarters name and address (reporting relationship within your entity).
- (d) If the Offeror does not become registered in the SAM database in the time prescribed by the NREL Subcontract Administrator, the NREL Subcontract Administrator reserves the right to proceed to award to the next otherwise successful registered Offeror.
- (e) Processing time, which normally takes 48 hours, should be taken into consideration when registering. Offerors who are not registered in SAM should consider applying for registration immediately upon receipt of this solicitation. See <https://www.sam.gov> for information on registration.

SYSTEM FOR AWARD MANAGEMENT MAINTENANCE (NOV 2019)

Derived from FAR 52.204-13 (OCT 2018)

(Applies to all subcontracts.)

(a) Definitions. As used in this clause—

“Electronic Funds Transfer (EFT) indicator” means a four-character suffix to the unique entity identifier. The suffix is assigned at the discretion of the commercial, nonprofit, or Government entity to establish additional System for Award Management (SAM) records for identifying alternative EFT accounts (see subpart 32.11) for the same entity.

“Registered in the System for Award Management (SAM)” means that—

- (1) The subcontractor has entered all mandatory information, including the unique entity identifier and the EFT indicator (if applicable), the Commercial and Government Entity (CAGE) code, as well as data required by the Federal Funding Accountability and Transparency Act of 2006 (see subpart 4.14), into SAM;
- (2) The subcontractor has completed the Core, Assertions, Representations and Certifications, and Points of Contact sections of the registration in SAM;
- (3) The Government has validated all mandatory data fields, to include validation of the Taxpayer Identification Number (TIN) with the Internal Revenue Service (IRS). The subcontractor will be required to provide consent for TIN validation to the Government as a part of the SAM registration process; and
- (4) The Government has marked the record “Active”.

“System for Award Management (SAM)” means the primary Government repository for prospective Federal awardee and Federal awardee information and the centralized Government system for certain contracting, grants, and other assistance-related processes. It includes—

- (1) Data collected from prospective Federal awardees required for the conduct of business with the Government;
- (2) Prospective subcontractor-submitted annual representations and certifications in accordance with FAR subpart 4.12; and
- (3) Identification of those parties excluded from receiving Federal contracts, certain subcontracts, and certain types of Federal financial and non-financial assistance and benefits.

“Unique entity identifier” means a number or other identifier used to identify a specific commercial, nonprofit, or Government entity. See www.sam.gov for the designated entity for establishing unique entity identifiers.

- (b) If the solicitation for this subcontract contained the provision 52.204-7, and the subcontractor was unable to register prior to award, the subcontractor shall be registered in SAM within 30 days after award or before three days prior to submission of the first invoice, whichever occurs first.
- (c) The subcontractor shall maintain registration in SAM during subcontract performance and through final payment of any subcontract, basic agreement, basic ordering agreement, or blanket purchasing agreement. The subcontractor is responsible for the currency, accuracy and completeness of the data within SAM, and for any liability resulting from NREL and the Government’s reliance on inaccurate or incomplete data. To remain registered in SAM after the initial registration, the subcontractor is required to review and update on an annual basis, from the date of initial registration or subsequent updates, its information in SAM to ensure it is current, accurate and

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- complete. Updating information in SAM does not alter the terms and conditions of this subcontract and is not a substitute for a properly executed contractual document.
- (d)
- (1)
- (i) If a subcontractor has legally changed its business name or “doing business as” name (whichever is shown on the subcontract), or has transferred the assets used in performing the subcontract, but has not completed the necessary requirements regarding novation and change-of-name agreements in subpart 42.12, the subcontractor shall provide the responsible NREL Subcontract Administrator a minimum of one business day's written notification of its intention to—
- (A) Change the name in SAM;
- (B) Comply with the requirements of subpart 42.12 of the FAR;
and
- (C) Agree in writing to the timeline and procedures specified by the responsible NREL Subcontract Administrator. The subcontractor shall provide with the notification sufficient documentation to support the legally changed name.
- (ii) If the subcontractor fails to comply with the requirements of paragraph (d)(1)(i) of this clause, or fails to perform the agreement at paragraph (d)(1)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the SAM information that shows the subcontractor to be other than the subcontractor indicated in the subcontract will be considered to be incorrect information within the meaning of the “Suspension of Payment” paragraph of the electronic funds transfer (EFT) clause of this subcontract.

NOTIFICATION OF CHANGE IN OWNERSHIP AND/OR NAME (OCT 2009)

Derived from FAR 52.215-19 (OCT 1997) (FD)

(Applies to all subcontracts.)

- (a) The Subcontractor shall make the following notifications in writing:
 - (1) When the Subcontractor becomes aware that a change in its ownership or name has occurred, or is certain to occur, the Subcontractor shall provide such notification in accordance with NREL's novation and name change procedures.
 - (2) When a change that could result in changes in the valuation of the Subcontractor's capitalized assets in the accounting records or any other asset valuations or cost changes, the Subcontractor shall provide such notification to the NREL Subcontract Administrator within thirty (30) days.
- (b) In the event of change in ownership, the Subcontractor shall—
 - (1) Maintain current, accurate, and complete inventory records of assets and their costs;
 - (2) Provide the NREL Subcontract Administrator or designated representative ready access to the records upon request;
 - (3) Ensure that all individual and grouped assets, their capitalized values, accumulated depreciation or amortization, and remaining useful lives, are identified accurately before and after each of the Subcontractor's ownership changes; and
 - (4) Retain and continue to maintain depreciation and amortization schedules based on the asset records maintained before each Subcontractor ownership change.
- (c) The Subcontractor shall include the substance of this clause in all lower-tier subcontracts where it is contemplated that cost or pricing data will be required or for which any pre-award or post-award cost determination is subject to FAR 31.2, cost principles and procedures applicable to commercial organizations. The Subcontractor shall notify the NREL Subcontract Administrator of the change in ownership or name of any lower-tier Subcontractor subject to the terms of this clause.

UTILIZATION OF SMALL BUSINESS CONCERNS (NOV 2016)

Derived from FAR 52.219-8 (FD) (NOV 2016)

(Applies to all subcontracts exceeding \$150,000.)

(a) *Definitions.* As used in this subcontract—

"HUBZone small business concern" means a small business concern, certified by the Small Business Administration, that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

"Service-disabled veteran-owned small business concern"—

(1) Means a small business concern—

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) "Service-disabled veteran" means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

"Small business concern" means a small business as defined pursuant to Section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto.

"Small disadvantaged business concern, consistent with 13 CFR 124.1002," means a small business concern under the size standard applicable to the acquisition, that—

(1) Is at least 51 percent unconditionally and directly owned (as defined at 13

(i) CFR 124.105) by-- One or more socially disadvantaged (as defined at 13 CFR 124.103) and economically disadvantaged (as defined at 13 CFR 124.104) individuals who are citizens of the United States; and

(ii) Each individual claiming economic disadvantage has a net worth not exceeding \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and

(2) The management and daily business operations of which are controlled (as defined at 13.CFR 124.106) by individuals, who meet the criteria in paragraphs (1)(i) and (ii) of this definition.

"Veteran-owned small business concern" means a small business concern—

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

"Women-owned small business concern" means a small business concern--

(1) That is at least 51 percent owned by one or more women, or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

(b) It is the policy of the United States that small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns shall have the maximum practicable opportunity to participate in performing subcontracts let by any Federal agency,

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

including subcontracts and lower-tier subcontracts for subsystems, assemblies, components, and related services for major systems. It is further the policy of the United States that its prime contractors and subcontractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns.

- (c) The Subcontractor hereby agrees to carry out this policy in the awarding of lower-tier subcontracts to the fullest extent consistent with efficient subcontract performance. The Subcontractor further agrees to cooperate in any studies or surveys as may be conducted by the United States Small Business Administration or the awarding agency of the United States as may be necessary to determine the extent of the Subcontractor's compliance with this clause.
- (d)
- (1) The Contractor may accept a subcontractor's written representations of its size and socioeconomic status as a small business, small disadvantaged business, veteran-owned small business, service-disabled veteran-owned small business, or a women-owned small business if the subcontractor represents that the size and socioeconomic status representations with its offer are current, accurate, and complete as of the date of the offer for the subcontract.
 - (2) The Subcontractor may accept a lower-tier subcontractor's representations of its size and socioeconomic status as a small business, small disadvantaged business, veteran-owned small business, service-disabled veteran-owned small business, or a women-owned small business in the System for Award Management (SAM) if—
 - (i) The lower-tier subcontractor is registered in SAM; and
 - (ii) The lower-tier subcontractor represents that the size and socioeconomic status representations made in SAM are current, accurate and complete as of the date of the offer for the subcontract.
 - (3) The Subcontractor may not require the use of SAM for the purposes of representing size or socioeconomic status in connection with a lower-tier subcontract.
 - (4) In accordance with 13 CFR 121.411, 124.1015, 125.29, 126.900, and 127.700, a subcontractor acting in good faith is not liable for misrepresentations made by its lower-tier subcontractors regarding the lower-tier subcontractor's size or socioeconomic status.
 - (5) The Subcontractor shall confirm that a lower-tier subcontractor representing itself as a HUBZone small business concern is certified by SBA as a HUBZone small business concern by accessing the System for Award Management database or by contacting the SBA. Options for contacting the SBA include—
 - (i) HUBZone small business database search application Web page at http://dsbs.sba.gov/dsbs/search/dsp_searchhubzone.cfm; or <http://www.sba.gov/hubzone>;
 - (ii) In writing to the Director/HUB, U.S. Small Business Administration, 409 3rd Street, SW., Washington DC 20416; or
 - (iii) The SBA HUBZone Help Desk at hubzone@sba.gov.

CONVICT LABOR (JUN 2003)

Derived from FAR 52.222-3 (JUN 2003)

(Applies to all subcontracts.)

- (a) Except as provided in paragraph (b) of this clause, the Subcontractor shall not employ in the performance of this subcontract any person undergoing a sentence of imprisonment imposed by any court of a State, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, or the U.S. Virgin Islands.
- (b) The Subcontractor is not prohibited from employing persons—
 - (1) On parole or probation to work at paid employment during the term of their sentence;
 - (2) Who have been pardoned or who have served their terms; or
 - (3) Confined for violation of the laws of any of the States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, or the U.S. Virgin Islands who are authorized to work at paid employment in the community under the laws of such jurisdiction, if—
 - (i) The worker is paid or is in an approved work training program on a voluntary basis;
 - (ii) Representatives of local union central bodies or similar labor union organizations have been consulted;
 - (iii) Such paid employment will not result in the displacement of employed workers, or be applied in skills, crafts, or trades in which there is a surplus of available gainful labor in the locality, or impair existing contracts for services;
 - (iv) The rates of pay and other conditions of employment will not be less than those paid or provided for work of a similar nature in the locality in which the work is being performed; and
 - (v) The Attorney General of the United States has certified that the work-release laws or regulations of the jurisdiction involved are in conformity with the requirements of Executive Order 11755, as amended by Executive Orders 12608 and 12943.

SUBCONTRACTS FOR MATERIALS, SUPPLIES, ARTICLES AND EQUIPMENT (MAY 2014)

Derived from FAR 52.222-20 (MAY 2014)

(Applies to all subcontracts exceeding \$15,000 for manufacturing or furnishing of materials, supplies, articles, or equipment subject to the Walsh-Healey Public Contracts Act.)

If this subcontract is for the manufacture or furnishing of materials, supplies, articles or equipment in an amount that exceeds or may exceed \$15,000, and is subject to 41 U.S.C. chapter 65, the following terms and conditions apply:

- (a) All stipulations required by 41 U.S.C. chapter 65 and regulations issued by the Secretary of Labor (41 CFR Chapter 50) are incorporated by reference. These stipulations are subject to all applicable rulings and interpretations of the Secretary of Labor that are now, or may hereafter, be in effect.
- (b) All employees whose work relates to this subcontract shall be paid not less than the minimum wage prescribed by regulations issued by the Secretary of Labor (41 CFR 50-202.2). Learners, student learners, apprentices, and workers with disabilities may be employed at less than the prescribed minimum wage (see 41 CFR 50-202.3) to the same extent that such employment is permitted under Section 14 of the Fair Labor Standards Act (41 U.S.C. 6508).

PROHIBITION OF SEGREGATED FACILITIES (APR 2015)

Derived from FAR 52.222-21 (APR 2015) (FD)

(Applies to subcontracts where the "Equal Opportunity Clause" is applicable.)

(a) *Definitions.* As used in this clause--

"Gender identity" has the meaning given by the Department of Labor's Office of Federal Contract Compliance Programs, and is found at

www.dol.gov/ofccp/LGBT/LGBT_FAQs.html .

"Segregated facilities" means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between sexes.

"Sexual orientation" has the meaning given by the Department of Labor's Office of Federal Contract Compliance Programs, and is found at

www.dol.gov/ofccp/LGBT/LGBT_FAQs.html .

- (b) The Subcontractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Subcontractor agrees that a breach of this clause is a violation of the Equal Opportunity clause in the contract.
- (c) The Subcontractor shall include this clause in every lower-tier subcontract and purchase order that is subject to the Equal Opportunity clause of this contract.

EQUAL OPPORTUNITY (SEP 2016)

Derived from FAR 52.222-26 (SEP 2016) (FD)

(Applies to all subcontracts unless exempt from Executive Order 11246.) (See FAR 22.807(a).)

(a) Definitions. As used in this clause—

“Compensation” means any payments made to, or on behalf of, an employee or offered to an applicant as remuneration for employment, including but not limited to salary, wages, overtime pay, shift differentials, bonuses, commissions, vacation and holiday pay, allowances, insurance and other benefits, stock options and awards, profit sharing, and retirement.

“Compensation information” means the amount and type of compensation provided to employees or offered to applicants, including, but not limited to, the desire of the Subcontractor to attract and retain a particular employee for the value the employee is perceived to add to the Subcontractor’s profit or productivity; the availability of employees with like skills in the marketplace; market research about the worth of similar jobs in the relevant marketplace; job analysis, descriptions, and evaluations; salary and pay structures; salary surveys; labor union agreements; and Subcontractor decisions, statements and policies related to setting or altering employee compensation.

“Essential job functions” means the fundamental job duties of the employment position an individual holds. A job function may be considered essential if—

(1) The access to compensation information is necessary in order to perform that function or another routinely assigned business task;

or

(2) The function or duties of the position include protecting and maintaining the privacy of employee personnel records, including compensation information.

“Gender identity” has the meaning given by the Department of Labor’s Office of Federal Contract Compliance Programs, and is found at www.dol.gov/ofccp/LGBT/LGBT_FAQs.html.

“Sexual orientation” has the meaning given by the Department of Labor’s Office of Federal Contract Compliance Programs, and is found at www.dol.gov/ofccp/LGBT/LGBT_FAQs.html.

“United States” means the 50 States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, and Wake Island.

(b) (1) If, during any twelve (12) month period (including the twelve (12) months preceding the award of this subcontract), the Subcontractor has been or is awarded nonexempt Federal contracts and/or subcontracts that have an aggregate value in excess of \$10,000, the Subcontractor shall comply with this clause, except for work performed outside the United States by employees who were not recruited within the United States. Upon request, the Subcontractor shall provide information necessary to determine the applicability of this clause.

(2) If the Subcontractor is a religious corporation, association, educational institution, or society, the requirements of this clause do not apply with respect to the employment of individuals of a particular religion to perform work connected with the carrying on of the Subcontractor’s activities (41 CFR 60-1.5).

(c) (1) The Subcontractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation,

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- gender identity, or national origin. However, it shall not be a violation of this clause for the Subcontractor to extend a publicly announced preference in employment to Indians living on or near an Indian reservation, in connection with employment opportunities on or near an Indian reservation, as permitted by 41 CFR 60-1.5.
- (2) The Subcontractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. This shall include, but not be limited to—
 - (i) Employment;
 - (ii) Upgrading;
 - (iii) Demotion;
 - (iv) Transfer;
 - (v) Recruitment or recruitment advertising;
 - (vi) Layoff or termination;
 - (vii) Rates of pay or other forms of compensation; and
 - (viii) Selection for training, including apprenticeship.
 - (3) The Subcontractor shall post in conspicuous places available to employees and applicants for employment the notices to be provided by the NREL Subcontract Administrator that explain this clause.
 - (4) The Subcontractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Subcontractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
 - (5)
 - (i) The Subcontractor shall not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This prohibition against discrimination does not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the Subcontractor's legal duty to furnish information.
 - (ii) The Subcontractor shall disseminate the prohibition on discrimination in paragraph (c)(5)(i) of this clause, using language prescribed by the Director of the Office of Federal Contract Compliance Programs (OFCCP), to employees and applicants by—
 - (A) Incorporation into existing employee manuals or handbooks; and
 - (B) Electronic posting or by posting a copy of the provision in conspicuous places available to employees and applicants for employment.
 - (6) The Subcontractor shall send, to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, the notice to be provided by the NREL Subcontract

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- Administrator advising the labor union or workers' representative of the Subcontractor's commitments under this clause, and post copies of the notice in conspicuous places available to employees and applicants for employment.
- (7) The Subcontractor shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.
 - (8) The Subcontractor shall furnish to NREL all information required by Executive Order 11246, as amended, and by the rules, regulations, and orders of the Secretary of Labor. The Subcontractor shall also file Standard Form 100 (EEO-1), or any successor form, as prescribed in 41 CFR Part 60-1. Unless the Subcontractor has filed within the twelve (12) months preceding the date of subcontract award, the Subcontractor shall, within thirty (30) days after subcontract award, apply to either the regional Office of Federal Contract Compliance Programs (OFCCP) or the local office of the Equal Employment Opportunity Commission for the necessary forms.
 - (9) The Subcontractor shall permit access to its premises, during normal business hours, by NREL/the Government or the OFCCP for the purpose of conducting on-site compliance evaluations and complaint investigations. The Subcontractor shall permit the NREL/the Government to inspect and copy any books, accounts, records (including computerized records), and other material that may be relevant to the matter under investigation and pertinent to compliance with Executive Order 11246, as amended, and rules and regulations that implement the Executive Order.
 - (10) If the OFCCP determines that the Subcontractor is not in compliance with this clause or any rule, regulation, or order of the Secretary of Labor, this subcontract may be canceled, terminated, or suspended in whole or in part and the Subcontractor may be declared ineligible for further NREL/ Government contracts/subcontracts, under the procedures authorized in Executive Order 11246, as amended. In addition, sanctions may be imposed and remedies invoked against the Subcontractor as provided in Executive Order 11246, as amended; in the rules, regulations, and orders of the Secretary of Labor; or as otherwise provided by law.
 - (11) The Subcontractor shall include the terms and conditions of this clause in every lower-tier subcontract or purchase order that is not exempted by the rules, regulations, or orders of the Secretary of Labor issued under Executive Order 11246, as amended, so that these terms and conditions will be binding upon each lower-tier Subcontractor or vendor.
 - (12) The Subcontractor shall take such action with respect to any lower-tier subcontract or purchase order as the NREL Subcontract Administrator may direct as a means of enforcing these terms and conditions, including sanctions for noncompliance, provided, that if the Subcontractor becomes involved in, or is threatened with, litigation with a lower-tier Subcontractor or vendor as a result of any direction, the Subcontractor may request the United States to enter into the litigation to protect the interests of the United States.
- (d) Notwithstanding any other clause in this subcontract, disputes relative to this clause will be governed by the procedures in 41 CFR Part 60-1.1.

COMBATING TRAFFICKING IN PERSONS (MAR 2015)

Derived from FAR 52.222-50 (MAR 2015) (FD)

(Applies to all subcontracts.)

(a) *Definitions.* As used in this clause—

“Agent” means any individual, including a director, an officer, an employee, or an independent Subcontractor, authorized to act on behalf of the organization.

“Coercion” means—

- (1) Threats of serious harm to or physical restraint against any person;
- (2) Any scheme, plan, or pattern intended to cause a person to believe that failure to perform an act would result in serious harm to or physical restraint against any person; or
- (3) The abuse or threatened abuse of the legal process.

“Commercial sex act” means any sex act on account of which anything of value is given to or received by any person.

“Commercially available off-the-shelf (COTS) item” means--

- (1) Any item of supply (including construction material) that is—
 - (i) A commercial item (as defined in paragraph (1) of the definition at FAR 2.101);
 - (ii) Sold in substantial quantities in the commercial marketplace; and
 - (iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and
- (2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4), such as agricultural products and petroleum products.

“Debt bondage” means the status or condition of a debtor arising from a pledge by the debtor of his or her personal services or of those of a person under his or her control as a security for debt, if the value of those services as reasonably assessed is not applied toward the liquidation of the debt or the length and nature of those services are not respectively limited and defined.

“Employee” means an employee of the Subcontractor directly engaged in the performance of work under the subcontract who has other than a minimal impact or involvement in subcontract performance.

“Forced labor” means knowingly providing or obtaining the labor or services of a person—

- (1) By threats of serious harm to, or physical restraint against, that person or another person;
- (2) By means of any scheme, plan, or pattern intended to cause the person to believe that, if the person did not perform such labor or services, that person or another person would suffer serious harm or physical restraint; or
- (3) By means of the abuse or threatened abuse of law or the legal process.

“Involuntary servitude” includes a condition of servitude induced by means of—

- (1) Any scheme, plan, or pattern intended to cause a person to believe that, if the person did not enter into or continue in such conditions, that person or another person would suffer serious harm or physical restraint; or
- (2) The abuse or threatened abuse of the legal process.

“Severe forms of trafficking in persons” means—

- (1) Sex trafficking in which a commercial sex act is induced by force, fraud, or coercion, or in which the person induced to perform such act has not attained 18 years of age; or

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- (2) The recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.
“Sex trafficking” means the recruitment, harboring, transportation, provision, or obtaining of a person for the purpose of a commercial sex act.
“Lower-Tier Subcontract” means any contract entered into by a lower-tier subcontractor to furnish supplies or services for performance of a subcontract.
“Lower-Tier Subcontractor” means any supplier, distributor, vendor, or firm that furnishes supplies or services to or for a Subcontractor or another Lower-Tier Subcontractor.
“United States” means the 50 States, the District of Columbia, and outlying areas.
- (b) *Policy.* The United States Government has adopted a policy prohibiting trafficking in persons including the trafficking-related activities of this clause. Subcontractors, Subcontractor employees, and their agents shall not—
- (1) Engage in severe forms of trafficking in persons during the period of performance of the subcontract;
 - (2) Procure commercial sex acts during the period of performance of the subcontract;
 - (3) Use forced labor in the performance of the subcontract;
 - (4) Destroy, conceal, confiscate, or otherwise deny access by an employee to the employee's identity or immigration documents, such as passports or drivers' licenses, regardless of issuing authority;
 - (5)
 - (i) Use misleading or fraudulent practices during the recruitment of employees or offering of employment, such as failing to disclose, in a format and language accessible to the worker, basic information or making material misrepresentations during the recruitment of employees regarding the key terms and conditions of employment, including wages and fringe benefits, the location of work, the living conditions, housing and associated costs (if employer or agent provided or arranged), any significant cost to be charged to the employee, and, if applicable, the hazardous nature of the work;
 - (ii) Use recruiters that do not comply with local labor laws of the country in which the recruiting takes place;
 - (6) Charge employees recruitment fees;
 - (7)
 - (i) Fail to provide return transportation or pay for the cost of return transportation upon the end of employment--
 - (A) For an employee who is not a national of the country in which the work is taking place and who was brought into that country for the purpose of working on a U.S. Government contract or subcontract (for portions of contracts performed outside the United States); or
 - (B) For an employee who is not a United States national and who was brought into the United States for the purpose of working on a U.S. Government contract or subcontract, if the payment of such costs is required under existing temporary worker programs or pursuant to a written agreement with the employee (for portions of contracts performed inside the United States); except that--
 - (ii) The requirements of paragraphs (b)(7)(i) of this clause shall not apply to an employee who is--
 - (A) Legally permitted to remain in the country of employment and who chooses to do so; or

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- (B) Exempted by an authorized official of the contracting agency from the requirement to provide return transportation or pay for the cost of return transportation;
- (iii) The requirements of paragraph (b)(7)(i) of this clause are modified for a victim of trafficking in persons who is seeking victim services or legal redress in the country of employment, or for a witness in an enforcement action related to trafficking in persons. The Subcontractor shall provide the return transportation or pay the cost of return transportation in a way that does not obstruct the victim services, legal redress, or witness activity. For example, the Subcontractor shall not only offer return transportation to a witness at a time when the witness is still needed to testify. This paragraph does not apply when the exemptions at paragraph (b)(7)(ii) of this clause apply.
- (8) Provide or arrange housing that fails to meet the host country housing and safety standards; or
- (9) If required by law or contract, fail to provide an employment contract, recruitment agreement, or other required work document in writing. Such written work document shall be in a language the employee understands. If the employee must relocate to perform the work, the work document shall be provided to the employee at least five days prior to the employee relocating. The employee's work document shall include, but is not limited to, details about work description, wages, prohibition on charging recruitment fees, work location(s), living accommodations and associated costs, time off, roundtrip transportation arrangements, grievance process, and the content of applicable laws and regulations that prohibit trafficking in persons.
- (c) *Subcontractor requirements.* The Subcontractor shall—
 - (1) Notify its employees and agents of—
 - (i) The United States Government's policy prohibiting trafficking in persons, described in paragraph (b) of this clause; and
 - (ii) The actions that will be taken against employees or agents for violations of this policy. Such actions for employees may include, but are not limited to, removal from the subcontract, reduction in benefits, or termination of employment; and
 - (2) Take appropriate action, up to and including termination, against employees, agents, or lower-tier Subcontractors that violate the policy in paragraph (b) of this clause.
- (d) *Notification.*
 - (1) The Subcontractor shall inform the NREL Subcontract Administrator and the agency Inspector General immediately of—
 - (i) Any credible information it receives from any source (including host country law enforcement) that alleges a Subcontractor employee, lower-tier Subcontractor, or lower-tier Subcontractor employee, or their agent has engaged in conduct that violates the policy in paragraph (b) of this clause (see also 18 U.S.C. 1351, Fraud in Foreign Labor Contracting, and 52.203-1. 13(b)(3)(i)(A), if that clause is included in the solicitation or subcontract, which requires disclosure to NREL General Counsel when the Subcontractor has credible evidence of fraud); and
 - (ii) Any actions taken against a Subcontractor employee, lower-tier Subcontractor, lower-tier Subcontractor employee, or their agent pursuant to this clause.

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- (2) If the allegation may be associated with more than one subcontract, the Subcontractor shall inform the NREL subcontract administrator for the subcontract with the highest dollar value.
- (e) *Remedies.* In addition to other remedies available to the Government, the Subcontractor's failure to comply with the requirements of paragraphs (c), (d), (g), (h), or (i) of this clause may result in—
 - (1) Requiring the Subcontractor to remove a Subcontractor employee or employees from the performance of the subcontract;
 - (2) Requiring the Subcontractor to terminate a subcontract;
 - (3) Suspension of subcontract payments until the Subcontractor has taken appropriate remedial action;
 - (4) Loss of award fee, consistent with the award fee plan, for the performance period in which the Government determined Subcontractor non-compliance;
 - (5) Declining to exercise available options under the contract;
 - (6) Termination of the subcontract for default or cause, in accordance with the termination clause of this subcontract; or
 - (7) Suspension or debarment.
- (f) *Mitigating and aggravating factors.* When determining remedies, the NREL Subcontract Administrator may consider the following:
 - (1) *Mitigating factors.* The Subcontractor had a Trafficking in Persons compliance plan or an awareness program at the time of the violation, was in compliance with the plan, and has taken appropriate remedial actions for the violation, that may include reparation to victims for such violations.
 - (2) *Aggravating factors.* The Subcontractor failed to abate an alleged violation or enforce the requirements of a compliance plan, when directed by the NREL Subcontract Administrator to do so.
- (g) *Full cooperation.*
 - (1) The Subcontractor shall, at a minimum—
 - (i) Disclose to NREL General Counsel information sufficient to identify the nature and extent of an offense and the individuals responsible for the conduct;
 - (ii) Provide timely and complete responses to Government auditors' and investigators' requests for documents;
 - (iii) Cooperate fully in providing reasonable access to its facilities and staff (both inside and outside the U.S.) to allow contracting agencies and other responsible Federal agencies to conduct audits, investigations, or other actions to ascertain compliance with the Trafficking Victims Protection Act of 2000 (22 U.S.C. chapter 78), E.O. 13627, or any other applicable law or regulation establishing restrictions on trafficking in persons, the procurement of commercial sex acts, or the use of forced labor; and
 - (iv) Protect all employees suspected of being victims of or witnesses to prohibited activities, prior to returning to the country from which the employee was recruited, and shall not prevent or hinder the ability of these employees from cooperating fully with Government authorities.
 - (2) The requirement for full cooperation does not foreclose any Subcontractor rights arising in law, the FAR, or the terms of the contract. It does not—
 - (i) Require the Subcontractor to waive its attorney-client privilege or the protections afforded by the attorney work product doctrine;
 - (ii) Require any officer, director, owner, employee, or agent of the Subcontractor, including a sole proprietor, to waive his or her attorney client privilege or Fifth Amendment rights; or

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- (iii) Restrict the Subcontractor from—
 - (A) Conducting an internal investigation; or
 - (B) Defending a proceeding or dispute arising under the contract or related to a potential or disclosed violation.
- (h) *Compliance plan.*
 - (1) This paragraph (h) applies to any portion of the contract that—
 - (i) Is for supplies, other than commercially available off-the-shelf items, acquired outside the United States, or services to be performed outside the United States; and
 - (ii) Has an estimated value that exceeds \$500,000.
 - (2) The Subcontractor shall maintain a compliance plan during the performance of the contract that is appropriate—
 - (i) To the size and complexity of the contract; and
 - (ii) To the nature and scope of the activities to be performed for the Government, including the number of non-United States citizens expected to be employed and the risk that the contract or subcontract will involve services or supplies susceptible to trafficking in persons.
 - (3) *Minimum requirements.* The compliance plan must include, at a minimum, the following:
 - (i) An awareness program to inform Subcontractor employees about the Government's policy prohibiting trafficking-related activities described in paragraph (b) of this clause, the activities prohibited, and the actions that will be taken against the employee for violations. Additional information about Trafficking in Persons and examples of awareness programs can be found at the Web site for the Department of State's Office to Monitor and Combat Trafficking in Persons at <http://www.state.gov/j/tip/>.
 - (ii) A process for employees to report, without fear of retaliation, activity inconsistent with the policy prohibiting trafficking in persons, including a means to make available to all employees the hotline phone number of the Global Human Trafficking Hotline at 1-844-888-FREE and its email address at help@befree.org.
 - (iii) A recruitment and wage plan that only permits the use of recruitment companies with trained employees, prohibits charging recruitment fees to the employee, and ensures that wages meet applicable host-country legal requirements or explains any variance.
 - (iv) A housing plan, if the Subcontractor or subSubcontractor intends to provide or arrange housing, that ensures that the housing meets host-country housing and safety standards.
 - (v) Procedures to prevent agents and Lower-Tier Subcontractors at any tier and at any dollar value from engaging in trafficking in persons (including activities in paragraph (b) of this clause) and to monitor, detect, and terminate any agents, subcontracts, or subSubcontractor employees that have engaged in such activities.
 - (4) *Posting.*
 - (i) The Subcontractor shall post the relevant contents of the compliance plan, no later than the initiation of contract performance, at the workplace (unless the work is to be performed in the field or not in a fixed location) and on the Subcontractor's Web site (if one is maintained). If posting at the workplace or on the Web site is impracticable, the Subcontractor shall provide the relevant contents of the compliance plan to each worker in writing.

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- (ii) The Subcontractor shall provide the compliance plan to the NREL Subcontract Administrator upon request.
- (5) *Certification.* Annually after receiving an award, the Subcontractor shall submit a certification to the NREL Subcontract Administrator that—
 - (i) It has implemented a compliance plan to prevent any prohibited activities identified at paragraph (b) of this clause and to monitor, detect, and terminate any agent, lower-tier subcontract or lower-tier subcontractor employee engaging in prohibited activities; and
 - (ii) After having conducted due diligence, either—
 - (A) To the best of the Subcontractor's knowledge and belief, neither it nor any of its agents, lower-tier subcontractors, or their agents is engaged in any such activities; or
 - (B) If abuses relating to any of the prohibited activities identified in paragraph (b) of this clause have been found, the Subcontractor or lower-tier subcontractor has taken the appropriate remedial and referral actions.
- (i) *Subcontracts.*
 - (1) The Subcontractor shall include the substance of this clause, including this paragraph (i), in all lower-tier subcontracts and in all contracts with agents. The requirements in paragraph (h) of this clause apply only to any portion of the lower-tier subcontract that—
 - (A) Is for supplies, other than commercially available off-the-shelf items, acquired outside the United States, or services to be performed outside the United States; and
 - (B) Has an estimated value that exceeds \$500,000.
 - (2) If any lower-tier subcontractor is required by this clause to submit a certification, the Subcontractor shall require submission prior to the award of the lower-tier subcontract and annually thereafter. The certification shall cover the items in paragraph (h)(5) of this clause.

RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (JUN 2008)

Derived from FAR 52.225-13 (JUN 2008)(FD)

(Applies to all subcontracts.)

- (a) Except as authorized by the Office of Foreign Assets Control (OFAC) in the Department of the Treasury, the Subcontractor shall not acquire, for use in the performance of this subcontract, any supplies or services if any proclamation, Executive order, or statute administered by OFAC, or if OFAC's implementing regulations at 31 CFR Chapter V, would prohibit such a transaction by a person subject to the jurisdiction of the United States.
- (b) Except as authorized by OFAC, most transactions involving Cuba, Iran, and Sudan are prohibited, as are most imports from Burma or North Korea, into the United States or its outlying areas. Lists of entities and individuals subject to economic sanctions are included in OFAC's List of Specially Designated Nationals and Blocked Persons at <http://www.treas.gov/offices/enforcement/ofac/sdn>. More information about these restrictions, as well as updates, is available in the OFAC's regulations at 31 CFR Chapter V and/or on OFAC's website at <http://www.treas.gov/offices/enforcement/ofac>.
- (c) The Subcontractor shall insert this clause, including this paragraph (c), in all lower-tier subcontracts.

FEDERAL, STATE, AND LOCAL TAXES (FEB 2013)

Derived from FAR 52.229-3 (FEB 2013)

(Applies to fixed price subcontracts exceeding the Simplified Acquisition Threshold.)

- (a) As used in this clause—
- “After-imposed Federal tax” means any new or increased Federal excise tax or duty, or tax that was exempted or excluded on the subcontract date but whose exemption was later revoked or reduced during the subcontract period, on the transactions or property covered by this subcontract that the Subcontractor is required to pay or bear as the result of legislative, judicial, or administrative action taking effect after the subcontract date. It does not include social security tax or other employment taxes.
- “After-relieved Federal tax” means any amount of Federal excise tax or duty, except social security or other employment taxes, that would otherwise have been payable on the transactions or property covered by this subcontract, but which the Subcontractor is not required to pay or bear, or for which the Subcontractor obtains a refund or drawback, as the result of legislative, judicial, or administrative action taking effect after the subcontract date.
- “All applicable Federal, State, and local taxes and duties” means all taxes and duties, in effect on the subcontract date, that the taxing authority is imposing and collecting on the transactions or property covered by this subcontract.
- “Subcontract date” means the date set for bid opening or, if this is a negotiated subcontract or a modification, the effective date of this subcontract or modification.
- “Local taxes” includes taxes imposed by a possession or territory of the United States, Puerto Rico, or the Northern Mariana Islands, if the subcontract is performed wholly or partly in any of those areas.
- (b) (1) The subcontract price includes all applicable Federal, State, and local taxes and duties.
(2) [Reserved]
- (c) The subcontract price shall be increased by the amount of any after-imposed Federal tax, provided the Subcontractor warrants in writing that no amount for such newly imposed Federal excise tax or duty or rate increase was included in the subcontract price, as a contingency reserve or otherwise.
- (d) The subcontract price shall be decreased by the amount of any after-relieved Federal tax.
- (e) The subcontract price shall be decreased by the amount of any Federal excise tax or duty, except social security or other employment taxes, that the Subcontractor is required to pay or bear, or does not obtain a refund of, through the Subcontractor’s fault, negligence, or failure to follow instructions of the NREL Subcontract Administrator.
- (f) No adjustment shall be made in the subcontract price under this clause unless the amount of the adjustment exceeds \$250.
- (g) The Subcontractor shall promptly notify the NREL Subcontract Administrator of all matters relating to any Federal excise tax or duty that reasonably may be expected to result in either an increase or decrease in the subcontract price and shall take appropriate action as the NREL Subcontract Administrator directs.
- (h) The Government through NREL shall, without liability, furnish evidence appropriate to establish exemption from any Federal, State, or local tax when the Subcontractor requests such evidence and a reasonable basis exists to sustain the exemption.

TAXES—FOREIGN FIXED PRICE SUBCONTRACTS (FEB 2013)

Derived from FAR 52.229-6 (FEB 2013)

(Applies to fixed price subcontracts exceeding the Simplified Acquisition Threshold and performed wholly or partly in a foreign country.)

- (a) To the extent that this subcontract provides for furnishing supplies or performing services outside the United States and its outlying areas, this clause applies in lieu of any Federal, State, and local taxes clause of the subcontract.
- (b) *Definitions.* As used in this clause—
“Subcontract date” means the date set for bid opening or, if this is a negotiated subcontract or a modification, the effective date of this subcontract or modification.
“Country concerned” means any country, other than the United States and its outlying areas, in which expenditures under this subcontract are made.
“Tax” and “taxes” include fees and charges for doing business that are levied by the government of the country concerned or by its political subdivisions.
“All applicable taxes and duties” means all taxes and duties, in effect on the subcontract date, that the taxing authority is imposing and collecting on the transactions or property covered by this subcontract, pursuant to written ruling or regulation in effect on the subcontract date.
“After-imposed tax” means any new or increased tax or duty, or tax that was exempted or excluded on the subcontract date but whose exemption was later revoked or reduced during the subcontract period, other than excepted tax, on the transactions or property covered by this subcontract that the Subcontractor is required to pay or bear as the result of legislative, judicial, or administrative action taking effect after the subcontract date.
“After-relieved tax” means any amount of tax or duty, other than an excepted tax, that would otherwise have been payable on the transactions or property covered by this subcontract, but which the Subcontractor is not required to pay or bear, or for which the Subcontractor obtains a refund, as the result of legislative, judicial, or administrative action taking effect after the subcontract date.
“Excepted tax” means social security or other employment taxes, net income and franchise taxes, excess profits taxes, capital stock taxes, transportation taxes, unemployment compensation taxes, and property taxes. “Excepted tax” does not include gross income taxes levied on or measured by sales or receipts from sales, property taxes assessed on completed supplies covered by this subcontract, or any tax assessed on the Subcontractor’s possession of, interest in, or use of property, title to which is in the U.S. Government.
- (c) (1) Unless otherwise provided in this subcontract, the subcontract price includes all applicable taxes and duties, except taxes and duties that the Government of the United States and the government of the country concerned have agreed shall not be applicable to expenditures in such country by or on behalf of the United States.
(2) [Reserved]
- (d) (1) Except as provided in subparagraph (d)(2) of this clause, the subcontract price shall be increased by the amount of any after-imposed tax or of any tax or duty specifically excluded from the subcontract price by a provision of this subcontract that the Subcontractor is required to pay or bear, including any interest or penalty, if the Subcontractor states in writing that the subcontract price does not include any contingency for such tax and if liability for such tax, interest, or penalty was not incurred through the Subcontractor’s fault, negligence, or failure to follow instructions of the NREL Subcontract Administrator or to comply with the provisions of paragraph (i) of this clause.

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firmed Fixed Price and Fixed Unit Price

- (e) The subcontract price shall be decreased by the amount of any after-relieved tax, including any interest or penalty. NREL/the Government of the United States shall be entitled to interest received by the Subcontractor incident to a refund of taxes to the extent that such interest was earned after the Subcontractor was paid by NREL for such taxes. NREL/the Government of the United States shall be entitled to repayment of any penalty refunded to the Subcontractor to the extent that the penalty was paid by NREL/the Government.
- (f) The subcontract price shall be decreased by the amount of any tax or duty, other than an excepted tax, that was included in the subcontract and that the Subcontractor is required to pay or bear, or does not obtain a refund of, through the Subcontractor's fault, negligence, or failure to follow instructions of the NREL Subcontract Administrator or to comply with the provisions of paragraph (i) of this clause.
- (g) No adjustment shall be made in the subcontract price under this clause unless the amount of the adjustment exceeds \$250.
- (h) If the Subcontractor obtains a reduction in tax liability under the United States Internal Revenue Code (Title 26, U.S. Code) because of the payment of any tax or duty that either was included in the subcontract price or was the basis of an increase in the subcontract price, the amount of the reduction shall be paid or credited to NREL/the Government of the United States as the NREL Subcontract Administrator directs.
- (i) The Subcontractor shall take all reasonable action to obtain exemption from or refund of any taxes or duties, including interest or penalty, from which the United States Government, NREL, the Subcontractor, any lower-tier subcontractor, or the transactions or property covered by this subcontract are exempt under the laws of the country concerned or its political subdivisions or which the governments of the United States and of the country concerned have agreed shall not be applicable to expenditures in such country by or on behalf of the United States.
- (j) The Subcontractor shall promptly notify the NREL Subcontract Administrator of all matters relating to taxes or duties that reasonably may be expected to result in either an increase or decrease in the subcontract price and shall take appropriate action as the NREL Subcontract Administrator directs. The subcontract price shall be equitably adjusted to cover the costs of action taken by the Subcontractor at the direction of the NREL Subcontract Administrator, including any interest, penalty, and reasonable attorneys' fees.

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firmed Fixed Price and Fixed Unit Price

PAYMENTS UNDER FIXED-PRICE RESEARCH AND DEVELOPMENT CONTRACTS (APR 1984)

Derived from FAR 52.232-2 (APR 1984)

Applies to fixed-price research and development subcontracts.

NREL shall pay the Subcontractor, upon submission of proper invoices or vouchers, the prices stipulated in this subcontract for work delivered or rendered and accepted, less any deductions provided in this subcontract. Unless otherwise specified, payment shall be made upon acceptance of any portion of the work delivered or rendered for which a price is separately stated in the subcontract.

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

ASSIGNMENT OR TRANSFER (MAY 2014) (SPECIAL OCT 2008)

Derived from FAR 52.232-24 (MAY 2014)

Applies to all subcontracts.

- (a) Except as expressly authorized in writing by the NREL Subcontract Administrator, this subcontract or any interest therein or claim under this subcontract shall not be assigned or transferred by the Subcontractor.
- (b) In the event of any authorization of assignment or transfer, the parties shall file written notice together with a true copy of the instrument of the assignment or transfer with the NREL Subcontract Administrator. Such assignment or transfer shall cover all amounts payable under the subcontract not already paid, shall not be made to more than one party, and shall not be subject to further assignment or transfers.
- (c) When directed by DOE, the Prime Contractor, may assign or transfer all its rights and obligations under this subcontract to DOE or its designee.

**PAYMENT BY ELECTRONIC FUNDS TRANSFER – SYSTEM FOR AWARD MANAGEMENT
(NOV 2016)**

Derived from FAR 52.232-33 (JUL 2013)

(Applies to all subcontracts where lower-tier Subcontractor is a small business concern.)

- (a) Method of payment.
 - (1) All payments by NREL under this subcontract shall be made by electronic funds transfer (EFT), except as provided in paragraph (a)(2) of this clause. As used in this clause, the term “EFT” refers to the funds transfer and may also include the payment information transfer.
 - (2) In the event NREL is unable to release one or more payments by EFT, the subcontractor agrees to either—
 - (ii) Accept payment by check or some other mutually agreeable method of payment; or
 - (iii) Request NREL to extend the payment due date until such time as NREL can make payment by EFT (but see paragraph (d) of this clause).
- (b) Subcontractor's EFT information. NREL shall make payment to the subcontractor using the EFT information contained in the Representations and Certifications and NREL ACH Banking Information form submitted with the offer. Information provided to NREL in these documents shall be consistent with that entered in the Government's System for Award Management (SAM) database. In the event that the EFT information changes, the subcontractor shall be responsible for providing the updated information in updated Representations and Certifications submitted to the subcontract administrator and to the SAM database.
- (c) Mechanisms for EFT payment. NREL may make payment by EFT through either the Automated Clearing House (ACH) network. Suspension of payment. If the subcontractor's EFT information is incorrect, then NREL need not make payment to the subcontractor under this subcontract until correct EFT information is provided in Representations and Certifications, the NREL ACH Banking Information form and entered into the SAM database; and any invoice request shall be deemed not to be a proper invoice for the purpose of prompt payment under this subcontract. The prompt payment terms of the subcontract regarding notice of an improper invoice and delays in accrual of interest penalties apply.
- (d) Liability for uncompleted or erroneous transfers.
 - (1) If an uncompleted or erroneous transfer occurs because NREL used the subcontractor's EFT information incorrectly, NREL remains responsible for—
 - (i) Making a correct payment;
 - (ii) Paying any prompt payment penalty due; and
 - (iii) Recovering any erroneously directed funds.
 - (2) If an uncompleted or erroneous transfer occurs because the subcontractor's EFT information was incorrect, and—
 - (ii) If the funds are no longer under the control of the NREL Accounts Payable office, NREL is deemed to have made payment and the subcontractor is responsible for recovery of any erroneously directed funds; or
 - (iii) If the funds remain under the control of the NREL Accounts Payable office, NREL shall not make payment, and the provisions of paragraph (d) of this clause shall apply.

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firmed Fixed Price and Fixed Unit Price

- (e) EFT and prompt payment. A payment shall be deemed to have been made in a timely manner in accordance with the prompt payment terms of this subcontract if, payment is on or before the payment due date, provided the specified payment date is a valid date under the payment terms of the subcontract.
- (f) No EFT assignment of claims is allowable under this subcontract.
- (g) Liability for change of EFT information by financial agent. NREL is not liable for errors resulting from changes to EFT information made by the subcontractor's financial agent.
- (h) Payment information. The NREL Accounts Payable office shall forward to the subcontractor available payment information that is suitable for transmission as of the date of release of the EFT instruction to NREL's payment processing contractor. NREL may request the subcontractor to designate a desired format and method(s) for delivery of payment information from a list of formats and methods the NREL payment office is capable of executing. However, NREL does not guarantee that any particular format or method of delivery is available and retains the latitude to use the format and delivery method most convenient to NREL. If NREL makes payment by check in accordance with paragraph (a) of this clause, NREL shall mail the payment information to the remittance address contained in the subcontractor's Representations and Certifications and the subcontract.

UNENFORCEABILITY OF UNAUTHORIZED OBLIGATIONS (JUN 2013)

Derived from FAR 52.232-39 (JUN 2013)

(Applies to all subcontracts where any supply or service acquired is subject to any End User License Agreement.)

- (a) Except as stated in paragraph (b) of this clause, when any supply or service acquired under this subcontract is subject to any End User License Agreement (EULA), Terms of Service (TOS), or similar legal instrument or agreement, that includes any clause requiring NREL/the Government to indemnify the Subcontractor or any person or entity for damages, costs, fees, or any other loss or liability that would create an Anti-Deficiency Act violation (31 U.S.C. 1341), the following shall govern:
 - (1) Any such clause is unenforceable against NREL/the Government.
 - (2) Neither NREL/the Government nor any Government authorized end user shall be deemed to have agreed to such clause by virtue of it appearing in the EULA, TOS, or similar legal instrument or agreement. If the EULA, TOS, or similar legal instrument or agreement is invoked through an “I agree” click box or other comparable mechanism (e.g., “click-wrap” or “browse-wrap” agreements), execution does not bind NREL/the Government or any Government authorized end user to such clause.
 - (3) Any such clause is deemed to be stricken from the EULA, TOS, or similar legal instrument or agreement.
- (b) Paragraph (a) of this clause does not apply to indemnification by the Government that is expressly authorized by statute and specifically authorized under applicable agency regulations and procedures.

**PROVIDING ACCELERATED PAYMENTS TO SMALL BUSINESS LOWER-TIER
SUBCONTRACTORS (DEC 2013)**

Derived from FAR 52.232-40 (FD)

(Applies to all subcontracts where lower-tier Subcontractor is a small business concern.)

- (a) Upon receipt of accelerated payments from the NREL/Government, the Contractor shall make accelerated payments to its small business Subcontractors under this subcontract, to the maximum extent practicable and prior to when such payment is otherwise required under the applicable subcontract or lower-tier subcontract, after receipt of a proper invoice and all other required documentation from the small business Subcontractor.
- (b) The acceleration of payments under this clause does not provide any new rights under the Prompt Payment Act.
- (c) Include the substance of this clause, including this paragraph (c), in all lower-tier subcontracts with small business concerns, including lower-tier subcontracts with small business concerns for the acquisition of commercial items.

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firmed Fixed Price and Fixed Unit Price

BANKRUPTCY (JUL 1995)

Derived from FAR 52.242-13

(Applies to all subcontracts.)

In the event the Subcontractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Subcontractor agrees to furnish, by certified mail or electronic commerce method authorized by the subcontract, written notification of the bankruptcy to the NREL Subcontract Administrator responsible for administering the subcontract. This notification shall be furnished within five (5) days of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of other NREL subcontract numbers and Government contract numbers and contracting offices for all NREL/Government subcontracts and contracts against which final payment has not been made. This obligation remains in effect until final payment under this subcontract.

STOP WORK ORDER (AUG 1989) AND ALTERNATE I (APR 1984) (COST REIMBURSEMENT)

Derived from FAR 52.242-15 (AUG 1989)

Applies to all subcontracts.

Alternate I applies to cost type subcontracts.

- (a) The NREL Subcontract Administrator may, at any time, by written order to the Subcontractor, require the Subcontractor to stop all or any part of the work called for by this subcontract for a period of up to ninety (90) days, as determined appropriate by the NREL Subcontract Administrator, after the order is delivered to the Subcontractor, and for any further period to which the parties may agree. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Subcontractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Within a period of up to ninety (90) days, as determined appropriate by the NREL Subcontract Administrator, after a stop-work is delivered to the Subcontractor, or within any extension of that period to which the parties shall have agreed, the NREL Subcontract Administrator shall either—
 - (1) Cancel the stop-work order; or
 - (2) Terminate the work covered by the order as provided in the Default or the Termination clause of this subcontract.
- (b) If a stop-work order issued under this clause is canceled or the period of the order or any extension thereof expires, the Subcontractor shall resume work. The NREL Subcontract Administrator shall make an equitable adjustment and the subcontract shall be modified, in writing, accordingly, if—
 - (1) The stop-work order results in an increase in the time required for, or in the Subcontractor's cost properly allocable to, the performance of any part of this subcontract; and
 - (2) The Subcontractor asserts its right to the adjustment within thirty (30) days after the end of the period of work stoppage provided that, if the NREL Subcontract Administrator decides the facts justify the action, the NREL Subcontract Administrator may receive and act upon the claim submitted at any time before final payment under this subcontract.
- (c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of NREL/Government, the NREL Subcontract Administrator shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.
- (d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the NREL Subcontract Administrator shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

ALTERNATE I (APR 1984)

If this clause is inserted in a cost reimbursement subcontract, substitute in paragraph (a) (2) the words, "the Termination clause of this subcontract" for the words "the Default, or the Termination for Convenience of NREL/Government clause of this subcontract." In paragraph (b) substitute the words "an equitable adjustment in the delivery schedule, the estimated cost, the fee, or a combination thereof, and in any other terms of the subcontract that may be affected" for the words, "an equitable adjustment in the delivery subcontract schedule or subcontract price, or both."

CHANGES - FIXED PRICE (AUG 1987) AND ALTERNATES I THROUGH V (APR 1984)

Derived from FAR 52.243-1

(Applies to fixed price subcontracts.)

(Alternate I applies to subcontracts for services where no supplies are to be furnished--other than architect-engineer or other professional services subcontracts.)

(Alternate II applies to subcontracts for services where supplies are to be furnished--other than architect-engineer services, transportation, or research and development.)

(Alternate III applies to subcontracts for architect-engineer or other professional services.)

(Alternate IV applies to subcontracts for transportation services.)

(Alternate V applies to fixed price research and development subcontracts.)

- (a) The NREL Subcontract Administrator may at any time, by written order, and without notice to the sureties, if any, make changes within the general scope of this subcontract in any one or more of the following:
 - (1) Drawings, designs, or specifications when the supplies to be furnished are to be specially manufactured for NREL/Government, in accordance with the drawings, designs, or specifications.
 - (2) Method of shipment or packing or supplies.
 - (3) Place of delivery.
- (b) If any such change causes an increase or decrease in the cost of, or the time required for, performance of any part of the work under this subcontract, whether or not changed by the order, the NREL Subcontract Administrator shall make an equitable adjustment in the subcontract price, the delivery schedule, or both, and shall modify the subcontract.
- (c) The Subcontractor must assert its right to an adjustment under this clause within thirty (30) days from the date of receipt of the written order. However, if the NREL Subcontract Administrator decides that the facts justify it, the NREL Subcontract Administrator may receive and act upon a proposal submitted before final payment of the subcontract.
- (d) If the Subcontractor's proposal includes the cost of property made obsolete or excess by the change, the NREL Subcontract Administrator shall have the right to prescribe the manner of the disposition of the property.
- (e) Failure to agree to any adjustment shall be a dispute under the Disputes clause. However, nothing in this clause shall excuse the Subcontractor from proceeding with the subcontract as changed.

ALTERNATE I (APR 1984)

If the requirement is for services, other than architect-engineer or other professional services, and no supplies are to be furnished, substitute the following paragraph (a) in the basic clause:

- (a) The NREL Subcontract Administrator may at any time, by written order, and without notice to the sureties, if any, make changes within the general scope of this subcontract in any one or more of the following:
 - (1) Description of services to be performed.
 - (2) Time of performance (i.e., hours of the day, days of the week, etc.).
 - (3) Place of performance of the services.

ALTERNATE II (APR 1984)

If the requirement is for services (other than architect-engineer services, transportation, or research and development) and supplies are to be furnished, substitute the following paragraph (a) in the basic clause:

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- (a) The NREL Subcontract Administrator may at any time, by written order, and without notice to the sureties, if any, make changes within the general scope of this subcontract in any one or more of the following:
- (1) Description of services to be performed.
 - (2) Time of performance (i.e., hours of the day, days of the week, etc.).
 - (3) Place of performance of the services.
 - (4) Drawings, designs, or specifications when the supplies to be furnished are to be specially manufactured for NREL/Government, in accordance with the drawings, designs, or specifications.
 - (5) Method of shipment or packing of supplies.
 - (6) Place of delivery.

ALTERNATE III (APR 1984)

If the requirement is for architect-engineer or other professional services, substitute the following paragraph (a) in the basic clause and add the following paragraph (f):

- (a) The NREL Subcontract Administrator may at any time, by written order, and without notice to the sureties, if any, make changes within the general scope of this subcontract in the services to be performed.
* * * * *
- (b) No services for which an additional cost or fee will be charged by the Subcontractor shall be furnished without the prior written authorization of the NREL Subcontract Administrator.

ALTERNATE IV (APR 1984)

If the requirement is for transportation services, substitute the following paragraph (a) in the basic clause.

- (a) The NREL Subcontract Administrator may at any time, by written order, and without notice to the sureties, if any, make changes within the general scope of this subcontract in any one or more of the following:
- (1) Specifications.
 - (2) Work or services.
 - (3) Place of origin.
 - (4) Place of delivery.
 - (5) Tonnage to be shipped.
 - (6) Amount of Government furnished property.

ALTERNATE V (APR 1984)

If the requirement is for fixed price research and development, substitute the following subparagraphs (a) (1) and (a) (3) and paragraph (b) in the basic clause.

- (a) * * * * *
- (1) Drawings, designs, or specifications.
* * * * *
 - (2) Place of inspection, delivery, or acceptance.
- (b) If any such change causes an increase or decrease in the cost of, or time required for, performing this subcontract, whether or not changed by the order, the NREL Subcontract Administrator shall make an equitable adjustment in—
- (1) The subcontract price, the time of performance, or both; and
 - (2) Other affected terms of the subcontract, and shall modify the subcontract accordingly.

LOWER-TIER SUBCONTRACTS (OCT 2010) INCORPORATING ALTERNATE I (JUN 2007)

Derived from FAR 52.244-2 (OCT 2010)

Applies to all cost type subcontracts. Applies to letter, fixed price, time and material, and labor hour subcontracts exceeding \$150,000.

- (a) Definitions.
 - (1) "Approved purchasing system," as used in this clause, means a Subcontractor's purchasing system that has been reviewed and approved in accordance with Part 44 of the Federal Acquisition Regulation (FAR).
 - (2) "Consent to lower-tier subcontract," as used in this clause, means the NREL Subcontract Administrator's written consent for the Subcontractor to enter into a particular lower-tier subcontract.
 - (3) "Lower-tier subcontract," as used in this clause, means any contract, as defined in FAR Subpart 2.1, entered into by a lower-tier Subcontractor to furnish supplies or services for performance of the subcontract or a lower-tier subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.
- (b) When this clause is included in a fixed price type subcontract, consent to lower-tier subcontracts is required only on unpriced subcontract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (c) or (d) of this clause.
- (c) If the Subcontractor does not have an approved purchasing system, consent to lower-tier subcontract is required for any lower-tier subcontract that—
 - (1) Is of the cost reimbursement, time and materials, or labor hour type; or
 - (2) Is fixed price and exceeds the simplified acquisition threshold or five (5) percent of the total estimated cost of the subcontract.
- (d) If the Subcontractor has an approved purchasing system, the Subcontractor nevertheless shall obtain the NREL Subcontract Administrator's written consent before placing any of the lower-tier subcontracts identified in the subcontract schedule.
- (e) (1) The Subcontractor shall notify the NREL Subcontract Administrator reasonably in advance of placing any lower-tier subcontract or modification thereof for which consent is required under paragraph (b), (c), or (d) of this clause, including the following information:
 - (ii) A description of the supplies or services to be lower-tier subcontracted.
 - (iii) Identification of the type of lower-tier subcontract to be used.
 - (iv) Identification of the proposed lower-tier Subcontractor.
 - (v) The proposed lower-tier subcontract price.
 - (vi) The lower-tier Subcontractor's current, complete, and accurate cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other subcontract provisions.
 - (vii) The lower-tier Subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this subcontract.
 - (viii) A negotiation memorandum reflecting—
 - (A) The principal elements of the lower-tier subcontract price negotiations;
 - (B) The most significant considerations controlling establishment of initial or revised prices;

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- (C) The reason cost or pricing data were or were not required;
 - (D) The extent, if any, to which the Subcontractor did not rely on the lower-tier Subcontractor's cost or pricing data in determining the price objective and in negotiating the final price;
 - (E) The extent to which it was recognized in the negotiation that the lower-tier Subcontractor's cost or pricing data were not accurate, complete, or current; the action taken by the Subcontractor and the lower-tier Subcontractor; and the effect of any such defective data on the total price negotiated;
 - (F) The reasons for any significant difference between the Subcontractor's price objective and the price negotiated; and
 - (G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.
- (2) If the Subcontractor has an approved purchasing system and consent is not required under paragraph (c) or (d) of this clause, the Subcontractor nevertheless shall notify the NREL Subcontract Administrator reasonably in advance of entering into any:
- (i) cost plus-fixed-fee subcontract, or
 - (ii) fixed price subcontract that exceeds either the simplified acquisition threshold or 5 percent of the total estimated cost of this contract. The notification shall include the information required by paragraphs (e)(1)(i) through (e)(1)(iv) of this clause.
- (f) Unless the consent or approval specifically provides otherwise, neither consent by the NREL Subcontract Administrator to any lower-tier subcontract nor approval of the Subcontractor's purchasing system shall constitute a determination—
- (1) Of the acceptability of any lower-tier subcontract terms or conditions;
 - (2) Of the allowability of any cost under this subcontract; or
 - (3) To relieve the Subcontractor of any responsibility for performing this subcontract.
- (g) No lower-tier subcontract or modification thereof placed under this subcontract shall provide for payment on a cost plus a percentage of cost basis, and any fee payable under cost reimbursement type lower-tier subcontracts shall not exceed the fee limitations in FAR 15.404-4(c)(4)(i).
- (h) The Subcontractor shall give the NREL Subcontract Administrator immediate written notice of any action or suit filed and prompt notice of any claim made against the Subcontractor by any lower-tier Subcontractor or vendor that, in the opinion of the Subcontractor, may result in litigation related in any way to this subcontract, with respect to which the Subcontractor may be entitled to reimbursement from NREL/Government.
- (i) NREL/Government reserves the right to review the Subcontractor's purchasing system as set forth in FAR Subpart 44.3.
- (j) Paragraphs (d) and (f) of this clause do not apply to any of the lower-tier subcontracts identified in the subcontract schedule that were evaluated during negotiations.

LOWER-TIER SUBCONTRACTS FOR COMMERCIAL ITEMS (NOV 2016)

Derived from FAR 52.244-6 (NOV 2017) (FD)

(Applies to subcontracts for supplies or services other than commercial items.)

- (a) Definitions. As used in this clause—
“Commercial item and commercially available off-the-shelf item” have the meanings contained Federal Acquisition Regulation 2.101, Definitions.
“Lower-tier Subcontract” includes a transfer of commercial items between divisions, subsidiaries, or affiliates of the Subcontractor or lower-tier subcontractors.
- (b) To the maximum extent practicable, the Subcontractor shall incorporate, and require its lower-tier subcontractors at all tiers to incorporate, commercial items or non-developmental items as components of items to be supplied under this subcontract.
- (c)
- (1) The Subcontractor shall insert the following clauses in lower-tier subcontracts for commercial items:
- (i) 52.203-13, Contractor Code of Business Ethics and Conduct (Oct 2015) (41 U.S.C. 3509), if the subcontract exceeds \$5.5 million and has a performance period of more than 120 days. In altering this clause to identify the appropriate parties, all disclosures of violation of the civil False Claims Act or of Federal criminal law shall be directed to the agency Office of the Inspector General, with a copy to the NREL Subcontract Administrator.
 - (ii) 52.203-15, Whistleblower Protections Under the American Recovery and Reinvestment Act of 2009 (Jun 2010) (Section 1553 of Pub. L. 111-5), if the subcontract is funded under the Recovery Act.
 - (iii) 52.203-19, Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements (Jan 2017).
 - (iv) 52.204-21, Basic Safeguarding of Covered Contractor Information Systems (Jun 2016), other than subcontracts for commercially available off-the-shelf items, if flow down is required in accordance with paragraph (c) of FAR clause 52.204-21.
 - (v) 52.219-8, Utilization of Small Business Concerns (Nov 2016) (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 lower-tier subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.
 - (vi) 52.222-21, Prohibition of Segregated Facilities (Apr 2015).
 - (vii) 52.222-26, Equal Opportunity (Sep 2016) (E.O. 11246).
 - (viii) 52.222-35, Equal Opportunity for Veterans (Oct 2015) (38 U.S.C. 4212(a));
 - (ix) 52.222-36, Equal Opportunity for Workers with Disabilities (Jul 2014) (29 U.S.C. 793).
 - (x) 52.222-37, Employments Reports on Veterans (Feb 2016) (38 U.S.C. 4212).
 - (xi) 52.222-40, Notification of Employee Rights Under the National Labor Relations Act (Dec 2010) (E.O. 13496), if flow down is required in accordance with paragraph (f) of FAR clause 52.222-40.
 - (xii)
- (A) 52.222-50, Combating Trafficking in Persons (Mar 2015) (22 U.S.C. chapter 78 and E.O. 13627).

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- (B) Alternate I (Mar 2015) of 52.222-50 (22 U.S.C. chapter 78 and E.O. 13627).
- (xiii) 52.222-55, Minimum Wages under Executive Order 13658 (Dec 2015), if flowdown is required in accordance with paragraph (k) of FAR clause 52.222-55.
- (xiv) 52.222-62, Paid Sick Leave Under Executive Order 13706 (Jan 2017) (E.O. 13706), if flow down is required in accordance with paragraph (m) of FAR clause 52.222-62.
- (xv)
 - (A) 52.224-3, Privacy Training (Jan 2017) (5 U.S.C. 552a) if flow down is required in accordance with 52.224-3(f).
 - (B) Alternate I (Jan 2017) of 52.224-3, if flow down is required in accordance with 52.224-3(f) and the agency specifies that only its agency-provided training is acceptable.
- (xvi) 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).
- (xvii) 52.232-40, Providing Accelerated Payments to Small Business Subcontractors (Dec 2013), if flow down is required in accordance with paragraph (c) of FAR clause 52.232-40.
- (xviii) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (Feb 2006) (46 U.S.C. App. 1241 and 10 U.S.C. 2631), if flow down is required in accordance with paragraph (d) of FAR clause 52.247-64.
- (2) While not required, the Subcontractor may flow down to lower-tier subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.
- (d) The Subcontractor shall include the terms of this clause, including this paragraph (d), in lower-tier subcontracts awarded under this subcontract.

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

INSPECTION OF RESEARCH AND DEVELOPMENT (SHORT FORM) (APR 1984)

Derived from FAR 52.246-9

(Applies to subcontracts for research and development.)

NREL/Government has the right to inspect and evaluate the work performed or being performed under the subcontract, and the premises where the work is being performed, at all reasonable times and in a manner that will not unduly delay the work. If NREL/Government performs inspections or evaluations on the premises of the Subcontractor or a lower-tier Subcontractor, the Subcontractor shall furnish and shall require lower-tier Subcontractors to furnish all reasonable facilities and assistance for the safe and convenient performance of these duties.

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firmed Fixed Price and Fixed Unit Price

COMMERCIAL BILL OF LADING NOTATIONS (OCT 2009)

Derived from FAR 52.247-1 (FEB 2006) (FD)

(Applies to all subcontracts where transportation is a direct charge to the subcontract.) (Direct and actual transportation cost is a separate item in the invoice (e.g. free on board (F.O.B.) origin) and not included in the delivered price (e.g. F.O.B. destination).

When the NREL Subcontract Administrator authorizes supplies to be shipped on a commercial bill of lading and the Subcontractor will be reimbursed these transportation costs as direct allowable costs, the Subcontractor shall ensure before shipment is made that the commercial shipping documents are annotated with the following notation:

“Transportation is for the U.S. Department of Energy, acting through its National Renewable Energy Laboratory (NREL) and the actual total transportation charges paid to the carrier(s) by the consignor or consignee shall be reimbursed by NREL on behalf of the Government pursuant to cost reimbursement contract No. DE-AC36-08GO28308. This may be confirmed by contacting the DOE, Golden Service Center, 15013 Denver West Parkway, Golden, CO 80401.”

PREFERENCE FOR U.S.-FLAG AIR CARRIERS (JUN 2003)

Derived from FAR 52.247-63 (FD)

(Applies to subcontracts that involve international air transportation.)

- (a) Definitions. As used in this clause—
- (1) “International air transportation,” means transportation by air between a place in the United States and a place outside the United States or between two places both of which are outside the United States.
 - (2) “United States” means the 50 States, the District of Columbia, and outlying areas.
 - (3) “U.S.-flag air carrier,” means an air carrier holding a certificate under [49 U.S.C. Chapter 411](#).
- (b) Section 5 of the International Air Transportation Fair Competitive Practices Act of 1974 ([49 U.S.C. 40118](#)) (Fly America Act) requires that all Federal agencies and Government contractors and Subcontractors use U.S.-flag air carriers for U.S. Government-financed international air transportation of personnel (and their personal effects) or property, to the extent that service by those carriers is available. It requires the Comptroller General of the United States, in the absence of satisfactory proof of the necessity for foreign-flag air transportation, to disallow expenditures from funds, appropriated or otherwise established for the account of the United States, for international air transportation secured aboard a foreign-flag air carrier if a U.S.-flag air carrier is available to provide such services.
- (c) If available, the Subcontractor, in performing work under this subcontract, shall use U.S.-flag carriers for international air transportation of personnel (and their personal effects) or property.
- (d) In the event that the Subcontractor selects a carrier other than a U.S.-flag air carrier for international air transportation, the Subcontractor shall include a statement on vouchers involving such transportation essentially as follows:
- Statement of Unavailability of U.S.-Flag Air Carriers
International air transportation of persons (and their personal effects) or property by U.S.-flag air carrier was not available or it was necessary to use foreign-flag air carrier service for the following reasons (see section [47.403](#) of the Federal Acquisition Regulation): [State reasons]

PREFERENCE FOR PRIVATELY OWNED U.S.-FLAG COMMERCIAL VESSELS (FEB 2006)

Derived from FAR 52.247-64 (FD)

(Applies to subcontracts that involve ocean transportation of supplies subject to the Cargo Preference Act of 1954.)

- (a) Except as provided in paragraph (e) of this clause, the Cargo Preference Act of 1954 (46 U.S.C. App. 1241(b)) requires that Federal departments and agencies shall transport in privately owned U.S.-flag commercial vessels at least 50 percent of the gross tonnage of equipment, materials, or commodities that may be transported in ocean vessels (computed separately for dry bulk carriers, dry cargo liners, and tankers). Such transportation shall be accomplished when any equipment, materials, or commodities, located within or outside the United States, that may be transported by ocean vessel are—
 - (1) Acquired for a U.S. Government agency account;
 - (2) Furnished to, or for the account of, any foreign nation without provision for reimbursement;
 - (3) Furnished for the account of a foreign nation in connection with which the United States advances funds or credits, or guarantees the convertibility of foreign currencies; or
 - (4) Acquired with advance of funds, loans, or guaranties made by or on behalf of the United States.
- (b) The Subcontractor shall use privately owned U.S.-flag commercial vessels to ship at least 50 percent of the gross tonnage involved under this subcontract (computed separately for dry bulk carriers, dry cargo liners, and tankers) whenever shipping any equipment, materials, or commodities under the conditions set forth in paragraph (a) of this clause, to the extent that such vessels are available at rates that are fair and reasonable for privately owned U.S.-flag commercial vessels.
- (c)
 - (1) The Subcontractor shall submit one legible copy of a rated on-board ocean bill of lading for each shipment to both—
 - (ii) The NREL Subcontract Administrator, and
 - (iii) The Office of Cargo Preference
Maritime Administration (MAR-590)
400 Seventh Street, SW
Washington, DC 20590
Lower-tier Subcontractor bills of lading shall be submitted through the Subcontractor.
 - (2) The Subcontractor shall furnish these bill of lading copies
 - (i) Within twenty (20) working days of the date of loading for shipments originating in the United States, or
 - (ii) Within thirty (30) working days for shipments originating outside the United States. Each bill of lading copy shall contain the following information:
 - (A) Sponsoring U.S. Government agency
 - (B) Name of vessel
 - (C) Vessel flag of registry
 - (D) Date of loading
 - (E) Port of loading
 - (F) Port of final discharge
 - (G) Description of commodity
 - (H) Gross weight in pounds and cubic feet if available, and

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- (l) Total ocean freight revenue in U.S. dollars.
- (d) The Subcontractor shall insert the substance of this clause, including this paragraph (d), in all lower-tier subcontracts or purchase orders under this subcontract, except those described in paragraph (e)(4).
- (e) The requirement in paragraph (a) does not apply to—
 - (1) Cargoes carried in vessels as required or authorized by law or treaty;
 - (2) Ocean transportation between foreign countries of supplies purchased with foreign currencies made available, or derived from funds that are made available, under the Foreign Assistance Act of 1961 (22 U.S.C. 2353);
 - (3) Shipments of classified supplies when the classification prohibits the use of non-Government vessels; and
 - (4) Lower-tier subcontracts or purchase orders for the acquisition of commercial items unless—
 - (ii) This subcontract is—
 - (A) A subcontract or agreement for ocean transportation services; or
 - (B) A construction subcontract; or
 - (iii) The supplies being transported are—
 - (A) Items the Subcontractor is reselling or distributing to the NREL/Government without adding value generally, the Subcontractor does not add value to the items when it lower-tier subcontracts items for f.o.b. destination shipment); or
 - (B) Shipped in direct support of U.S. military—
 - (1) Contingency operations;
 - (2) Exercises; or
 - (3) Forces deployed in connection with United Nations or North Atlantic Treaty Organization humanitarian or peacekeeping operations.
- (f) Guidance regarding fair and reasonable rates for privately owned U.S.-flag commercial vessels may be obtained from:
 - Office of Costs and Rates
 - Maritime Administration
 - 400 Seventh Street, SW
 - Washington DC 20590
 - Phone: (202) 366-4610

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firmed Fixed Price and Fixed Unit Price

TERMINATION FOR CONVENIENCE OF NREL/GOVERNMENT (FIXED PRICE) (SHORT FORM) (APR 1984)

Derived from FAR 52.249-1 (FD)

(Applies to fixed price subcontracts of \$100,000 or less, except subcontracts for research and development work with educational or nonprofit institutions and subcontracts for architect-engineer services.)

The NREL Subcontract Administrator, by written notice, may terminate this subcontract, in whole or in part, when it is in NREL's/Government's interest. If this subcontract is terminated, the rights, duties, and obligations of the parties, including compensation to the Subcontractor, shall be in accordance with Part 49 of the Federal Acquisition Regulation in effect on the date of this subcontract.

TERMINATION FOR CONVENIENCE OF NREL/GOVERNMENT (FIXED PRICE) (APR 2012) AND ALTERNATE I (SEP 19916) (CONSTRUCTION) (SPECIAL)

Derived from FAR 52.249-2 (APR 2012) and Alternate I (SEP 1996) (FD)

(Applies to fixed price subcontracts exceeding the Simplified Acquisition Threshold, except subcontracts for dismantling and demolition, research and development work with an educational or nonprofit institution on a no-profit basis, or architect-engineering services.) (Alternate I applies to fixed price construction subcontracts exceeding the Simplified Acquisition Threshold.)

- (a) NREL may terminate performance of work under this subcontract in whole or, from time to time, in part if the NREL Subcontract Administrator determines that a termination is in NREL/the Government's interest. The NREL Subcontract Administrator shall terminate by delivering to the Subcontractor a Notice of Termination specifying the extent of termination and the effective date.
- (b) After receipt of a Notice of Termination, and except as directed by the NREL Subcontract Administrator, the Subcontractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:
 - (1) Stop work as specified in the notice.
 - (2) Place no further lower-tier subcontracts or orders (referred to as lower-tier subcontracts in this clause) for materials, services, or facilities, except as necessary to complete the continued portion of the subcontract;
 - (3) Terminate all lower-tier subcontracts to the extent they relate to the work terminated.
 - (4) Assign to NREL, as directed by the NREL Subcontract Administrator, all right, title, and interest of the Subcontractor under the lower-tier subcontracts terminated, in which case NREL shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.
 - (5) With approval or ratification to the extent required by the NREL Subcontract Administrator, settle all outstanding liabilities and termination settlement proposals arising from the termination of lower-tier subcontracts; the approval or ratification will be final for purposes of this clause.
 - (6) As directed by the NREL Subcontract Administrator, transfer title to the Government and deliver to NREL—
 - (i) The fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated; and
 - (ii) The completed or partially completed plans, drawings, information, and other property that, if the subcontract had been completed, would be required to be furnished to NREL/the Government.
 - (7) Complete performance of the work not terminated.
 - (8) Take any action that may be necessary, or that the NREL Subcontract Administrator may direct, for the protection and preservation of the property related to this subcontract that is in the possession of the Subcontractor and in which NREL/the Government has or may acquire an interest.
 - (9) Use its best efforts to sell, as directed or authorized by the Government through the NREL Subcontract Administrator, any property of the types referred to in paragraph (b)(6) of this clause; *provided*, however, that the Subcontractor: (i) is not required to extend credit to any purchaser, and (ii) may acquire the property under the conditions prescribed by, and at prices approved by, the Government acting through the NREL Subcontract Administrator. The proceeds of any transfer or disposition will be applied to

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- reduce any payments to be made by NREL under this subcontract, credited to the price or cost of the work, or paid in any other manner directed by the NREL Subcontract Administrator.
- (c) The Subcontractor shall submit complete termination inventory subcontract schedules no later than 120 days from the effective date of termination, unless extended in writing by the NREL Subcontract Administrator upon written request of the Subcontractor within this 120-day period.
 - (d) [Reserved.]
 - (e) After termination, the Subcontractor shall submit a final termination settlement proposal to the NREL Subcontract Administrator in the form and with the certification prescribed by the NREL Subcontract Administrator. The Subcontractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the NREL Subcontract Administrator upon written request of the Subcontractor within this 1-year period. However, if the NREL Subcontract Administrator determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension. If the Subcontractor fails to submit the proposal within the time allowed, the NREL Subcontract Administrator may determine, on the basis of information available, the amount, if any, due the Subcontractor because of the termination and shall pay the amount determined.
 - (f) Subject to paragraph (e) of this clause, the Subcontractor and the NREL Subcontract Administrator may agree upon the whole or any part of the amount to be paid or remaining to be paid because of the termination. The amount may include a reasonable allowance for profit on work done. However, the agreed amount, whether under this paragraph (f) or paragraph (g) of this clause, exclusive of costs shown in paragraph (g)(3) of this clause, may not exceed the total subcontract price as reduced by (1) the amount of payments previously made and (2) the subcontract price of work not terminated. The subcontract shall be modified, and the Subcontractor paid the agreed amount. Paragraph (g) of this clause shall not limit, restrict, or affect the amount that may be agreed upon to be paid under this paragraph.
 - (g) If the Subcontractor and the NREL Subcontract Administrator fail to agree on the whole amount to be paid because of the termination of work, the NREL Subcontract Administrator shall pay the Subcontractor the amounts determined by the NREL Subcontract Administrator as follows, but without duplication of any amounts agreed on under paragraph (f) of this clause:
 - (1) The subcontract price for completed supplies or services accepted by NREL (or sold or acquired under paragraph (b)(9) of this clause) not previously paid for, adjusted for any saving of freight and other charges.
 - (2) The total of—
 - (i) The costs incurred in the performance of the work terminated, including initial costs and preparatory expense allocable thereto, but excluding any costs attributable to supplies or services paid or to be paid under paragraph (g)(1) of this clause;
 - (ii) The cost of settling and paying termination settlement proposals under terminated lower-tier subcontracts that are properly chargeable to the terminated portion of the subcontract if not included in subdivision (g)(2)(i) of this clause; and
 - (iii) A sum, as profit on subdivision (g)(2)(i) of this clause, determined by the NREL Subcontract Administrator under [49.202](#) of the Federal Acquisition Regulation, in effect on the date of this subcontract, to be

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

fair and reasonable; however, if it appears that the Subcontractor would have sustained a loss on the entire subcontract had it been completed, the NREL Subcontract Administrator shall allow no profit under this subdivision (g)(2)(iii) and shall reduce the settlement to reflect the indicated rate of loss.

- (3) The reasonable costs of settlement of the work terminated, including—
 - (i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;
 - (ii) The termination and settlement of lower-tier subcontracts (excluding the amounts of such settlements); and
 - (iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.
- (h) Except for normal spoilage, and except to the extent that NREL/the Government expressly assumed the risk of loss, the NREL Subcontract Administrator shall exclude from the amounts payable to the Subcontractor under paragraph (g) of this clause, the fair value, as determined by the NREL Subcontract Administrator, for the loss of NREL/the Government property.
- (i) The cost principles and procedures of [Part 31](#) of the Federal Acquisition Regulation, in effect on the date of this subcontract, shall govern all costs claimed, agreed to, or determined under this clause.
- (j) The Subcontractor shall have the right of appeal, under the Disputes clause, from any determination made by the NREL Subcontract Administrator under paragraph (e), (g), or (l) of this clause, except that if the Subcontractor failed to submit the termination settlement proposal or request for equitable adjustment within the time provided in paragraph (e) or (l), respectively, and failed to request a time extension, there is no right of appeal.
- (k) In arriving at the amount due the Subcontractor under this clause, there shall be deducted—
 - (1) All unliquidated advance or other payments to the Subcontractor under the terminated portion of the subcontract;
 - (2) Any claim which NREL/the Government has against the Subcontractor under this subcontract; and
 - (3) The agreed price for, or the proceeds of sale of, materials, supplies, or other things acquired by the Subcontractor or sold under the provisions of this clause and not recovered by or credited to NREL/the Government.
- (l) If the termination is partial, the Subcontractor may file a proposal with the NREL Subcontract Administrator for an equitable adjustment of the price(s) of the continued portion of the subcontract. The NREL Subcontract Administrator shall make any equitable adjustment agreed upon. Any proposal by the Subcontractor for an equitable adjustment under this clause shall be requested within 90 days from the effective date of termination unless extended in writing by the NREL Subcontract Administrator.
- (m) (1) NREL/the Government may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Subcontractor for the terminated portion of the subcontract, if the NREL Subcontract Administrator believes the total of these payments will not exceed the amount to which the Subcontractor will be entitled.
(2) If the total payments exceed the amount finally determined to be due, the Subcontractor shall repay the excess to NREL/the Government upon demand,

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

together with interest computed at the rate established by the Secretary of the Treasury under [50 U.S.C. App. 1215\(b\)\(2\)](#). Interest shall be computed for the period from the date the excess payment is received by the Subcontractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Subcontractor's termination settlement proposal because of retention or other disposition of termination inventory until 10 days after the date of the retention or disposition, or a later date determined by the NREL Subcontract Administrator because of the circumstances.

- (n) Unless otherwise provided in this subcontract or by statute, the Subcontractor shall maintain all records and documents relating to the terminated portion of this subcontract for 3 years after final settlement. This includes all books and other evidence bearing on the Subcontractor's costs and expenses under this subcontract. The Subcontractor shall make these records and documents available to NREL/the Government, at the Subcontractor's office, at all reasonable times, without any direct charge. If approved by the NREL Subcontract Administrator, photographs, microphotographs, or other authentic reproductions may be maintained instead of original records and documents.

ALTERNATE I (SEP 1996)

If the contract is for construction, substitute the following paragraph (g) for paragraph (g) of the basic clause:

- (g) If the Subcontractor and NREL Subcontract Administrator fail to agree on the whole amount to be paid the Subcontractor because of the termination of work, the NREL Subcontract Administrator shall pay the Subcontractor the amounts determined as follows, but without duplication of any amounts agreed upon under paragraph (f) of this clause:
- (1) For subcontract work performed before the effective date of termination, the total (without duplication of any items) of—
 - (i) The cost of this work;
 - (ii) The cost of settling and paying termination settlement proposals under terminated lower-tier subcontracts that are properly chargeable to the terminated portion of the subcontract if not included in subdivision (g)(1)(i) of this clause; and
 - (iii) A sum, as profit on subdivision (g)(1)(i) of this clause, determined by the NREL Subcontract Administrator under [49.202](#) of the Federal Acquisition Regulation, in effect on the date of this subcontract, to be fair and reasonable; however, if it appears that the Subcontractor would have sustained a loss on the entire subcontract had it been completed, the NREL Subcontract Administrator shall allow no profit under this subdivision (g)(1)(iii) and shall reduce the settlement to reflect the indicated rate of loss.
 - (2) The reasonable costs of settlement of the work terminated, including—
 - (i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;
 - (ii) The termination and settlement of lower-tier subcontracts (excluding the amounts of such settlements); and
 - (iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.

TERMINATION FOR CONVENIENCE OF NREL/GOVERNMENT (EDUCATIONAL AND OTHER NONPROFIT INSTITUTIONS) (AUG 2016)

Derived from FAR 52.249-5 (AUG 2016) (FD)

(Applies to fixed-price or cost type subcontracts for research and development work with an educational or nonprofit institution on a nonprofit or no-fee basis.)

- (a) NREL may terminate performance of work under this subcontract in whole or, from time to time, in part if the NREL Subcontract Administrator determines that a termination is in NREL/the Government's interest. The NREL Subcontract Administrator shall terminate by delivering to the Subcontractor a Notice of Termination specifying the extent of termination and the effective date.
- (b) After receipt of a Notice of Termination and except as directed by the NREL Subcontract Administrator, the Subcontractor shall immediately proceed with the following obligations:
 - (1) Stop work as specified in the notice.
 - (2) Place no further subcontracts or orders (referred to as lower-tier subcontracts in this clause), except as necessary to complete the continued portion of the subcontract;
 - (3) Terminate all applicable lower-tier subcontracts and cancel or divert applicable commitments covering personal services that extend beyond the effective date of termination.
 - (4) Assign to NREL, as directed by the NREL Subcontract Administrator, all right, title, and interest of the Subcontractor under the lower-tier subcontracts terminated, in which case NREL shall have the right to settle or pay any termination settlement proposal arising out of those terminations.
 - (5) With approval or ratification to the extent required by the NREL Subcontract Administrator, settle all outstanding liabilities and termination settlement proposals arising from the termination of lower-tier subcontracts; approval or ratification will be final for purposes of this clause.
 - (6) Transfer title (if not already transferred) to the Government and, as directed by the NREL Subcontract Administrator, deliver to NREL any information and items that, if the subcontract had been completed, would have been required to be furnished, including—
 - (i) Materials or equipment produced, in process, or acquired for the work terminated; and
 - (ii) Completed or partially completed plans, drawings, and information.
 - (7) Complete performance of the work not terminated.
 - (8) Take any action that may be necessary, or that the NREL Subcontract Administrator may direct, for the protection and preservation of the property related to this subcontract that is in the possession of the Subcontractor and in which NREL/the Government has or may acquire an interest.
 - (9) Use its best efforts to sell, as directed or authorized by the NREL Subcontract Administrator, termination inventory other than that retained by NREL/the Government under paragraph (b)(6) of this clause; *provided, however*, that the Subcontractor (i) is not required to extend credit to any purchaser and (ii) may acquire the property under the conditions prescribed by, and at prices approved by, the NREL Subcontract Administrator. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by NREL under this subcontract, credited to the price or cost of the work, or paid in any other manner directed by the NREL Subcontract Administrator.
- (c) The Subcontractor shall submit complete termination inventory subcontract schedules no later than 120 days from the effective date of termination, unless

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- extended in writing by the NREL Subcontract Administrator upon written request of the Subcontractor within this 120-day period.
- (d) After termination, the Subcontractor shall submit a final termination settlement proposal to the NREL Subcontract Administrator in the form and with the certification prescribed by the NREL Subcontract Administrator. The Subcontractor shall submit the proposal promptly but no later than 1 year from the effective date of termination unless extended in writing by the NREL Subcontract Administrator upon written request of the Subcontractor within this 1-year period. If the Subcontractor fails to submit the termination settlement proposal within the time allowed, the NREL Subcontract Administrator may determine, on the basis of information available, the amount, if any, due the Subcontractor because of the termination and shall pay the amount determined.
- (e) Subject to paragraph (d) of this clause, the Subcontractor and the NREL Subcontract Administrator may agree upon the whole or any part of the amount to be paid because of the termination. This amount may include reasonable cancellation charges incurred by the Subcontractor and any reasonable loss on outstanding commitments for personal services that the Subcontractor is unable to cancel; *provided*, that the Subcontractor exercised reasonable diligence in diverting such commitments to other operations. The subcontract shall be amended and the Subcontractor paid the agreed amount.
- (f) The cost principles and procedures in subpart [31.3](#) of the Federal Acquisition Regulation (FAR), subcontracts with Educational Institutions (defined as institutions of higher education in the OMB Uniform Guidance in 2 CFR part 200, subpart A, and [20 U.S.C. 1001](#)), as in effect on the date of the subcontract, shall govern all costs claimed, agreed to, or determined under this clause; however, if the Subcontractor is not an educational institution and is a nonprofit organization (as defined in the OMB Uniform Guidance at 2 CFR part 200), the cost principles and procedures in subpart [31.7](#) of the FAR, subcontracts with Nonprofit Organizations, shall apply; unless the Subcontractor is a nonprofit institution listed in the OMB Uniform Guidance at 2 CFR part 200, appendix VIII, as exempted from the cost principles in subpart E, in which case the cost principles at FAR [31.2](#) for commercial organizations shall apply to such Subcontractor.
- (g) NREL may, under the terms and conditions it prescribes, make partial payments against costs incurred by the Subcontractor for the terminated portion of this subcontract, if the NREL Subcontract Administrator believes the total of these payments will not exceed the amount to which the Subcontractor will be entitled.
- (h) The Subcontractor has the right of appeal as provided under the Disputes clause, except that if the Subcontractor failed to submit the termination settlement proposal within the time provided in paragraph (d) of this clause and failed to request a time extension, there is no right of appeal.

DEFAULT (FIXED PRICE RESEARCH AND DEVELOPMENT) (APR 1984)

Derived from FAR 52.249-9

(Applies to fixed price research and development subcontracts except subcontracts with educational or non-profit institutions on a no-profit basis.)

- (a) (1) NREL may, subject to paragraphs (c) and (d) of this clause, by written Notice of Default to the Subcontractor, terminate this subcontract in whole or in part if the Subcontractor fails to—
 - (ii) Perform the work under the subcontract within the time specified in this subcontract or any extension;
 - (iii) Prosecute the work so as to endanger performance of this subcontract (but see subparagraph (a)(2) of this clause); or
 - (iv) Perform any of the other provisions of this subcontract but see subparagraph (a) (2) of this clause.
- (2) NREL's right to terminate this subcontract under subdivisions (a)(1)(ii) and (iii) of this clause may be exercised if the Subcontractor does not cure such failure within ten (10) days (or more, if authorized in writing by the NREL Subcontract Administrator) after receipt of the notice from the NREL Subcontract Administrator specifying the failure.
- (b) If NREL terminates this subcontract in whole or in part, it may acquire, under the terms and in the manner the NREL Subcontract Administrator considers appropriate, work similar to the work terminated, and the Subcontractor will be liable to NREL/Government for any excess costs for the similar work. However, the Subcontractor shall continue the work not terminated.
- (c) Except for defaults of Subcontractors at any tier, the Subcontractor shall not be liable for any excess costs if the failure to perform the subcontract arises from causes beyond the control and without the fault or negligence of the Subcontractor. Examples of such causes include—
 - (1) Acts of God or of the public enemy;
 - (2) Acts of the Government in either its sovereign or contractual capacity;
 - (3) Fires;
 - (4) Floods;
 - (5) Epidemics;
 - (6) Quarantine restrictions;
 - (7) Strikes;
 - (8) Freight embargoes; and
 - (9) Unusually severe weather.In each instance the failure to perform must be beyond the control and without the fault or negligence of the Subcontractor.
- (d) If the failure to perform is caused by the default of a Subcontractor at any tier, and if the cause of the default is beyond the control of both the Subcontractor and lower-tier Subcontractor, and without the fault or negligence of either, the Subcontractor shall not be liable for any excess costs for failure to perform, unless the subcontracted supplies or services were obtainable from other sources in sufficient time for the Subcontractor to meet the required delivery subcontract schedule or other performance requirements.
- (e) If this subcontract is terminated for default, NREL may require the Subcontractor to transfer title to the Government and deliver to NREL, as directed by the NREL Subcontract Administrator, any—

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- (1) Completed or partially completed work not previously delivered to, and accepted by, NREL; and
 - (2) Other property, including subcontract rights, specifically produced or acquired for the terminated portion of this subcontract. Upon direction of the NREL Subcontract Administrator, the Subcontractor shall also protect and preserve property in its possession in which NREL/Government has an interest.
- (f) NREL shall pay the subcontract price, if separately stated, for completed work it has accepted and the amount agreed upon by the Subcontractor and the NREL Subcontract Administrator for—
- (1) Completed work for which no separate price is stated;
 - (2) Partially completed work;
 - (3) Other property described above that it accepts; and
 - (4) The protection and preservation of the property.
- Failure to agree will be a dispute under the Disputes clause. NREL may withhold from these amounts any sum the NREL Subcontract Administrator determines to be necessary to protect NREL/Government against loss from outstanding liens or claims of former lien holders.
- (g) If, after termination, it is determined that the Subcontractor was not in default, or that the default was excusable, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of NREL/Government.
- (h) The rights and remedies of NREL/Government in this clause are in addition to any other rights and remedies provided by law or under this subcontract.

SENSITIVE FOREIGN NATIONS CONTROLS (SPECIAL) (MAR 2011)

Derived from DEAR 952.204-71 (MAR 2011) (FD)

(Applies if the subcontract involves making unclassified information about nuclear technology available to sensitive foreign nations.)

- (a) In connection with any activities in the performance of this subcontract, the Subcontractor agrees to comply with the "Sensitive Foreign Nations Controls" requirements attached to this subcontract, relating to those countries, which may from time to time, be identified to the Subcontractor by written notice as sensitive foreign nations. The Subcontractor shall have the right to terminate its performance under this subcontract upon at least 60 days' prior written notice to the NREL Subcontract Administrator if the Subcontractor determines that it is unable, without substantially interfering with its polices or without adversely impacting its performance to continue performance of the work under this subcontract as a result of such notification. If the Subcontractor elects to terminate performance, the provisions of this subcontract regarding termination for the convenience of NREL/the Government shall apply.
- (b) The provisions of this clause shall be included in any lower-tier subcontracts which may involve making unclassified information about nuclear technology available to sensitive foreign nations.

PUBLIC AFFAIRS (DEC 2000) (SPECIAL OCT 2011)

Derived from DEAR 952.204-75 (DEC 2000)

(Applies to subcontracts where the Subcontractor is required to release unclassified information related to NREL/DOE policies, programs, and activities.)

- (a) The Subcontractor must cooperate with NREL in releasing general, non-technical information concerning the existence of this subcontract, the identity of the parties, and the character and scope of the Subcontractor's effort to the public and news media, including but not limited to NREL/DOE policies, programs, and activities. The responsibilities under this clause must be accomplished through coordination with the NREL Subcontract Administrator and appropriate NREL public affairs personnel prior to the release of general, non-technical information.
- (b) The Subcontractor is responsible for the development, planning, and coordination of proactive approaches for the timely dissemination of general, non-technical information regarding NREL/DOE activities onsite and offsite, including, but not limited to, operations and programs. Proactive public affairs programs may utilize a variety of communication media, including public workshops, meetings or hearings, open houses, newsletters, press releases, conferences, audio/visual presentations, speeches, forums, tours, and other appropriate stakeholder interactions.
- (c) The Subcontractor's internal procedures must ensure that all releases of general, non-technical information to the public and news media are coordinated through, and approved by, a management official at an appropriate level within the Subcontractor's organization.
- (d) The Subcontractor must comply with the NREL Subcontract Administrator's direction for obtaining advance clearances on oral, written, and audio/visual informational material prepared for public dissemination or use.
- (e) Unless prohibited by law, the Subcontractor must notify the NREL Subcontract Administrator and appropriate NREL public affairs personnel of communications or contacts with Members of Congress relating to the effort performed under the subcontract.
- (f) The Subcontractor must notify the NREL Subcontract Administrator and appropriate NREL public affairs personnel of activities or situations that may attract regional or national news media attention and of non-routine inquiries from national news media relating to the effort performed under the subcontract.
- (g) In releases of general, non-technical information to the public and news media, the Subcontractor must fully and accurately identify the Subcontractor's relationship to NREL/DOE and fully and accurately credit NREL/DOE for its role in funding programs and projects resulting in scientific, technical, and other achievements.
- (h) The release or publication of information of a scientific or technical nature generated under this subcontract is governed by the provisions of Appendix C of this subcontract.

COMPUTER SECURITY (AUG 2006) (SPECIAL JAN 2019)

Derived from DEAR 952.204-77 (AUG 2006)

(Applies to all subcontracts where Subcontractor employees have access to computers owned, leased, or operated on behalf of DOE.)

- (a) Definitions.
 - (1) Computer means desktop computers, portable computers, computer networks (including the DOE Network and local area networks at or controlled by DOE organizations), network devices, automated information systems, and or other related computer equipment owned by, leased, or operated on behalf of the DOE.
 - (2) Individual means an NREL/DOE [Sub]Contractor or lower-tier subcontractor employee, or any other person who has been granted access to a DOE computer or to information on a DOE computer and does not include a member of the public who sends an email message to a DOE computer or who obtains information available to the public on DOE Web sites.
- (b) Access to DOE computers. A Subcontractor shall not allow an individual to have access to information on a DOE computer unless—
 - (1) The individual has acknowledged in writing that the individual has no expectation of privacy in the use of a DOE computer; and
 - (2) The individual has consented in writing to permit access by an authorized investigative agency to any DOE computer used during the period of that individual's access to information on a DOE computer, and for a period of three years thereafter.
- (c) No expectation of privacy. Notwithstanding any other provision of law (including any provision of law enacted by the Electronic Communications Privacy Act of 1986), no individual using a DOE computer shall have any expectation of privacy in the use of that computer.
- (d) Written records. The Subcontractor is responsible for maintaining written records for itself and lower-tier subcontractors demonstrating compliance with the provisions of paragraph (b) of this section. The Subcontractor agrees to provide access to these records to the DOE, its authorized agents, or the NREL Subcontract Administrator upon request.
- (e) Lower-tier Subcontracts. The Subcontractor shall insert this clause, including this paragraph (e), in lower-tier subcontracts under this subcontract that may provide access to computers owned, leased, or operated on behalf of the DOE.

RESEARCH MISCONDUCT (JUL 2005)

Derived from DEAR 952.235-71 (FD)

(Applies to all subcontracts where the Subcontractor will propose, perform, or review research of any kind.)

- (a) The Subcontractor is responsible for maintaining the integrity of research performed pursuant to this subcontract award including the prevention, detection, and remediation of research misconduct as defined by this clause, and the conduct of inquiries, investigations, and adjudication of allegations of research misconduct in accordance with the requirements of this clause.
- (b) Unless otherwise instructed by the NREL Subcontract Administrator, the Subcontractor must conduct an initial inquiry into any allegation of research misconduct. If the Subcontractor determines that there is sufficient evidence to proceed to an investigation, it must notify the NREL Subcontract Administrator and, unless otherwise instructed, the Subcontractor must:
 - (1) Conduct an investigation to develop a complete factual record and an examination of such record leading to either a finding of research misconduct and an identification of appropriate remedies or a determination that no further action is warranted;
 - (2) Conduct adjudication, if the investigation leads to a finding of research misconduct, by a responsible official who was not involved in the inquiry or investigation and is separated organizationally from the element which conducted the investigation. The adjudication must include a review of the investigative record and, as warranted, a determination of appropriate corrective actions and sanctions.
 - (3) Inform the NREL Subcontract Administrator if an initial inquiry supports a formal investigation and, if requested by the NREL Subcontract Administrator thereafter, keep the NREL Subcontract Administrator informed of the results of the investigation and any subsequent adjudication. When an investigation is complete, the Subcontractor will forward to the NREL Subcontract Administrator a copy of the evidentiary record, the investigative report, any recommendations made to the Subcontractor's adjudicating official, and the adjudicating official's decision and notification of any corrective action taken or planned, and the subject's written response (if any).
- (c) NREL/DOE may elect to act in lieu of the Subcontractor in conducting an inquiry or investigation into an allegation of research misconduct if the NREL Subcontract Administrator finds that:
 - (1) The research organization is not prepared to handle the allegation in a manner consistent with this clause;
 - (2) The allegation involves an entity of sufficiently small size that it cannot reasonably conduct the inquiry;
 - (3) NREL/DOE involvement is necessary to ensure the public health, safety, and security, or to prevent harm to the public interest; or
 - (4) The allegation involves possible criminal misconduct.
- (d) In conducting the activities under paragraphs (b) and (c) of this clause, the Subcontractor and NREL, if it elects to conduct the inquiry or investigation, shall adhere to the following guidelines:
 - (1) Safeguards for information and subjects of allegations. The Subcontractor shall provide safeguards to ensure that individuals may bring allegations of research misconduct made in good faith to the attention of the Subcontractor

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

without suffering retribution. Safeguards include: protection against retaliation; fair and objective procedures for examining and resolving allegations; and diligence in protecting positions and reputations. The Subcontractor shall also provide the subjects of allegations confidence that their rights are protected and that the mere filing of an allegation of research misconduct will not result in an adverse action. Safeguards include timely written notice regarding substantive allegations against them, a description of the allegation and reasonable access to any evidence submitted to support the allegation or developed in response to an allegation, and notice of any findings of research misconduct.

- (2) **Objectivity and Expertise.** The Subcontractor shall select individual(s) to inquire, investigate, and adjudicate allegations of research misconduct that have appropriate expertise and have no unresolved conflict of interest. The individual(s) who conduct(s) adjudication must not be the same individual(s) who conducted the inquiry or investigation, and must be separate organizationally from the element that conducted the inquiry or investigation.
 - (3) **Timeliness.** The Subcontractor shall coordinate, inquire, investigate, and adjudicate allegations of research misconduct promptly, but thoroughly. Generally, an investigation should be completed within one hundred twenty (120) days of initiation, and adjudication should be complete within sixty (60) days of receipt of the record of investigation.
 - (4) **Confidentiality.** To the extent possible, consistent with fair and thorough processing of allegations of research misconduct and applicable law and regulation, knowledge about the identity of the subjects of allegations, and informants should be limited to those with a need to know.
 - (5) **Remediation and Sanction.** If the Subcontractor finds that research misconduct has occurred, it shall assess the seriousness of the misconduct and its impact on the research completed or in process. The Subcontractor must take all necessary corrective actions. Such actions may include, but are not limited to, correcting the research record and as appropriate imposing restrictions, controls, or other parameters on research in process or to be conducted in the future. The Subcontractor must coordinate remedial actions with the NREL Subcontract Administrator. The Subcontractor must also consider whether personnel sanctions are appropriate. Any such sanction must be considered and effected consistent with any applicable personnel laws, policies, and procedures, and shall take into account the seriousness of the misconduct and its impact, whether it was done knowingly or intentionally, and whether it was an isolated event or pattern of conduct.
- (e) NREL/DOE reserves the right to pursue such remedies and other actions as it deems appropriate, consistent with the terms and conditions of the award instrument and applicable laws and regulations. However, the Subcontractor's good faith administration of this clause and the effectiveness of its remedial actions and sanctions shall be positive considerations and shall be taken into account as mitigating factors in assessing the need for such actions. If NREL/DOE pursues any such action, it will inform the subject of the action of the outcome and any applicable appeal procedures.
- (f) **Definitions.**
- (1) "Adjudication," as used in this clause, means a formal review of a record of investigation of alleged research misconduct to determine whether and what corrective actions and sanctions should be taken.

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- (2) "Fabrication," as used in this clause, means making up data or results and recording or reporting them.
 - (3) "Falsification," as used in this clause, means manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.
 - (4) "Finding of Research Misconduct," as used in this clause, means a determination, based on a preponderance of the evidence that research misconduct has occurred. Such a finding requires a conclusion that there has been a significant departure from accepted practices of the relevant research community and that it be knowingly, intentionally, or recklessly committed.
 - (5) "Inquiry," as used in this clause, means information gathering and initial fact-finding to determine whether an allegation or apparent instance of misconduct warrants an investigation.
 - (6) "Investigation," as used in this clause, means the formal examination and evaluation of the relevant facts.
 - (7) "Plagiarism," as used in this clause, means the appropriation of another person's ideas, processes, results, or words without giving appropriate credit.
 - (8) "Research," as used in this clause, means all basic, applied, and demonstration research in all fields of science, medicine, engineering, and mathematics, including, but not limited to, research in economics, education, linguistics, medicine, psychology, social sciences statistics, and research involving human subjects or animals.
 - (9) "Research Misconduct," as used in this clause, means fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results, but does not include honest error or differences of opinion.
 - (10) "Research Record," as used in this clause, means the record of all data or results that embody the facts resulting from scientists' inquiries, including, but not limited to, research proposals; laboratory records, both physical and electronic; progress reports; abstracts; theses; oral presentations; internal reports; and journal articles.
- (g) By executing this subcontract, the Subcontractor provides its assurance that it has established an administrative process for performing an inquiry, mediating if possible, or investigating, and reporting allegations of research misconduct; and that it will comply with its own administrative process and the requirements of 10 CFR part 733 for performing an inquiry, possible mediation, investigation and reporting of research misconduct.
- (h) The Subcontractor must insert or have inserted the substance of this clause, including paragraph (g), in subcontracts at all tiers that involve research.

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firmed Fixed Price and Fixed Unit Price

FOREIGN TRAVEL (JUN 2010) (SPECIAL JUN 2012)

Derived from DEAR 952.247-70 (JUN 2010) and DOE Order 551.1C

(Applies to all subcontracts where foreign travel is required.)

- (a) Subcontractor foreign travel shall be conducted pursuant to the requirements contained in Department of Energy (DOE) Order 551.1C, Official Foreign Travel, or its successor in effect at the time of award.
- (b) All foreign travel (one trip or multiple trips), if required in performance of the subcontract, shall be subject to prior approval of the Department of Energy and an approved Electronic Country Clearance (eCC) from the U.S. Department of State.
- (c) Foreign travel is defined as travel from the United States (including Alaska, Hawaii, the Commonwealth of Puerto Rico and the Northern Mariana Islands, and the territories and possessions of the United States) to a foreign country and return, travel between foreign countries, by persons, including foreign nationals, whose salaries or travel expenses or both will ultimately be funded in whole or in part by NREL/DOE. Foreign travel also includes travel funded by non-NREL/DOE sources for which the traveler represents NREL/DOE or conducts business on behalf of NREL/DOE or the U.S. Government.
- (d) Request for approval of foreign travel shall be submitted to NREL on an NREL Foreign Travel Request form minimum of forty-five (45) days prior to the planned departure date.

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

PRINTING (DEC 2000)

Derived from DEAR 970.5208-1 (FD)

(Applies to all subcontracts where printing is required as this term is defined in Title I of the U.S. Government Printing and Binding Regulations.)

- (a) To the extent that duplicating or printing services may be required in the performance of this subcontract, the Subcontractor shall provide or secure such services in accordance with the Government Printing and Binding Regulations, Title 44 of the U.S. Code, and DOE Directives relative thereto.
- (b) The term "Printing" includes the following processes: Composition, platemaking, presswork, binding, microform publishing, or the end items produced by such processes. Provided, however, that performance of a requirement under this subcontract involving the duplication of less than five thousand (5,000) copies of a single page, or no more than twenty-five thousand (25,000) units in the aggregate of multiple pages, will not be deemed to be printing.
- (c) Printing services not obtained in compliance with this guidance shall result in the cost of such printing being disallowed.
- (d) The Subcontractor shall include the substance of this clause in all lower-tier subcontracts hereunder which require printing (as that term is defined in Title I of the U.S. Government Printing and Binding Regulations).

COMPLIANCE WITH EXPORT CONTROL LAWS AND REGULATIONS (NOV 2015)

Derived from DEAR 970.5225-1 (NOV 2015)

(Applies to all subcontracts.)

- (a) The Subcontractor shall comply with all applicable U.S. export control laws and regulations.
- (b) The Subcontractor's responsibility to comply with all applicable laws and regulations exists independent of, and is not established or limited by, the information provided by this clause.
- (c) Nothing in the terms of this contract adds to, changes, supersedes, or waives any of the requirements of applicable Federal laws, Executive Orders, and regulations, including but not limited to—
 - (1) The Atomic Energy Act of 1954, as amended;
 - (2) The Arms Export Control Act (22 U.S.C. 2751 *et seq.*);
 - (3) The Export Administration Act of 1979 (50 U.S.C. app. 2401 *et seq.*), as continued under the International Emergency Economic Powers Act (Title II of Pub. L. 95-223, 91 Stat. 1626, October 28, 1977; 50 U.S.C. 1701 *et seq.*);
 - (4) Trading with the Enemy Act (50 U.S.C. App. 5(b), as amended by the Foreign Assistance Act of 1961);
 - (5) Assistance to Foreign Atomic Energy Activities (10 CFR part 810);
 - (6) Export and Import of Nuclear Equipment and Material (10 CFR part 110);
 - (7) International Traffic in Arms Regulations (ITAR) (22 CFR parts 120 through 130);
 - (8) Export Administration Regulations (EAR) (15 CFR parts 730 through 774); and
 - (9) Regulations administered by the Office of Foreign Assets Control (31 CFR parts 500 through 598).
- (d) In addition to the Federal laws and regulations cited above, National Security Decision Directive (NSDD) 189, National Policy on the Transfer of Scientific, Technical, and Engineering Information establishes a national policy that, to the maximum extent possible, the products of fundamental research shall remain unrestricted. NSDD 189 provides that no restrictions may be placed upon the conduct or reporting of federally funded fundamental research that has not received national security classification, except as provided in applicable U.S. statutes. As a result, contracts confined to the performance of unclassified fundamental research generally do not involve any export-controlled activities.
NSDD 189 does not take precedence over statutes. NSDD 189 does not exempt any research from statutes that apply to export controls such as the Atomic Energy Act, as amended; the Arms Export Control Act; the Export Administration Act of 1979, as amended; or the U.S. International Emergency Economic Powers Act; or the regulations that implement those statutes (*e.g.*, the ITAR, the EAR, 10 CFR part 110 and 10 CFR part 810). Thus, if items (*e.g.*, commodities, software or technologies) that are controlled by U.S. export control laws or regulations are used to conduct research or are generated as part of the research efforts, the export control laws and regulations apply to the controlled items.
- (e) The Subcontractor shall include the substance of this clause, including this paragraph (e), in all solicitations and lower-tier subcontracts.

ACCOUNTS, RECORDS, AND INSPECTION (DEC 2010) WITH ALTERNATE I (DEC 2000)

Derived from DEAR 970.5232-3

(Applies to subcontracts that include FAR 52.215-11, Price Reduction for Defective Cost or Pricing Data-Modifications.)

- (a) Accounts. The Subcontractor shall maintain a separate and distinct set of accounts, records, documents, and other evidence showing and supporting: all allowable costs incurred; collections accruing to the Subcontractor in connection with the work under this subcontract, other applicable credits, negotiated fixed amounts, and fee accruals under this subcontract; and the receipt, use, and disposition of all Government property coming into the possession of the Subcontractor under this subcontract. The system of accounts employed by the Subcontractor shall be satisfactory to NREL and in accordance with generally accepted accounting principles consistently applied.
- (b) Inspection and audit of accounts and records. All books of account and records relating to this subcontract shall be subject to inspection and audit by DOE or its designees in accordance with the provisions of Clause 970.5204-3, Access to and Ownership of Records, at all reasonable times, before and during the period of retention provided for in paragraph (d) of this clause, and the Subcontractor shall afford DOE proper facilities for such inspection and audit.
- (c) Audit of Subcontractors' records. The Subcontractor also agrees, with respect to any lower-tier subcontracts (including fixed-price or unit-price lower-tier subcontracts or purchase orders) where, under the terms of the lower-tier subcontract, costs incurred are a factor in determining the amount payable to the Subcontractor of any tier, to either conduct an audit of the lower-tier Subcontractor's costs or arrange for such an audit to be performed by the cognizant government audit agency through the NREL Subcontract Administrator.
- (d) Disposition of records. Except as agreed upon by NREL/Government and the Subcontractor, all financial and cost reports, books of account and supporting documents, system files, data bases, and other data evidencing costs allowable, collections accruing to the Subcontractor in connection with the work under this subcontract, other applicable credits, and fee accruals under this subcontract, shall be the property of the Government, and shall be delivered to NREL/Government or otherwise disposed of by the Subcontractor either as the NREL Subcontract Administrator/Contracting Officer may from time to time direct during the progress of the work or, in any event, as the NREL Subcontract Administrator/Contracting Officer shall direct upon completion or termination of this subcontract and final audit of accounts hereunder. Except as otherwise provided in this subcontract, including provisions of Clause 970.5204-3, Access to and Ownership of Records, all other records in the possession of the Subcontractor relating to this subcontract shall be preserved by the Subcontractor for a period of three years after final payment under this subcontract or otherwise disposed of in such manner as may be agreed upon by NREL/Government and the Subcontractor.
- (e) Reports. The Subcontractor shall furnish such progress reports and schedules, financial and cost reports, and other reports concerning the work under this subcontract as the NREL Subcontract Administrator/Contracting Officer may from time to time require.
- (f) Inspections. The DOE/NREL shall have the right to inspect the work and activities of the Subcontractor under this subcontract at such time and in such manner as it shall deem appropriate.

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- (g) Lower-tier Subcontracts. The Subcontractor further agrees to require the inclusion of provisions similar to those in paragraphs (a) through (g) and paragraph (h) of this clause in all lower-tier subcontracts (including fixed-price or unit-price subcontracts or purchase orders) entered into hereunder where, under the terms of the lower-tier subcontract, costs incurred are a factor in determining the amount payable to the lower-tier Subcontractor.
- (h) Comptroller general.
- (1) The Comptroller General of the United States, or an authorized representative, shall have access to and the right to examine any of the Subcontractor's or lower-tier Subcontractor's directly pertinent records involving transactions related to this subcontract or a lower-tier subcontract hereunder and to interview any current employee regarding such transactions.
 - (2) This paragraph may not be construed to require the Subcontractor or lower-tier Subcontractor to create or maintain any record that the Subcontractor or lower-tier Subcontractor does not maintain in the ordinary course of business or pursuant to a provision of law.
 - (3) Nothing in this subcontract shall be deemed to preclude an audit by the Government Accountability Office of any transaction under this subcontract.
- (i) Internal audit. The Subcontractor agrees to design and maintain an internal audit plan and an internal audit organization.
- (1) Upon subcontract award, the exercise of any subcontract option, or the extension of the subcontract, the Subcontractor must submit to the NREL Subcontract Administrator for approval an Internal Audit Implementation Design to include the overall strategy for internal audits. The Audit Implementation Design must describe—
 - (i) The internal audit organization's placement within the Subcontractor's organization and its reporting requirements;
 - (ii) The audit organization's size and the experience and educational standards of its staff;
 - (iii) The audit organization's relationship to the corporate entities of the Subcontractor;
 - (iv) The standards to be used in conducting the internal audits;
 - (v) The overall internal audit strategy of this subcontract, considering particularly the method of auditing costs incurred in the performance of the subcontract;
 - (vi) The intended use of external audit resources;
 - (vii) The plan for audit of lower-tier subcontracts, both pre-award and post-award; and
 - (viii) The schedule for peer review of internal audits by other Subcontractor internal audit organizations, or other independent third party audit entities approved by the NREL Subcontract Administrator.
 - (2) By each January 31 of the subcontract performance period, the Subcontractor must submit an annual audit report, providing a summary of the audit activities undertaken during the previous fiscal year. That report shall reflect the results of the internal audits during the previous fiscal year and the actions to be taken to resolve weaknesses identified in the Subcontractor's system of business, financial, or management controls.
 - (3) By each June 30 of the subcontract performance period, the Subcontractor must submit to the NREL Subcontract Administrator an annual audit plan for the activities to be undertaken by the internal audit organization during the

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- next fiscal year that is designed to test the costs incurred and Subcontractor management systems described in the internal audit design.
- (4) The NREL Subcontract Administrator may require revisions to documents submitted under paragraphs (i)(1), (i)(2), and (i)(3) of this clause, including the design plan for the internal audits, the annual report, and the annual internal audits.
- (j) Remedies. If at any time during subcontract performance, the NREL Subcontract Administrator determines that unallowable costs were claimed by the Subcontractor to the extent of making the Subcontractor's management controls suspect, or the Subcontractor's management systems that validate costs incurred and claimed suspect, the NREL Subcontract Administrator may, in his or her sole discretion, require the Subcontractor to cease using the special financial institution account in whole or with regard to specified accounts, requiring reimbursable costs to be claimed by periodic vouchering. In addition, the NREL Subcontract Administrator, where he or she deems it appropriate, may: Impose a penalty under 48 CFR 970.5242-1, Penalties for Unallowable Costs; require a refund; reduce the Subcontractor's otherwise earned fee; and take such other action as authorized in law, regulation, or this subcontract.

Alternate I (DEC 2000). As prescribed in 970.3270(a)(2), if the subcontract includes the clause at 48 CFR 52.215-11, Price Reduction for Defective Cost or Pricing Data—Modifications, the basic clause shall be modified as follows:

- (a) Paragraph (a) of the basic clause shall be modified by adding the words “or anticipated to be incurred” after the words “allowable costs incurred.”
- (g) Paragraph (g) of the basic clause shall be modified by adding the following: The Subcontractor further agrees to include an “Audit” clause, the substance of which is the “Audit” clause set forth at 48 CFR 52.215-2, in each lower-tier subcontract which does not include provisions similar to those in paragraph (a) through paragraph (g) and paragraph (h) of this clause, but which contains a “defective cost or pricing data” clause.

PROPERTY (SPECIAL) (AUG 2016)

Derived from DEAR 970.5245-1 (AUG 2016) and Alternate I (AUG 2016) (FD)

(Applies to all subcontracts where Government Property is to be furnished to or acquired by the Subcontractor.)

(Alternate I applies if the Subcontractor is a non-profit Subcontractor.)

(a) *Furnishing of Government property.* NREL/The Government reserves the right to furnish any property or services required for the performance of the work under this subcontract.

(b) *Title to property.* Except as otherwise provided by the NREL Subcontract Administrator, title to all materials, equipment, supplies, and tangible personal property of every kind and description purchased by the Subcontractor, for the cost of which the Subcontractor is entitled to be reimbursed as a direct item of cost under this subcontract, shall pass directly from the vendor to the Government. NREL/The Government reserves the right to inspect, and to accept or reject, any item of such property. The Subcontractor shall make such disposition of rejected items as the NREL Subcontract Administrator shall direct. Title to other property, the cost of which is reimbursable to the Subcontractor under this subcontract, shall pass to and vest in the Government upon

- (1) Issuance for use of such property in the performance of this subcontract, or
- (2) Commencement of processing or use of such property in the performance of this subcontract, or
- (3) Property furnished by NREL/the Government and property purchased or furnished by the Subcontractor, title to which vests in the Government, under this paragraph are hereinafter referred to as Government property. Title to Government property shall not be affected by the incorporation of the property into or the attachment of it to any property not owned by the Government, nor shall such Government property or any part thereof, be or become a fixture or lose its identity as personality by reason of affixation to any realty.

(c) *Identification.* To the extent directed by the NREL Subcontract Administrator, the Subcontractor shall identify Government property coming into the Subcontractor's possession or custody, by marking and segregating in such a way, satisfactory to the NREL Subcontract Administrator, as shall indicate its ownership by the Government.

(d) *Disposition.* The Subcontractor shall make such disposition of Government property which has come into the possession or custody of the Subcontractor under this subcontract as the NREL Subcontract Administrator may direct during the progress of the work or upon completion or termination of this subcontract. The Subcontractor may, upon such terms and conditions as the NREL Subcontract Administrator may approve, sell, or exchange such property, or acquire such property at a price agreed upon by the Government through the NREL Subcontract Administrator and the Subcontractor as the fair value thereof. The amount received by the Subcontractor as the result of any disposition, or the agreed fair value of any such property acquired by the Subcontractor, shall be applied in reduction of costs allowable under this subcontract or shall be otherwise credited to account to NREL/the Government, as the NREL Subcontract Administrator may direct. Upon completion of the work or the termination of this subcontract, the Subcontractor shall render an accounting, as prescribed by the NREL Subcontract Administrator, of all Government property which had come into the possession or custody of the Subcontractor under this subcontract.

(e) *Protection of government property—management of high-risk property and classified materials.*

- (1) The Subcontractor shall take all reasonable precautions, and such other actions as may be directed by the NREL Subcontract Administrator, or in the absence of such direction, in accordance with sound business practice, to safeguard and protect Government property in the Subcontractor's possession or custody.

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firmed Fixed Price and Fixed Unit Price

(2) In addition, the Subcontractor shall ensure that adequate safeguards are in place, and adhered to, for the handling, control and disposition of high-risk property and classified materials throughout the life cycle of the property and materials consistent with the policies, practices and procedures for property management contained in the Federal Property Management Regulations (41 CFR chapter 101), the Department of Energy (DOE) Property Management Regulations (41 CFR chapter 109), and other applicable Regulations.

(3) High-risk property is property, the loss, destruction, damage to, or the unintended or premature transfer of which could pose risks to the public, the environment, or the national security interests of the United States. High-risk property includes proliferation sensitive, nuclear related dual use, export controlled, chemically or radioactively contaminated, hazardous, and specially designed and prepared property, including property on the militarily critical technologies list.

(f) *Risk of loss of Government property.*

(1)

(i) The Subcontractor shall not be liable for the loss or destruction of, or damage to, Government property unless such loss, destruction, or damage was caused by any of the following—

(A) Willful misconduct or lack of good faith on the part of the Subcontractor's managerial personnel;

(B) Failure of the Subcontractor's managerial personnel to take all reasonable steps to comply with any appropriate written direction of the NREL Subcontract Administrator to safeguard such property under paragraph (e) of this clause; or

(C) Failure of Subcontractor managerial personnel to establish, administer, or properly maintain an approved property management system in accordance with paragraph (i)(1) of this clause.

(ii) If, after an initial review of the facts, the NREL Subcontract Administrator informs the Subcontractor that there is reason to believe that the loss, destruction of, or damage to the Government property results from conduct falling within one of the categories set forth above, the burden of proof shall be upon the Subcontractor to show that the Subcontractor should not be required to compensate NREL/the Government for the loss, destruction, or damage.

(2) In the event that the Subcontractor is determined liable for the loss, destruction or damage to Government property in accordance with (f)(1) of this clause, the Subcontractor's compensation to NREL/the Government shall be determined as follows:

(i) For damaged property, the compensation shall be the cost of repairing such damaged property, plus any costs incurred for temporary replacement of the damaged property. However, the value of repair costs shall not exceed the fair market value of the damaged property. If a fair market value of the property does not exist, the Government through the NREL Subcontract Administrator shall determine the value of such property, consistent with all relevant facts and circumstances.

(ii) For destroyed or lost property, the compensation shall be the fair market value of such property at the time of such loss or destruction, plus any costs incurred for temporary replacement and costs associated with the disposition of destroyed property. If a fair market value of the property does not exist, the Government through the NREL Subcontract Administrator shall determine the value of such property, consistent with all relevant facts and circumstances.

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firmed Fixed Price and Fixed Unit Price

- (3) The portion of the cost of insurance obtained by the Subcontractor that is allocable to coverage of risks of loss referred to in paragraph (f)(1) of this clause is not allowable.
- (g) *Steps to be taken in event of loss.* In the event of any damage, destruction, or loss to Government property in the possession or custody of the Subcontractor with a value above the threshold set out in the Subcontractor's approved property management system, the Subcontractor —
- (1) Shall immediately inform the NREL Subcontract Administrator of the occasion and extent thereof,
 - (2) Shall take all reasonable steps to protect the property remaining, and
 - (3) Shall repair or replace the damaged, destroyed, or lost property in accordance with the written direction of the NREL Subcontract Administrator. The Subcontractor shall take no action prejudicial to the right of NREL/the Government to recover therefore, and shall furnish to NREL/the Government, on request, all reasonable assistance in obtaining recovery.
- (h) *Government property for NREL/Government use only.* Government property shall be used only for the performance of this subcontract.
- (i) *Property Management—*
- (1) *Property Management System.*

The Subcontractor shall establish, administer, and properly maintain an approved property management system of accounting for and control, utilization, maintenance, repair, protection, preservation, and disposition of Government property in its possession under the subcontract. The Subcontractor's property management system shall be submitted to the NREL Subcontract Administrator for approval and shall be maintained and administered in accordance with sound business practice, applicable Federal Property Management Regulations and Department of Energy Property Management Regulations, and such directives or instructions which the NREL Subcontract Administrator may from time to time prescribe.

 - (i) In order for a property management system to be approved, it must provide for—
 - (A) Comprehensive coverage of property from the requirement identification, through its life cycle, to final disposition;
 - (B) [Reserved]
 - (C) Full integration with the Subcontractor's other administrative and financial systems; and
 - (D) A method for continuously improving property management practices through the identification of best practices established by "best in class" performers.
 - (iii) Approval of the Subcontractor's property management system shall be contingent upon the completion of the baseline inventory as provided in subparagraph (i)(2) of this clause.
 - (2) *Property Inventory.*
 - (i) Unless otherwise directed by the NREL Subcontract Administrator, the Subcontractor shall within six months after execution of the subcontract provide a baseline inventory covering all items of Government property.
 - (ii) If the Subcontractor is succeeding another Subcontractor in the performance of this subcontract, the Subcontractor shall conduct a joint reconciliation of the property inventory with the predecessor Subcontractor. The Subcontractor agrees to participate in a joint reconciliation of the property inventory at the completion of this subcontract. This information will be used to

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firmed Fixed Price and Fixed Unit Price

provide a baseline for the succeeding subcontract as well as information for closeout of the predecessor subcontract.

(j) The term "Subcontractor's managerial personnel" as used in this clause means the Subcontractor's directors, officers and any of its managers, superintendents, or other equivalent representatives who have supervision or direction of—

- (1) All or substantially all of the Subcontractor's business; or
- (2) All or substantially all of the Subcontractor's operations at any one facility or separate location to which this subcontract is being performed; or
- (3) A separate and complete major industrial operation in connection with the performance of this subcontract; or
- (4) A separate and complete major construction, alteration, or repair operation in connection with performance of this subcontract; or
- (5) A separate and discrete major task or operation in connection with the performance of this subcontract.

(k) The Subcontractor shall include this clause in all cost reimbursable lower-tier subcontracts.

ALTERNATE I (AUG 2016)

If the Subcontractor is a non-profit Subcontractor replace paragraph (j) of the basic clause with the following paragraph (j):

(j) The term "Subcontractor's managerial personnel" as used in this clause means the Subcontractor's directors, officers and any of its managers, superintendents, or other equivalent representatives who have supervision or direction of all or substantially all of—

- (1) The Subcontractor's business; or
- (2) The Subcontractor's operations at any one facility or separate location at which this subcontract is being performed; or
- (3) The Subcontractor's property system and/or a Major System Project as defined in DOE Order 413.3B, or successor version (Version in effect on effective date of subcontract).

Employment Eligibility Verification (OCT 2015) (SPECIAL JAN 2019)

Derived from FAR 52.222-54 (OCT 2015) (FD)

Applies to all subcontracts that exceed \$3,500 and includes work performed in the United States.

(a) Definitions. As used in this clause—

“Commercially available off-the-shelf (COTS) item”—

(1) Means any item of supply that is—

- (i) A commercial item (as defined in paragraph (1) of the definition at 2.101);
- (ii) Sold in substantial quantities in the commercial marketplace; and
- (iii) Offered to NREL/the Government, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4) such as agricultural products and petroleum products. Per 46 CFR 525.1(c)(2), “bulk cargo” means cargo that is loaded and carried in bulk onboard ship without mark or count, in a loose unpackaged form, having homogenous characteristics. Bulk cargo loaded into intermodal equipment, except LASH or Seabee barges, is subject to mark and count and, therefore, ceases to be bulk cargo.

“Employee assigned to the subcontract” means an employee who was hired after November 6, 1986 (after November 27, 2009, in the Commonwealth of the Northern Mariana Islands), who is directly performing work, in the United States, under a subcontract that is required to include the clause prescribed at 22.1803. An employee is not considered to be directly performing work under a subcontract if the employee—

- (1) Normally performs support work, such as indirect or overhead functions; and
- (2) Does not perform any substantial duties applicable to the subcontract.

“Contractor” or “DOE Prime Contractor” means the entity managing and operating the National Renewable Energy Laboratory under prime contract to the U.S. Department of Energy (DOE). The National Renewable Energy Laboratory (NREL) is a Department of Energy-owned national laboratory, managed and operated by the DOE Prime Contractor.

“Lower-tier Subcontractor means any supplier, distributor, vendor, or firm that furnishes supplies or services to or for a Subcontractor or another lower-tier Subcontractor.

“Subcontract” means any subcontract, as defined in 2.101, entered into by a lower-tier subcontractor to furnish supplies or services for performance of a prime subcontract or a lower-tier subcontract. It includes but is not limited to purchase orders, and changes and modifications to purchase orders.

(1) “United States,” as defined in 8 U.S.C. 1101(a)(38), means the 50 States, the District of Columbia, Puerto Rico, Guam, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands.

(b) Enrollment and verification requirements.

(1) If the Subcontractor is not enrolled as a Federal [Sub]Contractor in E-Verify at time of subcontract award, the Subcontractor shall—

- (i) Enroll. Enroll as a Federal [Sub]Contractor in the E-Verify program within 30 calendar days of subcontract award;
- (ii) Verify all new employees. Within 90 calendar days of enrollment in the E-Verify program, begin to use E-Verify to initiate verification of employment eligibility of all new hires of the Subcontractor, who are working in the United States, whether or not assigned to the subcontract, within 3 business days after the date of hire (but see paragraph (b)(3) of this section); and

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- (iii) Verify employees assigned to the subcontract. For each employee assigned to the subcontract, initiate verification within 90 calendar days after date of enrollment or within 30 calendar days of the employee's assignment to the subcontract, whichever date is later (but see paragraph (b)(4) of this section).
- (2) If the Subcontractor is enrolled as a Federal [Sub]Contractor in E-Verify at time of subcontract award, the Subcontractor shall use E-Verify to initiate verification of employment eligibility of—
 - (i) All new employees.
 - (A) Enrolled 90 calendar days or more. The Subcontractor shall initiate verification of all new hires of the Subcontractor, who are working in the United States, whether or not assigned to the subcontract within 3 business days after the date of hire (but see paragraph (b)(3) of this section); or
 - (B) Enrolled less than 90 calendar days. Within 90 calendar days after enrollment as a Federal [Sub]Contractor in E-Verify, the Subcontractor shall initiate verification of all new hires of the subcontractor, who are working in the United States, whether or not assigned to the subcontract, within 3 business days after the date of hire (but see paragraph (b)(3) of this section); or
 - (ii) Employees assigned to the subcontract. For each employee assigned to the subcontract, the Subcontractor shall initiate verification within 90 calendar days after date of subcontract award or within 30 days after assignment to the subcontract, whichever date is later (but see paragraph (b)(4) of this section).
- If the Subcontractor is an institution of higher education (as defined at [20 U.S.C. 1001\(a\)](#)); a State or local government or the government of a Federally recognized Indian tribe; or a surety performing under a takeover agreement entered into with a Federal agency or NREL pursuant to a performance bond, the Subcontractor may choose to verify only employees assigned to the subcontract, whether existing employees or new hires. The Subcontractor shall follow the applicable verification requirements at (b)(1) or (b)(2), respectively, except that any requirement for verification of new employees applies only to new employees assigned to the subcontract.
- (3) Option to verify employment eligibility of all employees. The Subcontractor may elect to verify all existing employees hired after November 6, 1986 (after November 27, 2009, in the Commonwealth of the Northern Mariana Islands), rather than just those employees assigned to the subcontract. The Subcontractor shall initiate verification for each existing employee working in the United States who was hired after November 6, 1986 (after November 27, 2009, in the Commonwealth of the Northern Mariana Islands), within 180 calendar days of—
 - (i) Enrollment in the E-Verify program; or
 - (ii) Notification to E-Verify Operations of the Subcontractor's decision to exercise this option, using the contact information provided in the E-Verify program Memorandum of Understanding (MOU).
- (4) The Subcontractor shall comply, for the period of performance of this subcontract, with the requirements of the E-Verify program MOU.
 - (i) The Department of Homeland Security (DHS) or the Social Security Administration (SSA) may terminate the Subcontractor's MOU and deny access to the E-Verify system in accordance with the terms of the MOU. In such case, the Subcontractor will be referred to a suspension or debarment official.

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- (ii) During the period between termination of the MOU and a decision by the suspension or debarment official whether to suspend or debar, the Subcontractor is excused from its obligations under paragraph (b) of this clause. If the suspension or debarment official determines not to suspend or debar the Subcontractor, then the Subcontractor must reenroll in E-Verify.
- (c) Web site. Information on registration for and use of the E-Verify program can be obtained via the Internet at the Department of Homeland Security Web site: <http://www.dhs.gov/E-Verify>.
- (d) Individuals previously verified. The Subcontractor is not required by this clause to perform additional employment verification using E-Verify for any employee—
 - (1) Whose employment eligibility was previously verified by the Subcontractor through the E-Verify program;
 - (2) Who has been granted and holds an active U.S. Government security clearance for access to confidential, secret, or top secret information in accordance with the National Industrial Security Program Operating Manual; or
 - (3) Who has undergone a completed background investigation and been issued credentials pursuant to Homeland Security Presidential Directive (HSPD) -12, Policy for a Common Identification Standard for Federal Employees and [Sub]Contractors.
- (e) Lower-tier Subcontracts. The Subcontractor shall include the requirements of this clause, including this paragraph (e) (appropriately modified for identification of the parties), in each lower-tier subcontract that—
 - (1) Is for—
 - (i) Commercial or noncommercial services (except for commercial services that are part of the purchase of a COTS item (or an item that would be a COTS item, but for minor modifications), performed by the COTS provider, and are normally provided for that COTS item); or
 - (ii) Construction;
 - (2) Has a value of more than \$3,500; and
 - (3) Includes work performed in the United States.

**NOTIFICATION OF EMPLOYEE RIGHTS UNDER THE NATIONAL LABOR RELATIONS ACT
(DEC 2010) (SPECIAL NOV 2016)**

Derived from FAR 52.222-40 (DEC 2010)

Applies to all subcontracts exceeding \$10,000 that will be performed wholly or partially in the United States, unless exempted by the rules, regulations, or orders of the Secretary of Labor pursuant to section 3 of Executive Order 13496 of January 30, 2009.

- (a) During the term of this subcontract, the Subcontractor shall post an employee notice, of such size and in such form, and containing such content as prescribed by the Secretary of Labor, in conspicuous places in and about its plants and offices where employees covered by the National Labor Relations Act engage in activities relating to the performance of the subcontract, including all places where notices to employees are customarily posted both physically and electronically, in the languages employees speak, in accordance with 29 CFR 471.2 (d) and (f).
 - (1) Physical posting of the employee notice shall be in conspicuous places in and about the Subcontractor's plants and offices so that the notice is prominent and readily seen by employees who are covered by the National Labor Relations Act and engage in activities related to the performance of the subcontract.
 - (2) If the Subcontractor customarily posts notices to employees electronically, then the Subcontractor shall also post the required notice electronically by displaying prominently, on any website that is maintained by the Subcontractor and is customarily used for notices to employees about terms and conditions of employment, a link to the Department of Labor's website that contains the full text of the poster. The link to the Department's website, as referenced in (b)(3) of this section, must read, "Important Notice about Employee Rights to Organize and Bargain Collectively with Their Employers."
- (b) This required employee notice, printed by the Department of Labor, may be—
 - (1) Obtained from the Division of Interpretations and Standards, Office of Labor-Management Standards, U.S. Department of Labor, 200 Constitution Avenue, NW., Room N-5609, Washington, DC 20210, (202) 693-0123, or from any field office of the Office of Labor-Management Standards or Office of Federal Contract Compliance Programs;
 - (2) Downloaded from the Office of Labor-Management Standards Web site at <http://www.dol.gov/olms/regs/compliance/EO13496.htm>; or
 - (3) Reproduced and used as exact duplicate copies of the Department of Labor's official poster.
- (c) The required text of the employee notice referred to in this clause is located at Appendix A, Subpart A, 29 CFR Part 471.
- (d) The Subcontractor shall comply with all provisions of the employee notice and related rules, regulations, and orders of the Secretary of Labor.
- (e) In the event that the Subcontractor does not comply with the requirements set forth in paragraphs (a) through (d) of this clause or otherwise acts in violation of the National Labor Relations Act, NREL shall have the right to terminate this subcontract in whole or in part in accordance with the termination clause of this subcontract, and the Subcontractor may be suspended or debarred by the Department of Energy in accordance with 29 CFR 471.14 and subpart 9.4. Such other sanctions or remedies may be imposed as are provided by 29 CFR part 471, which implements Executive Order 13496 or as otherwise provided by law.
- (f) Lower-tier subcontracts.
 - (1) The Subcontractor shall include the substance of this clause, including this paragraph (f), in every lower-tier subcontract that exceeds \$10,000 and will

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

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, so that such provisions will be binding upon each lower-tier subcontractor.

- (2) The Subcontractor shall not procure supplies or services in a way designed to avoid the applicability of Executive Order 13496 or this clause.
- (3) The Subcontractor shall take such action with respect to any such lower-tier subcontract as may be directed by the Secretary of Labor as a means of enforcing such provisions, including the imposition of sanctions for noncompliance.
- (4) However, if the Subcontractor becomes involved in litigation with a lower-tier subcontractor, or is threatened with such involvement, as a result of such direction, the Subcontractor may request the United States, through the Secretary of Labor, to enter into such litigation to protect the interests of the United States.

ENCOURAGING SUBCONTRACTOR POLICIES TO BAN TEXT MESSAGING WHILE DRIVING (AUG 2011)

Derived from FAR 52.223-18 (AUG 2011)

(Applies to subcontracts exceeding the micro-purchase threshold.)

- (a) *Definitions.* As used in this clause--
- “Driving”—
- (1) Means operating a motor vehicle on an active roadway with the motor running, including while temporarily stationary because of traffic, a traffic light, stop sign, or otherwise.
 - (2) Does not include operating a motor vehicle with or without the motor running when one has pulled over to the side of, or off, an active roadway and has halted in a location where one can safely remain stationary.
- “Text messaging” means reading from or entering data into any handheld or other electronic device, including for the purpose of short message service texting, e-mailing, instant messaging, obtaining navigational information, or engaging in any other form of electronic data retrieval or electronic data communication. The term does not include glancing at or listening to a navigational device that is secured in a commercially designed holder affixed to the vehicle, provided that the destination and route are programmed into the device either before driving or while stopped in a location off the roadway where it is safe and legal to park.
- (b) This clause implements Executive Order 13513, Federal Leadership on Reducing Text Messaging while Driving, dated October 1, 2009.
- (c) The Subcontractor is encouraged to—
- (1) Adopt and enforce policies that ban text messaging while driving—
 - (i) Company-owned or -rented vehicles or Government-owned vehicles; or
 - (ii) Privately-owned vehicles when on official NREL/Government business or when performing any work for or on behalf of NREL/the Government.
 - (2) Conduct initiatives in a manner commensurate with the size of the business, such as—
 - (i) Establishment of new rules and programs or re-evaluation of existing programs to prohibit text messaging while driving; and
 - (ii) Education, awareness, and other outreach to employees about the safety risks associated with texting while driving.
- (d) Lower-tier subcontracts. The Subcontractor shall insert the substance of this clause, including this paragraph (d), in all lower-tier subcontracts that exceed the micro-purchase threshold.

EQUAL OPPORTUNITY FOR WORKERS WITH DISABILITIES (JUL 2014)

Derived from FAR 52.222-36 (JUL 2014) (FD)

(Applies to all subcontracts exceeding \$15,000.)

- (a) *Equal opportunity clause.* The Subcontractor 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 Subcontractor to employ and advance in employment qualified individuals with disabilities.
- (b) *Lower-Tier Subcontracts.* The Subcontractor shall include the terms of this clause in every lower-tier 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 lower-tier subcontractor or vendor. The Subcontractor 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.

DUTY-FREE ENTRY (OCT 2010)

Derived from FAR 52.225-8 (OCT 2010) (FD)

(Applies to subcontracts where supplies to be accorded duty-free entry will be imported into the customs territory of the United States, or other foreign supplies in excess of \$15,000 may be imported into the customs territory of the United States.)

- (a) *Definition.* "Customs territory of the United States" means the States, the District of Columbia, and Puerto Rico.
- (b) Except as otherwise approved by the NREL Subcontract Administrator, the Subcontractor shall not include in the subcontract price any amount for duties on supplies specifically identified in the subcontract schedule to be accorded duty-free entry.
- (c) Except as provided in paragraph (d) of this clause or elsewhere in this subcontract, the following procedures apply to supplies not identified in the subcontract schedule to be accorded duty-free entry:
 - (1) The Subcontractor shall notify the NREL Subcontract Administrator in writing of any purchase of foreign supplies (including, without limitation, raw materials, components, and intermediate assemblies) in excess of \$15,000 that are to be imported into the customs territory of the United States for delivery to NREL/the Government under this subcontract, either as end products or for incorporation into end products. The Subcontractor shall furnish the notice to the NREL Subcontract Administrator at least 20 calendar days before the importation. The notice shall identify the--
 - (i) Foreign supplies;
 - (ii) Estimated amount of duty; and (iii) Country of origin.
 - (2) The NREL Subcontract Administrator will determine whether any of these supplies should be accorded duty-free entry and will notify the Subcontractor within 10 calendar days after receipt of the Subcontractor's notification.
 - (3) Except as otherwise approved by the NREL Subcontract Administrator, the subcontract price shall be reduced by (or the allowable cost shall not include) the amount of duty that would be payable if the supplies were not entered duty-free.
- (d) The Subcontractor is not required to provide the notification under paragraph (c) of this clause for purchases of foreign supplies if--
 - (1) The supplies are identical in nature to items purchased by the Subcontractor or any lower-tier subcontractor in connection with its commercial business; and
 - (2) Segregation of these supplies to ensure use only on NREL/Government subcontracts containing duty-free entry provisions is not economical or feasible.
- (e) The Subcontractor shall claim duty-free entry only for supplies to be delivered to NREL/the Government under this subcontract, either as end products or incorporated into end products, and shall pay duty on supplies, or any portion of them, other than scrap, salvage, or competitive sale authorized by the NREL Subcontract Administrator, diverted to nongovernmental use.
- (f) NREL/the Government will execute any required duty-free entry certificates for supplies to be accorded duty-free entry and will assist the Subcontractor in obtaining duty-free entry for these supplies.
- (g) Shipping documents for supplies to be accorded duty-free entry shall consign the shipments to NREL/DOE in care of the Subcontractor and shall include the--
 - (1) Delivery address of the Subcontractor (or NREL/DOE, if appropriate);
 - (2) NREL's DOE prime contract number and the NREL subcontract number;
 - (3) Identification of carrier;
 - (4) Notation "UNITED STATES GOVERNMENT, _____ [agency], _____ Duty-free entry to be claimed pursuant to Item No(s) _____ [from Tariff subcontract

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firmed Fixed Price and Fixed Unit Price

- schedules] _____, Harmonized Tariff subcontract schedules of the United States. Upon arrival of shipment at port of entry, District Director of Customs, please release shipment under 19 CFR part 142 and notify [*cognizant subcontract administration office*] for execution of Customs Forms 7501 and 7501-A and any required duty-free entry certificates.";
- (5) Gross weight in pounds (if freight is based on space tonnage, state cubic feet in addition to gross shipping weight); and
 - (6) Estimated value in United States dollars.
- (h) The Subcontractor shall instruct the foreign supplier to--
- (1) Consign the shipment as specified in paragraph (g) of this clause;
 - (2) Mark all packages with the words "UNITED STATES GOVERNMENT" and "NREL/DOE"; and
 - (3) Include with the shipment at least two copies of the bill of lading (or other shipping document) for use by the District Director of Customs at the port of entry.
- (i) The Subcontractor shall provide written notice to the NREL Subcontract Administrator immediately after notification by the NREL Subcontract Administrator that duty-free entry will be accorded foreign supplies or, for duty-free supplies identified in the subcontract schedule, upon award by the Subcontractor to the overseas supplier. The notice shall identify the--
- (1) Foreign supplies;
 - (2) Country of origin;
 - (3) Subcontract number; and
 - (4) Subcontract schedule delivery date(s).
- (j) The Subcontractor shall include the substance of this clause in any lower-tier subcontract if--
- (1) Supplies identified in the subcontract schedule to be accorded duty-free entry will be imported into the customs territory of the United States; or
Other foreign supplies in excess of \$15,000 may be imported into the customs territory of the United States.

PROTECTING NREL'S/GOVERNMENT'S INTEREST WHEN SUBCONTRACTING AT ANY TIER WITH SUBCONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT (OCT 2015)

Derived from FAR 52.209-6 (OCT 2015) (FD)

(Applies to all subcontracts with lower-tier subcontracts exceeding \$35,000)

(a) Definition. "Commercially available off-the-shelf (COTS) item," as used in this clause-

- (1) Means any item of supply (including construction material) that is—
 - (i) A commercial item (as defined in paragraph (1) of the definition in FAR 2.101);
 - (ii) Sold in substantial quantities in the commercial marketplace; and
 - (iii) Offered to the NREL/Government, under a subcontract or a lower-tier subcontract, at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and
- (2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4), such as agricultural products and petroleum products.

(b) The Government suspends or debar Contractors to protect the Government's interests. Other than a subcontract for a commercially available off-the-shelf item, the Subcontractor shall not enter into any lower-tier subcontract in excess of \$35,000 with a lower-tier Subcontractor that is debarred, suspended, or proposed for debarment by any executive agency unless there is a compelling reason to do so.

(c) The Subcontractor shall require each proposed lower-tier Subcontractor, whose lower-tier subcontract will exceed \$35,000, other than a lower-tier Subcontractor providing a commercially available off-the-shelf item, to disclose to the lower-tier Subcontractor, in writing, whether as of the time of award of the lower-tier subcontract, the lower-tier Subcontractor, or its principals, is or is not debarred, suspended, or proposed for debarment by the Federal Government.

(d) A corporate officer or a designee of the Subcontractor shall notify the NREL Subcontract Administrator, in writing, before entering into a lower-tier subcontract with a party (other than a lower-tier Subcontractor providing a commercially available off-the-shelf item) that is debarred, suspended, or proposed for debarment (see FAR 9.404 for information on the System for Award Management (SAM) Exclusions). The notice must include the following:

- (1) The name of the lower-tier Subcontractor.
- (2) The Subcontractor's knowledge of the reasons for the lower-tier Subcontractor being listed with an exclusion in SAM.
- (3) The compelling reason(s) for doing business with the lower-tier Subcontractor notwithstanding its being listed with an exclusion in SAM.
- (4) The systems and procedures the Subcontractor has established to ensure that it is fully protecting NREL/the Government's interests when dealing with such lower-tier Subcontractor in view of the specific basis for the party's debarment, suspension, or proposed debarment.

(e) Lower-tier Subcontracts. Unless this is a subcontract for the acquisition of commercial items, the Subcontractor shall include the requirements of this clause, including this paragraph (e) (appropriately modified for the identification of the parties), in each lower-tier subcontract that—

- (1) Exceeds \$35,000 in value; and
- (2) Is not a lower-tier subcontract for commercially available off-the-shelf items.

**RESTRICTIONS ON LOWER-TIER SUBCONTRACTOR SALES TO NREL/GOVERNMENT
(NOV 2019)**

Derived from FAR 52.203-6 (SEP 2006) (FD)

(Applies to all subcontracts exceeding the Simplified Acquisition Threshold.)

- (a) Except as provided in (b) of this clause, the Subcontractor shall not enter into any agreement with an actual or prospective lower-tier Subcontractor, nor otherwise act in any manner, which has or may have the effect of restricting sales by such lower-tier Subcontractors directly to NREL/Government of any item or process (including computer software) made or furnished by the lower-tier Subcontractor under this subcontract or under any follow-on production subcontract.
- (b) The prohibition in (a) of this clause does not preclude the Subcontractor from asserting rights that are otherwise authorized by law or regulation.
- (c) The Subcontractor agrees to incorporate the substance of this clause, including this paragraph (c), in all lower-tier subcontracts under this subcontract which exceed the simplified acquisition threshold.

ANTI-KICKBACK PROCEDURES (NOV 2019)

Derived from FAR 52.203-7 (MAY 2014) (FD)

(Applies to all subcontracts exceeding the Simplified Acquisition Threshold.)

(a) *Definitions.*

“Kickback,” as used in this clause, means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided to any Subcontractor, Subcontractor employee, lower-tier Subcontractor, or lower-tier Subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a subcontract or in connection with a lower-tier subcontract relating to a subcontract.

“Person,” as used in this clause, means a corporation, partnership, business association of any kind, trust, joint-stock company, or individual.

“Subcontract,” as used in this clause, means a subcontract or contractual action entered into by the National Renewable Energy Laboratory (NREL) for the purpose of obtaining supplies, materials, equipment, or services of any kind.

“Subcontractor,” as used in this clause, means a person who has entered into a subcontract with the NREL.

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

“Lower-tier Subcontract,” as used in this clause, means a lower-tier subcontract or contractual action entered into by a Subcontractor or lower-tier Subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind under a subcontract.

“Lower-tier Subcontractor,” as used in this clause,

- (1) means any person, other than the Subcontractor, who offers to furnish or furnishes any supplies, materials, equipment, or services of any kind under a subcontract or a lower-tier subcontract entered into in connection with such subcontract, and
- (2) includes any person who offers to furnish or furnishes general supplies to the Subcontractor or a Prime Contractor.

“Lower-tier Subcontractor employee,” as used in this clause, means any officer, partner, employee, or agent of a lower-tier Subcontractor.

(b) The 41 U.S.C. Chapter 87, Kickbacks, prohibits any person from

- (1) Providing or attempting to provide or offering to provide any kickback;
- (2) Soliciting, accepting, or attempting to accept any kickback; or
- (3) Including, directly or indirectly, the amount of any kickback in the subcontract price charged by a Subcontractor to NREL or in the lower-tier subcontract price charged by a lower-tier Subcontractor to a Subcontractor or a Prime Contractor.

(c)

(1) The Subcontractor shall have in place and follow reasonable procedures designed to prevent and detect possible violations described in paragraph (b) of this clause in its own operations and direct business relationships.

(2) When the Subcontractor has reasonable grounds to believe that a violation described in paragraph (b) of this clause may have occurred, the Subcontractor shall promptly report in writing the possible violation. Such reports shall be made to the inspector general of the Department of Energy (DOE), the head of the DOE if the agency does not have an inspector general, or the Attorney General.

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- (3) The Subcontractor shall cooperate fully with any Federal agency and NREL investigating a possible violation described in paragraph (b) of this clause.
- (4) The NREL Subcontract Administrator may
 - (i) offset the amount of the kickback against any monies owed by NREL under the subcontract; and/or
 - (ii) direct that the Subcontractor withhold from sums owed the lower-tier Subcontractor under the subcontract the amount of the kickback. The NREL Subcontract Administrator may order that monies withheld under subdivision (c)(4)(ii) of this clause be paid over to NREL or the Government unless NREL or the Government has already offset those monies under subdivision (c)(4)(i) of this clause. In either case, the Subcontractor shall notify the NREL Subcontract Administrator when the monies are withheld.
- (5) The Subcontractor agrees to incorporate the substance of this clause, including subparagraph (c)(5) but excepting subparagraph (c)(1), in all lower-tier subcontracts under this subcontract which exceed \$150,000.

LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (NOV 2019)

Derived from FAR 52.203-12 (OCT 2010) (FD)

(Applies to all subcontracts exceeding the Simplified Acquisition Threshold.)

(a) Definitions. As used in this clause—

- (1) “Agency,” as used in this clause, means “executive agency” as defined in Federal Acquisition Regulation (FAR) 2.101.
- (2) “Covered Federal action,” as used in this clause, means any of the following actions:
 - (i) The awarding of any Federal contract or at any-tier.
 - (ii) The making of any Federal grant.
 - (iii) The making of any Federal loan.
 - (iv) The entering into any cooperative agreement.
 - (v) The extension, continuation renewal, amendment, or modification of any Federal contract or a subcontract at any-tier, grant, loan, or cooperative agreement.
- (3) “Indian Tribe” and “tribal organization,” as used in this clause, have the meaning provided in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b) and include Alaskan Natives.
- (4) “Influencing or attempting to influence,” as used in this clause, means making, with the intent to influence, any communication to or appearance before 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 in connection with any covered Federal action.
- (5) “Local government,” as used in this clause, means a unit of government in a State and, if chartered, established, or otherwise recognized by a State for the performance of a governmental duty, including a local public authority, a special district, an intrastate district, a council of governments, a sponsor group representative organization, and any other instrumentality of a local government.
- (6) “Officer or employee of an agency,” as used in this clause, includes the following individuals who are employed by an agency:
 - (i) An individual who is appointed to a position in the Government under Title 5, United States Code, including a position under a temporary appointment.
 - (ii) A member of the uniformed services, as defined in subsection 101(3), Title 37, United States Code.
 - (iii) A special Government employee, as defined in section 202, Title 18, United States Code.
 - (iv) An individual who is a member of a Federal advisory committee, as defined by the Federal Advisory Committee Act, Title 5, United States Code, appendix 2.
- (7) “Person,” as used in this clause, means an individual, corporation, company, association, authority, firm, partnership, society, state, and local government, regardless of whether such entity is operated for profit, or not for profit. This term excludes an Indian tribe, tribal organization, or any other Indian organization eligible to receive Federal contracts, subcontracts at any-tier, grants, cooperative agreements, or loans from an agency, but only with respect to expenditures by such tribe or organization that are made for

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- purposes specified in paragraph (b) of this clause and are permitted by other Federal law.
- (8) "Reasonable compensation," as used in this clause, means, with respect to a regularly employed officer or employee of any person, compensation that is consistent with the normal compensation for such officer or employee for work that is not furnished to, not funded by, or not furnished in cooperation with the Federal Government.
 - (9) "Reasonable payment," as used in this clause, means, with respect to professional and other technical services, a payment in an amount that is consistent with the amount normally paid for such services in the private sector.
 - (10) "Recipient," as used in this clause, as used in this clause, includes the Subcontractor and all lower-tier Subcontractors. This term excludes an Indian tribe, tribal organization, or any other Indian organization eligible to receive Federal contracts, subcontracts at any-tier, grants, cooperative agreements, or loans from an agency, but only with respect to expenditures by such tribe or organization that are made for purposes specified in paragraph (b) of this clause and are permitted by other Federal law.
 - (11) "Regularly employed," as used in this clause means, with respect to an officer or employee of a person requesting or receiving a Federal contract or subcontract at any-tier, an officer or employee who is employed by such person for at least one hundred thirty (130) working days within one (1) year immediately preceding the date of the submission that initiates agency consideration of such person for receipt of such contract or subcontract at any-tier. An officer or employee who is employed by such person for less than one hundred thirty (130) working days within one (1) year immediately preceding the date of the submission that initiates agency consideration of such person shall be considered to be regularly employed as soon as he or she is employed by such person for one hundred thirty (130) working days.
 - (12) "State," as used in this clause means a State of the United States, the District of Columbia, or an outlying area of the United States, an agency or instrumentality of a State, and multi-State, regional, or interstate entity having governmental duties and powers.
- (b) Prohibition. 31 U.S.C. 1352, among other things, prohibits a recipient of a Federal contract, subcontract, at any-tier, grant, loan, or cooperative agreement from using appropriated funds to pay 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 in connection with any covered Federal actions. In accordance with 31 U.S.C. 1352 the Subcontractor or lower-tier Subcontractors shall not use appropriated funds to pay 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 in connection with the award of this subcontract or lower-tier subcontracts or the extension, continuation, renewal, amendment, or modification of this subcontract or lower-tier subcontracts.
- (1) The term appropriated funds does not include profit or fee from a covered Federal action.
 - (2) To the extent the Subcontractor or lower-tier Subcontractor can demonstrate that the Subcontractor or lower-tier Subcontractor has sufficient monies, other than Federal appropriated funds, NREL/Government will assume that these

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- other monies were spent for any influencing activities that would be unallowable if paid for with Federal appropriated funds.
- (c) Exceptions. The prohibition in paragraph (b) of this clause does not apply under the following conditions:
- (2) Agency and legislative liaison by Subcontractor or lower-tier Subcontractor employees.
 - (i) Payment of reasonable compensation made to an officer or employee of the Subcontractor or lower-tier Subcontractor if the payment is for agency and legislative liaison activities not directly related to this subcontract or lower-tier subcontract. For purposes of this paragraph, providing any information specifically requested by an agency or Congress is permitted at any time.
 - (ii) Participating with an agency in discussions that are not related to a specific solicitation for any covered Federal action, but that concern—
 - (A) The qualities and characteristics (including individual demonstrations) of the person's products or services, conditions or terms of sale, and service capabilities; or
 - (B) The application or adaptation of the person's products or services for an agency's use.
 - (iii) Providing prior to formal solicitation of any covered Federal action any information not specifically requested but necessary for an agency to make an informed decision about initiation of a covered Federal action.
 - (iv) Participating in technical discussions regarding the preparation of an unsolicited proposal prior to its official submission; and
 - (v) Making capability presentations prior to formal solicitation of any covered Federal action by persons seeking awards from an agency pursuant to the provisions of the Small Business Act, as amended by Pub. L. 95-507, and subsequent amendments.
 - (3) Professional and technical services.
 - (i) A payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action, if payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action.
 - (ii) Any reasonable payment to a person, other than an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action if the payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action. Persons other than officers or employees of a person requesting or receiving a covered Federal action include consultants and trade associations.
 - (iii) As used in paragraph (c) (2) of this clause, "professional and technical services" are limited to advice and analysis directly applying any

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- professional or technical discipline (for examples, see FAR 3.803(a)(2)(iii)).
- (iv) Requirements imposed by or pursuant to law as a condition for receiving a covered Federal award include those required by law or regulation and any other requirements in the actual award documents.
- (4) Only those communications and services expressly authorized by paragraphs (c)(1) and (2) of this clause are permitted.
- (d) Disclosure.
- (1) If the Subcontractor or lower-tier Subcontractor did not submit OMB Standard Form LLL, Disclosure of Lobbying Activities, with its offer, but registrants under the Lobbying Disclosure Act of 1995 have subsequently made a lobbying contact on behalf of the Subcontractor or lower-tier Subcontractor with respect to this subcontract, the Subcontractor or lower-tier Subcontractor shall complete and submit OMB Standard Form LLL to provide the name of the lobbying registrants, including the individuals performing the services.
- (2) If the Subcontractor or lower-tier Subcontractor did submit OMB Standard Form LLL disclosure pursuant to paragraph (d) of the provision at FAR 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions, and a change occurs that affects Block 10 of the OMB Standard Form LLL (name and address of lobbying registrant or individuals performing services), the Subcontractor or lower-tier Subcontractor shall, at the end of the calendar quarter in which the change occurs, submit to the NREL Subcontract Administrator within thirty (30) days an updated disclosure using OMB Standard Form LLL.
- (e) Penalties.
- (1) Any person who makes an expenditure prohibited under paragraph (b) of this clause or who fails to file or amend the disclosure to be filed or amended by paragraph (d) of this clause shall be subject to civil penalties as provided for by 31 U.S.C. 1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable.
- (2) Subcontractors or lower-tier Subcontractors may rely without liability on the representation made by their lower-tier Subcontractors in the certification and disclosure form.
- (f) Cost allowability. Nothing in this clause makes allowable or reasonable any costs which would otherwise be unallowable or unreasonable. Conversely, costs made specifically unallowable by the requirements in this clause will not be made allowable under any other provision.
- (g) Lower-tier Subcontracts.
- (1) The Subcontractor shall obtain a declaration, including the certification and disclosure in paragraphs (c) and (d) of the provision at FAR 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions, from each person requesting or receiving a subcontract, at any-tier, exceeding \$150,000 under this subcontract. The Subcontractor that awards the subcontract, at any-tier, shall retain the declaration.
- (2) A copy of each lower-tier Subcontractor disclosure form (but not certifications) shall be forwarded from tier to tier until received by the Subcontractor. The Subcontractor shall, at the end of the calendar quarter in which the disclosure form is submitted by the Subcontractor, at any-tier, submit to the NREL Subcontract Administrator within thirty (30) days a copy

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

of all disclosures. Each lower-tier Subcontractor certification shall be retained
in the subcontract file.

The Subcontractor shall include the substance of this clause, including this paragraph (g), in any lower-tier subcontract exceeding \$150,000.

**SUBCONTRACTOR EMPLOYEE WHISTLEBLOWER RIGHTS AND REQUIREMENT TO
INFORM EMPLOYEES OF WHISTLEBLOWER RIGHTS (APR 2014)**

Derived from FAR 52.203-17 (APR 2014)

Applies to all subcontracts over the Simplified Acquisition Threshold.

- (a) This subcontract and employees working on this subcontract will be subject to the whistleblower rights and remedies in the pilot program on Subcontractor employee whistleblower protections established at 41 U.S.C. 4712 by section 828 of the National Defense Authorization Act for Fiscal Year 2013 (Pub. L.112-239) and FAR 3.908.
- (b) The Subcontractor shall inform its employees in writing, in the predominant language of the workforce, of employee whistleblower rights and protections under 41 U.S.C. 4712, as described in section 3.908 of the Federal Acquisition Regulation.
- (c) The Subcontractor shall insert the substance of this clause, including this paragraph (c), in all lower-tier subcontracts over the simplified acquisition threshold.

PROHIBITION ON REQUIRING CERTAIN INTERNAL CONFIDENTIALITY AGREEMENTS OR STATEMENTS (NOV 2019)

Derived from FAR 52.203-19 (JAN 2017) (FD)

(Applies to all subcontracts above the Simplified Acquisition Threshold requiring a confidentiality agreement.)

- (a) *Definitions.* As used in this clause--
- “Internal confidentiality agreement or statement” means a confidentiality agreement or any other written statement that the Subcontractor requires any of its employees or subcontractors to sign regarding nondisclosure of Subcontractor information, except that it does not include confidentiality agreements arising out of civil litigation or confidentiality agreements that Subcontractor employees or lower-tier subcontractors sign at the behest of a Federal agency.
- “Lower-Tier Subcontract” means any contract as defined in subpart 2.1 entered into by a lower-tier subcontractor to furnish supplies or services for performance of a prime contract or a subcontract. It includes but is not limited to purchase orders, and changes and modifications to purchase orders.
- “Lower-Tier Subcontractor” means any supplier, distributor, vendor, or firm (including a consultant) that furnishes supplies or services to or for a subcontractor or another lower-tier subcontractor.
- (b) The Subcontractor shall not require its employees or lower-tier subcontractors to sign or comply with internal confidentiality agreements or statements prohibiting or otherwise restricting such employees or lower-tier subcontractors from lawfully reporting waste, fraud, or abuse related to the performance of an NREL contract to a designated investigative or law enforcement representative of NREL authorized to receive such information (e.g., the NREL Subcontract Administrator).
- (c) The Subcontractor shall notify current employees and lower-tier subcontractors that prohibitions and restrictions of any preexisting internal confidentiality agreements or statements covered by this clause, to the extent that such prohibitions and restrictions are inconsistent with the prohibitions of this clause, are no longer in effect.
- (d) The prohibition in paragraph (b) of this clause does not contravene requirements applicable to Standard Form 312 (Classified Information Nondisclosure Agreement), Form 4414 (Sensitive Compartmented Information Nondisclosure Agreement), or any other form issued by a Federal department or agency governing the nondisclosure of classified information.
- (e) In accordance with section 743 of Division E, Title VII, of the Consolidated and Further Continuing Appropriations Act, 2015, (Pub. L. 113-235), and its successor provisions in subsequent appropriations acts (and as extended in continuing resolutions) use of funds appropriated (or otherwise made available) is prohibited, if the NREL Subcontract Administrator determines that the Subcontractor is not in compliance with the provisions of this clause.
- (f) The Subcontractor shall include the substance of this clause, including this paragraph (f), in lower-tier subcontracts under such contracts.

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER (SPECIAL) (NOV 2019)

Derived from FAR 52.204-4 (MAY 2011)

(Applies to all subcontracts exceeding the Simplified Acquisition Threshold.)

- (a) Definitions. As used in this clause—
 - (1) "Postconsumer fiber"
 - (i) Paper, paperboard, and fibrous materials from retail stores, office buildings, homes, and so forth, after they have passed through their end-usage as a consumer item, including: used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards; and used cordage; or
 - (ii) All paper, paperboard, and fibrous materials that enter and are collected from municipal solid waste; but not
 - (iii) Fiber derived from printers' over-runs, converter's scrap, and over-issue publications.
- (b) When not using electronic commerce methods to submit information or data to NREL/Government, the Subcontractor is required to submit paper documents, such as offers, letters, or reports, that are printed or copied double-sided on recycled paper containing at least thirty (30) percent postconsumer fiber.

EQUAL OPPORTUNITY FOR VETERANS (OCT 2015)

Derived from FAR 52.222-35 (OCT 2015) (FD)

(Applies to all subcontracts of \$150,000 or more.)

- (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 Subcontractor 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 Subcontractor to employ and advance in employment qualified protected veterans.
- (c) Lower-tier Subcontracts. The Subcontractor 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 Subcontractor shall act as specified by the NREL Subcontract Administrator, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate of identify properly the parties and their undertakings.

EMPLOYMENT REPORTS ON VETERANS (FEB 2016)

Derived from FAR 52.222-37 (FEB 2016) (FD)

(Applies to all subcontracts exceeding \$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,” and “recently separated veteran,” have the meanings given in FAR 22.1301.
- (b) Unless the Subcontractor is a State or local government agency, the Subcontractor shall report at least annually, as required by the Secretary of Labor, on--
 - (1) The total number of employees in the Subcontractor’s workforce, by job category and hiring location, who are protected veterans (*i.e.*, active duty wartime or campaign badge veterans, Armed Forces service medal veterans, disabled veterans, and recently separated veterans);
 - (2) The total number of new employees hired during the period covered by the report, and of the total, the number of protected veterans (*i.e.*, active duty wartime or campaign badge veterans, Armed Forces service medal veterans, disabled veterans, and recently separated veterans); and
 - (3) The maximum number and minimum number of employees of the Subcontractor or lower-tier subcontractor at each hiring location during the period covered by the report.
- (c) The Subcontractor shall report the above items by filing the VETS-4212 “Federal Contractor Veterans’ Employment Report” (see “VETS-4212 Federal Contractor Reporting” and “Filing Your VETS-4212 Report” at <http://www.dol.gov/vets/vets4212.htm>).
- (d) The Subcontractor shall file VETS-4212 Reports no later than September 30 of each year.
- (e) The employment activity report required by paragraphs (b)(2) and (b)(3) of this clause shall reflect total new hires, and maximum and minimum number of employees, during the most recent 12-month period preceding the ending date selected for the report. Subcontractors may select an ending date—
 - (1) As of the end of any pay period between July 1 and August 31 of the year the report is due; or
 - (2) As of December 31, if the Subcontractor has prior written approval from the Equal Employment Opportunity Commission to do so for purposes of submitting the Employer Information Report EEO-1 (Standard Form 100).
- (f) The number of veterans reported must be based on data known to the Subcontractor when completing the VETS-4212. The Subcontractor’s knowledge of veterans status may be obtained in a variety of ways, including an invitation to applicants to self-identify (in accordance with 41 CFR 60-300.42), voluntary self-disclosure by employees, or actual knowledge of veteran status by the Subcontractor. This paragraph does not relieve an employer of liability for discrimination under 38 U.S.C. 4212.
- (g) The Subcontractor shall insert the terms of this clause in all lower-tier subcontracts of \$150,000 or more unless exempted by rules, regulations, or orders of the Secretary of Labor.

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firmed Fixed Price and Fixed Unit Price

DISPLACED EMPLOYEE HIRING PREFERENCE (JUNE 1997)

Derived from DEAR 952.226-74 (FD)

(Applies to all subcontracts exceeding \$500,000, except subcontracts for commercial items.)

- (a) Definition.
Eligible employee means a current or former employee of a Contractor or Subcontractor employed at a Department of Energy Defense Nuclear Facility (1) whose position of employment has been, or will be, involuntarily terminated (except if terminated for cause), (2) 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 (3) who is qualified for a particular job vacancy with the Department or one of its Contractors or Subcontractors with respect to work under its Contract with the Department at the time the particular position is available.
- (b) 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.
- (c) The requirements of this clause shall be included in subcontracts at any tier (except for lower-tier subcontracts for commercial items pursuant to 41 U.S.C. 403) expected to exceed \$500,000.

SECURITY AND ACCESS REQUIREMENTS (SPECIAL) (DEC 2018)

Derived from NREL 08.100-02

(Applies to all subcontracts where the Subcontractor or lower-tier Subcontractors, and their employees, officers, agents, or other persons representing the Subcontractor, will perform work on NREL-operated facilities or government-owned or -leased properties.)

- (a) Security requirements.
 - (1) NREL has established security requirements to govern access onto NREL operated facilities or government-owned or -leased properties (here after “NREL operated facilities”) by the Subcontractor’s employees (and its lower-tier Subcontractors’ employees), officers, agents, and any other persons representing the Subcontractor.
 - (i) The introduction of certain “controlled” commodities and/or activities on the NREL operated facilities is prohibited. Prohibited articles include firearms, explosive devices, incendiary devices, dangerous weapons or materials, controlled substances (illegal drugs), alcoholic beverages, and livestock. NREL operated facilities and DOE-owned or -leased property are closed to all hunting.
 - (2) As a condition of entry to NREL operated facilities, the Subcontractor agrees to permit NREL Security personnel to search the Subcontractor’s employees (and its lower-tier Subcontractors’ employees) and their officers and agents’ vehicles, packages, tool boxes, or other containers for the purpose of preventing prohibited articles to be brought onto NREL operated facilities or to detect or deter the unauthorized removal of Government property from NREL operated facilities.
 - (3) The Subcontractor is solely responsible for the security of the Subcontractor’s employees (and its lower-tier Subcontractors’ employees) and their officers and agents’ materials and equipment at the NREL operated facilities. Any security system the Subcontractor may elect to use (fences, keys, alarms, etc.) must be coordinated with the NREL Technical Monitor.
 - (4) The Subcontractor is responsible to advise the NREL Technical Monitor promptly of any non-routine events, occurrences, incidents, accidents, etc., particularly in situations involving lost-time accidents and ambulance runs, occurring under this subcontract.
 - (5) NREL Security reserves the right to revoke site access authorization for any person violating NREL or DOE security policies and procedures.
- (b) Access requirements for U.S. citizens.
 - (1) Access to NREL operated facilities is controlled in accordance with DOE’s security requirements. The Subcontractor shall ensure that any of the Subcontractor’s employees (and its lower-tier Subcontractors’ employees) and their officers and agents who will enter onto the NREL operated facilities are specifically authorized site access under the NREL requirements set forth in the NREL Access Control Policy and Program, including identification, badging, and registration by NREL Security. A two-week advance notice to NREL Security processed through the NREL Subcontract Administrator is required prior to access by U.S. citizens.
- (c) Access requirements for persons who are not U.S. citizens.
 - (1) The Subcontractor shall ensure that any of the Subcontractor’s employees (or its lower-tier Subcontractors’ employees), officers, and agents who will enter onto NREL operated facilities and who are not U.S. citizens meet the

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- requirements set forth in NREL's Foreign National Management Policy and Program, including: (a) appropriate work authorization documentation (i.e. Visa); (b) completion of an NREL Foreign National Data Card; and (c) NREL Manager-level approval.
- (2) Foreign Nationals from DOE-designated "Sensitive Countries" will be processed for a federal background check. This process requires a minimum of 30 calendar days notification prior to visit or assignment. Foreign Nationals from DOE-designated "Terrorist Supporting Countries" will not be allowed. The Subcontractor should contact the NREL Subcontract Administrator to obtain the most current listing of "Sensitive Countries" and "Terrorist Supporting Countries."
 - (ii) It is the Subcontractor's responsibility to obtain and provide all necessary information and documentation to meet NREL, DOE, and federal requirements regarding Subcontractors' employees (or its lower-tier Subcontractors' employees), officers', and agents' work authorization and identification to the NREL Technical Monitor and the NREL Subcontract Administrator to meet the appropriate time frames for NREL Security to process and approve the request for access. Any person(s) denied access by NREL Security or DOE shall not be assigned by the Subcontractor to enter onto or perform subcontract work at NREL operated facilities.
 - (3) Prior to the initiation of a subcontract that requires entry onto NREL operated facilities, the Subcontractor shall provide to the NREL Subcontract Administrator advance notice and necessary evidence (including Visa types and expiration dates) that legally sufficient work permits have been obtained from the U.S. Citizenship and Immigration Services. Further, the Subcontractor is responsible to ensure that such permits are properly maintained for any of the Subcontractor's employees (and its lower-tier Subcontractors' employees) and their officers and agents who are not U.S. citizens for the duration of subcontract work at NREL operated facilities.
 - (4) After the Subcontractor (and its lower-tier Subcontractors) has commenced work under the subcontract, the Subcontractor shall provide to the NREL Subcontract Administrator the same advance notice and necessary evidence (including Visa types and expiration dates) for all subsequently assigned individuals who are not U.S. citizens who will enter onto NREL operated facilities.
- (d) Access Requirements for all persons.
- (1) All persons entering NREL operated facilities must display a valid NREL- or DOE- issued identification badge. The Subcontractor is responsible to coordinate badge requirements for entrance onto NREL operated facilities for all the Subcontractor's employees (and lower-tier Subcontractors' employees) and their officers and agents to ensure the display and return of all issued badges.
 - (2) The Subcontractor is responsible to coordinate with the NREL Technical Monitor all vehicle parking requirements needed to perform the subcontract work on the NREL operated facilities. Vehicle access by Subcontractors and other visitors to the NREL operated facilities is controlled on a 24-hour, 7-day per week basis.
 - (3) The Subcontractor is cautioned that effective January 1, 2007, the Colorado Revised Statutes (CRS 8-2-122) require employers that transact business in Colorado to comply with employment verification requirements to affirm that

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

the employer has examined the legal work status of newly-hired employees and has retained file copies of the documents required by the Federal Immigration Reform and Control Act (8 USC 1324a).

WORKER SAFETY AND HEALTH REQUIREMENTS (SPECIAL) (FEB 2009)

Derived from NREL 09.100-02

(Applies to all subcontracts where the Subcontractor or lower-tier Subcontractors, and their employees, officers, agents, or other persons representing the Subcontractor, will perform work on NREL-operated facilities or government-owned or -leased properties.)

- (a) **THE SUBCONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL WORK PERFORMED UNDER THIS SUBCONTRACT (INCLUSIVE OF LOWER-TIER SUBCONTRACTORS) IS PERFORMED IN ACCORDANCE WITH THE DEPARTMENT OF ENERGY'S "WORKER SAFETY AND HEALTH" RULE CODIFIED AT 10 CFR 851. THE SUBCONTRACTOR SHALL ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH NREL'S DOE-APPROVED SAFETY MANAGEMENT SYSTEM. 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 DOE'S "WORKER SAFETY AND HEALTH" RULE. WHEN THESE "WORKER SAFETY AND HEALTH REQUIREMENTS" ARE MADE APPLICABLE TO THE WORK TO BE PERFORMED UNDER AN NREL SUBCONTRACT, THE SUBCONTRACTOR SHALL ALSO COMPLY WITH THE CLAUSE "INTEGRATION OF ENVIRONMENT, SAFETY, AND HEALTH INTO WORK PLANNING AND EXECUTION" (DEAR 970.5223-1).**
- (b) The Subcontractor shall have a structured approach to its worker safety and health program that at a minimum meets the mandatory requirements specified in Appendix A of 10 CFR 851 for implementing any of the following functional areas applicable to the work to be performed: (1) construction safety; (2) fire protection; (3) firearms safety; (4) explosives safety; (5) pressure safety; (6) electrical safety; (7) industrial hygiene; (8) occupational medicine; (9) biological safety; and (10) motor vehicle safety.
- (c) The Subcontractor shall be responsible for full compliance (inclusive of its lower-tier Subcontractors) with all applicable worker safety and health standards of DOE and NREL to provide subcontract work that is free from recognized hazards that are causing or have the potential to cause death or serious physical harm to workers. The Subcontractor shall comply with all Safety and Health Standards applicable to the hazards of the work to be performed, including but not limited to: (a) 29 CFR 1904 Recording and Reporting Occupational Injuries and Illnesses; (b) 29 CFR 1910 Occupational Safety and Health Standards and ACGIH Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices; (c) 29 CFR 1926 Safety and Health Regulations for Construction; (d) ANSI Z88.2 Respiratory Protection; (e) ANSI Z136.1 Safe Use of Lasers; (f) ANSI Z49.1 Welding, Cutting, and Allied Processes; (g) NFPA 70 National Electrical Code; and (h) NFPA 70E Standard for Electrical Safety in the Workplace. Nothing in this Paragraph (c) shall be construed as relieving the Subcontractor from complying with any additional specific safety and health requirements necessary to protect the safety and health of workers.
- (d) In conforming to the worker safety and health requirements identified the Subcontractor shall provide at least worker safety and health supervision in the following areas: (1) management responsibilities; (2) worker rights and responsibilities; (3) hazard identification and assessment; (4) hazard prevention and abatement; (5) training and information; and (6) recordkeeping and reporting.
- (e) NREL may inspect the Subcontractor's operation as work proceeds, from time to time, for compliance with worker safety and health requirements contained in this subcontract. The NREL Subcontract Administrator shall direct the Subcontractor to

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- make the necessary corrections commensurate with deficiencies found. The Subcontractor shall make these corrections at no additional expense to NREL. The Subcontractor shall participate in NREL's fact-finding investigations of accidents, injuries, occurrences, and near-misses. The Subcontractor shall participate in fact-finding investigations at no additional expense to NREL. The Subcontractor shall remove from the work site any employee that NREL identifies in writing as unsafe, incompetent, careless, or otherwise objectionable. The Subcontractor shall replace the removed employee at no additional expense to NREL. Any NREL representatives, NREL Subcontractors, or DOE representatives, including but not limited to the NREL Technical Monitor or Project Manager, the DOE Federal Project Director, the NREL Subcontract Administrator and NREL and DOE EHSS&Q representatives have authority to stop work if unsafe conditions exist. The Subcontractor shall not be entitled to an extension of time or additional fee or damages by reason of or in connection with any unsafe conditions work stoppage. The Subcontractor's violation, refusal, or failure to abate violations, or applicable deficiencies may be justification for subcontract termination in accordance with the termination or default clauses of the subcontract terms and conditions.
- (f) The Subcontractor shall complete and post the Form DOE-F-5480.4 at the work site. The Subcontractor shall make available Form DOE-F-5480.4, "[Sub]Contractor Employee Occupational Safety or Health Complaint" to its employees. The Subcontractor shall maintain specific records and submit the information covering experience of both its direct employees and that of its lower-tier Subcontractors. The Subcontractor shall immediately provide to the NREL Technical Monitor or Project Manager and the NREL Subcontract Administrator notification of any injury or property damage incident and provide sufficient information necessary for NREL to complete DOE-F-5484.3 "The Individual Accident/Incident Report." Such information shall be submitted, as appropriate, for any period of time prior to final payment and closeout of this subcontract.

DRUG-FREE WORKPLACE (MAY 2001)

Derived from FAR 52.223-6 (MAY 2001)

(Applies to all subcontracts where work is to be performed on NREL operated facilities, including Government-owned or - leased property.)

- (a) Definitions, as used in this clause,
 - (1) "Controlled substance," means a controlled substance in subcontract schedules I through V of section 202 of the Controlled Substances Act (21 U.S.C. 812) and as further defined in regulation at 21 CFR 1308.11 - 1308.15.
 - (2) "Conviction," means a finding of guilt (including a plea of nolo contendere) or imposition of sentence, or both, by any judicial body charged with the responsibility to determine violations of the Federal or State criminal drug statutes.
 - (3) "Criminal drug statute," means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, possession, or use of any controlled substance.
 - (4) "Drug-free workplace," means the NREL-operated site(s) for the performance of work done by the Subcontractor in connection with a specific subcontract where employees of the Subcontractor are prohibited from engaging in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance.
 - (5) "Employee," means an employee of a Subcontractor directly engaged in the performance of work under a NREL subcontract. "Directly engaged" is defined to include all direct cost employees and any other Subcontractor employee who has other than a minimal impact or involvement in subcontract performance.
 - (6) "Individual," means a Subcontractor that has no more than one employee including the Subcontractor.
- (b) The Subcontractor, if other than an individual, shall—within thirty (30) days after award (unless a longer period is agreed to in writing for subcontracts of thirty (30) days or more performance duration), or as soon as possible for subcontracts of less than thirty (30) days performance duration—
 - (1) Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Subcontractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition;
 - (2) Establish an ongoing drug-free awareness program to inform such employees about—
 - (ii) The dangers of drug abuse in the workplace;
 - (iii) The Subcontractor's policy of maintaining a drug-free workplace;
 - (iv) Any available drug counseling, rehabilitation, and employee assistance programs; and
 - (v) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
 - (3) Provide all employees engaged in performance of the Subcontract with a copy of the statement required by subparagraph (b)(1) of this clause;
 - (4) Notify such employees in writing in the statement required by subparagraph (b)(1) of this clause that, as a condition of continued employment on this Subcontract, the employee will—
 - (ii) Abide by the terms of the statement; and

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- (iii) Notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than five (5) days after such conviction;
- (5) Notify the NREL Subcontract Administrator in writing within ten (10) days after receiving notice under subdivision (b) (4) (ii) of this clause, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;
- (6) Within thirty (30) days after receiving notice under subdivision (b)(4)(ii) of this clause of a conviction, take one of the following actions with respect to any employee who is convicted of a drug abuse violation occurring in the workplace:
 - (ii) Taking appropriate personnel action against such employee, up to and including termination; or
 - (iii) Require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, state, or local health, law enforcement, or other appropriate agency; and
- (7) Make a good faith effort to maintain a drug-free workplace through implementation of subparagraphs (b)(1) through (b)(6) of this clause.
- (c) The Subcontractor, if an individual, agrees by award of the subcontract or acceptance of a purchase order, not to engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance while performing this subcontract.
- (d) In addition to other remedies available to the NREL and the Government, the Subcontractor's failure to comply with the requirements of paragraph (b) or (c) of this clause may, pursuant to FAR 23.506, render the Subcontractor subject to suspension of subcontract payments, termination of the subcontract or default, and suspension or debarment."

**INSURANCE-WORK ON A GOVERNMENT INSTALLATION (SPECIAL) (JAN 2009) AND
 ALTERNATE I – ARCHITECT/ENGINEER SUBCONTRACTS (JAN 2009)**

Derived from FAR 52.228-5 (JAN 1997)

(Applies to all subcontracts, except construction and design-build subcontracts, where the Subcontractor or lower-tier Subcontractors, and their employees, officers, agents, or other persons representing the Subcontractor, will perform work on NREL-operated facilities or Government-owned or -leased properties.

(Alternate I applies to Architect/Engineer subcontracts.)

- (a) The Subcontractor shall, at its own expense, maintain and keep in force during the entire performance period of this subcontract at least the kinds and minimum amounts of insurance required in this clause.

Insurance Type	Bodily Injury		Property Damage
	Each Person	Each Occurrence	
Workers' Compensation	As Required by Law	As Required by Law	N/A
Employer's Liability	\$1,000,000.00	\$1,000,000.00	N/A
General Liability	\$1,000,000.00	\$1,000,000.00	\$1,000,000.00
Automobile Liability	\$1,000,000.00	\$1,000,000.00	\$1,000,000.00

- (b) Before commencing work under this subcontract, the Subcontractor shall obtain the required insurance and shall maintain such required insurance for the entire period of performance of this subcontract. The Subcontractor shall immediately notify the NREL Subcontract Administrator in the event of any termination, cancellation, reduction, or other material change adversely affecting NREL's/Government's interest in the required insurance.
- (c) The Subcontractor shall insert the substance of this clause, including this Paragraph (c), in lower-tier subcontracts under this subcontract that require work on a NREL-operated facility, or Government-owned or -leased properties and shall require the lower-tier Subcontractors to provide and maintain the same kinds and minimum amounts of insurance required under this subcontract (exceptions to this requirement will require prior approval from the NREL Subcontract Administrator). The Subcontractor shall maintain a copy of all the lower-tier Subcontractors' proof of required insurance, and shall make copies available to the NREL Subcontract Administrator upon request.

ALTERNATE I

(When the subcontract includes architect/engineer services, replace paragraph (b) with the following paragraph (b) and add the following paragraph (d) to the clause.)

- (a) Before commencing work under this subcontract, the Subcontractor shall provide the NREL Subcontract Administrator with written proof that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting the Alliance for Sustainable Energy, LLC and the Government's interest shall not be effective—

Appendix B-2
 Standard Terms and Conditions for Research and Development Subcontracts
 Firm Fixed Price and Fixed Unit Price

- (1) For such period as the laws of the state in which this subcontract is to be performed prescribe; or
- (2) Until thirty (30) days after the insurer or the Subcontractor gives written notice to the NREL Subcontract Administrator, whichever period is longer.

The Subcontractor shall immediately notify the NREL Subcontract Administrator in the event of any termination, cancellation, reduction or other material change adversely affecting the Alliance for Sustainable Energy, LLC and the Government's interest in the required insurance.

- (b) The Subcontractor shall, at its own expense, provide and maintain at least the kinds and minimum amounts of Architect/Engineer Professional Liability and Errors and Omissions insurance required in this clause. Architect/Engineer Professional Liability and Errors and Omissions insurance shall be provided and maintained during the entire performance of the subcontract and for five (5) years after the completion of the work. The Subcontractor shall flow down this insurance requirement to its lower-tier Subcontractors providing Architect/Engineer professional services. Such flow down to lower-tiers shall not be construed to relieve the Subcontractor from its obligations under this clause.

Insurance Type		
	Per Claim	Aggregate Claims
Architect/Engineer Professional Liability and Errors and Omissions	\$1,000,000.00	\$1,000,000.00

WHISTLEBLOWER PROTECTION FOR SUBCONTRACTOR EMPLOYEES (DEC 2000)

Derived from DEAR 952.203-70 (FD)

(Applies to subcontracts for work directly related to activities at NREL-operated facilities or Government-owned or -leased properties.)

- (a) The Subcontractor shall comply with the requirements of "DOE Contractor Employee Protection Program" at 10 CFR Part 708 for work performed on behalf of NREL directly related to activities at DOE-owned or -leased sites.
- (b) The Subcontractor shall insert or have inserted the substance of this clause, including this paragraph (b) in subcontracts at all tiers, for subcontracts involving work performed on behalf of NREL directly related to activities at DOE-owned or -leased sites.

INTEGRATION OF ENVIRONMENT, SAFETY, AND HEALTH INTO WORK PLANNING AND EXECUTION (NOV 2016)

Derived from DEAR 970.5223-1 (FD) (DEC 2000)

(Applies to all subcontracts where the Subcontractor or lower-tier Subcontractors and their employees, officers, agents, or other persons representing the Subcontractor will perform complex or hazardous work on NREL-operated facilities or Government-owned or –leased properties.)

- (a) For the purposes of this clause:
 - (1) “Safety’ encompasses environment, safety, and health, including pollution prevention and waste minimization; and
 - (2) ‘Employees” include lower-tier Subcontractor employees.
- (b) In performing work under this subcontract, the Subcontractor shall perform work safely, in a manner that ensures adequate protection for employees, the public, and the environment, and shall be accountable for the safe performance of work. The Subcontractor shall exercise a degree of care commensurate with the work and the associated hazards. The Subcontractor shall ensure that management of environment, safety and health (ES&H) functions and activities becomes an integral but visible part of the Subcontractor’s work planning and execution processes. The Subcontractor shall, in the performance of work, ensure that:
 - (1) Line management is responsible for the protection of employees, the public, and the environment. Line management includes those Subcontractor and lower-tier Subcontractor employees managing or supervising employees performing work.
 - (2) Clear and unambiguous lines of authority and responsibility for ensuring ES&H are established and maintained at all organizational levels.
 - (3) Personnel possess the experience, knowledge, skills, and abilities that are necessary to discharge their responsibilities.
 - (4) Resources are effectively allocated to address ES&H, programmatic, and operational considerations. Protecting employees, the public, and the environment is a priority whenever activities are planned and performed.
 - (5) Before work is performed, the associated hazards are evaluated and an agreed-upon set of ES&H standards and requirements are established which, if properly implemented, provide adequate assurance that employees, the public, and the environment are protected from adverse consequences.
 - (6) Upon discovery of potential cultural resources, the Subcontractor shall stop work immediately and report to the NREL Project Manager. The Subcontractor shall not handle, move, or otherwise disturb items that are potential cultural resources, either on the ground surface or buried/unearthed below the ground surface. Items discovered remain the property of DOE and may not be removed from the site. The Subcontractor shall not alter, damage, or deconstruct existing structures on the National Register of Historic Places as identified by the NREL Project Manager.
 - (7) Administrative and engineering controls to prevent and mitigate hazards are tailored to the work being performed and associated hazards. Emphasis should be on designing the work and/or controls to reduce or eliminate the hazards and to prevent accidents and unplanned releases and exposures.
 - (8) The conditions and requirements to be satisfied for operations to be initiated and conducted are established and agreed-upon by NREL/Government and the Subcontractor. These agreed-upon conditions and requirements are

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

requirements of the subcontract and binding upon the Subcontractor. The extent of documentation and level of authority for agreement shall be tailored to the complexity and hazards associated with the work and shall be established in a Safety Management System.

- (c) The Subcontractor shall manage and perform work in accordance with a documented Safety Management System (System) that fulfills all conditions in paragraph (b) of this clause at a minimum. Documentation of the System shall describe how the Subcontractor will:
 - (1) Define the scope of work;
 - (2) Identify and analyze hazards associated with the work;
 - (3) Develop and implement hazard controls;
 - (4) Perform work within controls; and
 - (5) Provide feedback on adequacy of controls and continue to improve safety management.
- (d) The System shall describe how the Subcontractor will establish, document, and implement safety performance objectives, performance measures, and commitments in response to NREL/DOE program and budget execution guidance while maintaining the integrity of the System. The System shall also describe how the Subcontractor will measure system effectiveness.
- (e) The Subcontractor shall submit to the NREL Subcontract Administrator documentation of its System for review and approval. Dates for submittal, discussions, and revisions to the System will be established by the NREL Subcontract Administrator. Guidance on the preparation, content, review, and approval of the System will be provided by the NREL Subcontract Administrator. On an annual basis, the Subcontractor shall review and update, for NREL's approval, its safety performance objectives, performance measures, and commitments consistent with and in response to NREL/DOE program and budget execution guidance and direction. Resources shall be identified and allocated to meet the safety objectives and performance commitments as well as maintain the integrity of the entire System. Accordingly, the System shall be integrated with the Subcontractor's business processes for work planning, budgeting, authorization, execution, and change control.
- (f) The Subcontractor shall comply with, and assist NREL/DOE in complying with, ES&H requirements of all applicable laws and regulations, and applicable directives identified in the clause of NREL's Prime Contract entitled "Laws, Regulations, and DOE Directives." The Subcontractor shall cooperate with Federal and non-Federal agencies having jurisdiction over ES&H matters under this subcontract.
- (g) The Subcontractor shall promptly evaluate and resolve any noncompliance with applicable ES&H requirements and the System. If the Subcontractor fails to provide resolution or, if at any time, the Subcontractor's acts or failure to act causes substantial harm or an imminent danger to the environment or health and safety of employees or the public, the NREL Subcontract Administrator may issue an order stopping work in whole or in part. Any stop work order issued by the NREL Subcontract Administrator under this clause (or issued by the Subcontractor to a lower-tier Subcontractor in accordance with paragraph (i) of this clause) shall be without prejudice to any other legal or contractual rights of NREL/Government. In the event that the NREL Subcontract Administrator issues a stop work order, an order authorizing the resumption of the work may be issued at the discretion of the NREL Subcontract Administrator. The Subcontractor shall not be entitled to an extension of time or additional fee or damages by reason of, or in connection with, any work stoppage ordered in accordance with this clause.

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firmed Fixed Price and Fixed Unit Price

- (h) Regardless of the performer of the work, the Subcontractor is responsible for compliance with the ES&H requirements applicable to this subcontract. The Subcontractor is responsible for flowing down the ES&H requirements applicable to this subcontract to subcontracts at any tier to the extent necessary to ensure the Subcontractor's compliance with the requirements.
- (i) The Subcontractor shall include a clause substantially the same as this clause in lower-tier subcontracts involving complex or hazardous work on site at an NREL operated facility or Government-owned or-leased properties. Such lower-tier subcontracts shall provide for the right to stop work under the conditions described in paragraph (g) of this clause. Depending on the complexity and hazards associated with the work, the Subcontractor may choose not to require the lower-tier Subcontractor to submit a Safety Management System for the Subcontractor's review and approval.

SUSTAINABLE ACQUISITION PROGRAM (NOV 2019)

Derived from DEAR 970.5223-7 (OCT 2010) (FD)

(Applies to subcontracts or purchase orders for supplies or services that support operation of NREL, exceed the Simplified Acquisition Threshold, and offer opportunities for the acquisition of energy efficient or environmentally sustainable supplies or services).

- (a) In the spirit of Executive Order 13423, Strengthening Federal Environmental, Energy and Transportation Management, and Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic Performance, NREL is committed to managing its facilities in an environmentally preferable and sustainable manner that will promote the nature environment and protect the health and well being of its employees and Subcontractors. In the performance of providing products or services under this subcontract or purchase order, the Subcontractor shall provide products or services in a manner that promotes the natural environment, reduces greenhouse gas emissions and protects the health and well being of NREL employees, Subcontractor and visitors.
- (b) Green purchasing or sustainable acquisition has several interacting initiatives. The Subcontractor must comply with initiatives that are current as of the subcontract or purchase order award date. NREL may require compliance with revised initiatives from time to time. The initiatives important to Executive Orders associated with sustainable acquisition practices are explained on the following Government or Industry Internet Sites:
 - (1) Recycled Content Products are described at <http://epa.gov/cpg>
 - (2) Biobased Products are described at <http://www.biopREFERRED.gov/>
 - (3) Energy efficient products are at <http://energystar.gov/products> for Energy Star products
 - (4) Energy efficient products are at <http://www.femp.energy.gov/procurement> for FEMP designated products
 - (5) Environmentally preferable and energy efficient electronics including desktop computers, laptops and monitors are at <http://www.epeat.net> the Electronic Products Environmental Assessment Tool (EPEAT) the Green Electronics Council site
 - (6) Greenhouse gas emission inventories are required, including Scope 3 emissions which include contractor emissions. These are discussed at Section 13 of Executive Order 13514 which can be found at <http://www.archives.gov/federal-register/executive-orders/disposition.html>
 - (7) Non-Ozone Depleting Alternative Products are at <http://www.epa.gov/ozone/strathome.html>
 - (8) Water efficient plumbing products are at <http://epa.gov/watersense>The Subcontractor may request an equitable adjustment to the terms of its subcontract or purchase order using the procedures in the applicable Changes clause in the relevant Appendix B.
- (c) The clauses at FAR 52.223-2, Affirmative Procurement of Bio based Products under Service and Construction Contracts, 52.223-15, Energy Efficiency in Energy Consuming Products, and 52.223-17 Affirmative Procurement of EPA-Designated Items in Service and Construction Contracts, require the use of products that have bio based content, are energy efficient, or have recycled content. To the extent that the services provided by the Subcontractor require provision of any of the above types of products, the Subcontractor must provide the energy efficient and environmentally sustainable type of product unless that type of product—

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- (1) Is not available;
 - (2) Is not life cycle cost effective (or does not exceed 110% of the price of alternative items if life cycle cost data is unavailable), EPEAT is an example of lifecycle costs that have been analyzed by DOE and found to be acceptable at the silver and gold level;
 - (3) Does not meet performance needs; or,
 - (4) Cannot be delivered in time to meet a critical need.
- (d) In the performance of this subcontract, the Subcontractor shall also consider the best practices within the DOE Acquisition Guide, Chapter 23, Acquisition Considerations Regarding Federal Leadership in Environmental, Energy, and Economic Performance. This guide includes information concerning recycled content products, bio based products, energy efficient products, water efficient products, alternative fuels and vehicles, non-ozone depleting substances and other environmentally preferable products and services. This guide is available on the Internet at: <http://management.energy.gov/documents/AcqGuide23pt0Rev1.pdf>.
- (e) Reserved.
- (f) In complying with the requirements of paragraph (c) of this clause, the Subcontractor, working through the NREL Subcontract Administrator, shall coordinate its activities with and submit required reports to the NREL Sustainability Administrator.
- (g) The Subcontractor shall prepare and submit performance reports, if required, using prescribed NREL formats made available to the Subcontractor from the NREL Sustainability Administrator, on September 30 of the year of performance, on matters related to the acquisition of environmentally preferable and sustainable products and services. This is a material delivery under the subcontract or purchase order. Failure to perform this requirement may be considered a failure that endangers performance of this subcontract and may result in termination for default.
- (h) The Subcontractor will comply with the procedures in paragraphs (c) through (f) regarding the collection of all data necessary to generate the reports required under paragraphs (c) through (f), and submit the reports directly to the NREL Sustainability Administrator.
- The Subcontractor will advise the NREL Subcontract Administrator if it is unable to procure energy efficient and environmentally sustainable items and cite which of the reasons in paragraph (c) apply.
- The reports may be submitted at the conclusion of this subcontract or purchase order term provided that the delivery term is not multi-year in nature. If the delivery term is multi-year, the Subcontractor shall report its accomplishments for each fiscal year ending on September 30th in a manner and at a time or times acceptable to both parties. Failure to comply with these reporting requirements may be considered a breach of contract with attendant consequences.

**OZONE-DEPLETING SUBSTANCES AND HIGH GLOBAL WARMING POTENTIAL
HYDROFLUOROCARBONS (NOV 2019)**

Derived from FAR 52.223-11 (JUN 2016)

(Applies to all subcontracts or purchase orders performed or delivered within the United States.)

(a) Definitions. As used in this clause—

“Global warming potential” means how much a given mass of a chemical contributes to global warming over a given time period compared to the same mass of carbon dioxide. Carbon dioxide’s global warming potential is defined as 1.0.

“High global warming potential hydrofluorocarbons” means any hydrofluorocarbons in a particular end use for which EPA’s Significant New Alternatives Policy (SNAP) program has identified other acceptable alternatives that have lower global warming potential. The SNAP list of alternatives is found at 40 CFR Part 82 subpart G with supplemental tables of alternatives available at (<http://www.epa.gov/snap/>).

“Hydrofluorocarbons” means compounds that only contain hydrogen, fluorine, and carbon.

“Ozone-depleting substance,” means any substance the Environmental Protection Agency designates in 40 CFR part 82 as-

- (1) Class I, including, but not limited to, chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform; or
- (2) Class II, including, but not limited to, hydrochlorofluorocarbons.

(b) The Subcontractor shall label products that contain or are manufactured with ozone-depleting substances in the manner and to the extent required by 42 U.S.C.7671j(b), (c), (d), and (e) and 40 CFR part 82, subpart E, as follows:

Warning

Contains (or manufactured with, if applicable) * _____, a substance(s) which harm(s) public health and environment by destroying ozone in the upper atmosphere.

*The Subcontractor shall insert the name of the substance(s).

- (c) Reporting. For equipment and appliances that normally each contain 50 or more pounds of hydrofluorocarbons or refrigerant blends containing hydrofluorocarbons, the Subcontractor shall—
- (1) Track on an annual basis, between October 1 and September 30, the amount in pounds of hydrofluorocarbons or refrigerant blends containing hydrofluorocarbons contained in the equipment and appliances delivered to NREL and the Government under this subcontract by—
 - (i) Type of hydrofluorocarbon (e.g., HFC-134 a, HFC-125, R-410 A, R-404 A, etc.);
 - (ii) Subcontract number; and
 - (iii) Equipment/appliance;
 - (2) Report that information to the NREL Subcontract Administrator –
 - (i) Annually by November 30 of each year during subcontract performance; and

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- (ii) At the end of subcontract performance.
- (d) The Subcontractor shall refer to EPA's SNAP program (available at <http://www.epa.gov/snap>) to identify alternatives. The SNAP list of alternatives is found at 40 CFR part 82 subpart G with supplemental tables available at <http://www.epa.gov/snap>.

**MAINTENANCE, SERVICE, REPAIR, OR DISPOSAL OF REFRIGERATION EQUIPMENT
AND AIR CONDITIONERS (NOV 2019)**

Derived from FAR 52.223-12 (JUN 2016)

(Applies to all indefinite delivery service subcontracts)

- (a) Definitions. As used in this clause—
“Global warming potential” means how much a given mass of a chemical contributes to global warming over a given time period compared to the same mass of carbon dioxide. Carbon dioxide’s global warming potential is defined as 1.0.
“High global warming potential hydrofluorocarbons” means any hydrofluorocarbons in a particular end use for which EPA’s Significant New Alternatives Policy (SNAP) program has identified other acceptable alternatives that have lower global warming potential. The SNAP list of alternatives is found at 40 CFR Part 82 subpart G with supplemental tables of alternatives available at (<http://www.epa.gov/snap/>).
“Hydrofluorocarbons” means compounds that only contain hydrogen, fluorine, and carbon.
- (b) The Subcontractor shall comply with the applicable requirements of Sections 608 and 609 of the Clean Air Act (42 U.S.C.7671g and 7 671h) as each or both apply to this subcontract.
- (c) Unless otherwise specified in the subcontract, the Subcontractor shall reduce the use, release, or emissions of high global warming potential hydrofluorocarbons under this subcontract by—
- (1) Transitioning over time to the use of another acceptable alternative in lieu of high global warming potential hydrofluorocarbons in a particular end use for which EPA’s SNAP program has identified other acceptable alternatives that have lower global warming potential;
 - (2) Preventing and repairing refrigerant leaks through service and maintenance during contract performance;
 - (3) Implementing recovery, recycling, and responsible disposal programs that avoid release or emissions during equipment service and as the equipment reaches the end of its useful life; and
 - (4) Using reclaimed hydrofluorocarbons, where feasible.
- (d) For equipment and appliances that normally each contain 50 or more pounds of hydrofluorocarbons or refrigerant blends containing hydrofluorocarbons, that will be maintained, serviced, repaired, or disposed under this contract, the Subcontractor shall—
- (1) Track on an annual basis, between October 1 and September 30, the amount in pounds of hydrofluorocarbons or refrigerant blends containing hydrofluorocarbons added or taken out of equipment or appliances under this subcontract by—
 - (i) Type of hydrofluorocarbon (e.g., HFC-134 a, HFC-125, R-410 A, R-404 A, etc.);
 - (ii) Subcontract number;
 - (iii) Equipment/appliance; and
 - (2) Report that information to the NREL Subcontract Administrator –
 - (i) No later than November 30 of each year during subcontract performance; and
 - (ii) At the end of subcontract performance.

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

- (e) The subcontractor shall refer to EPA's SNAP program to identify alternatives. The SNAP list of alternatives is found at 40 CFR part 82 subpart G with supplemental tables available at <http://www.epa.gov/snap/>.

ENERGY EFFICIENCY IN ENERGY-CONSUMING PRODUCTS (DEC 2007) (SPECIAL OCT 2008)

Derived from FAR 52.223-15 (DEC 2007) (FD)

Applies to all subcontracts where energy consuming products will be delivered, acquired, or furnished for use by the Subcontractor or for use on NREL-operated facilities or government-owned or -leased properties.

- (a) Definition. As used in this clause—
 - (1) “Energy-efficient product”—
 - (i) Means a product that—
meets DOE and Environmental Protection Agency criteria for use of the Energy Star® trademark label; or
 - (ii) Is in the upper twenty-five percent (25%) of efficiency for all similar products as designated by the Department of Energy’s Federal Energy Management Program (FEMP).
 - (2) [Reserved.]
- (b) The Subcontractor shall ensure that energy-consuming products are energy efficient products (i.e., ENERGY STAR® products or FEMP-designated products) at the time of subcontract award, for products that are—
 - (1) Delivered;
 - (2) Acquired by the Subcontractor for use in performing services at a DOE-owned or -leased facility;
 - (3) Furnished by the Subcontractor for use by NREL/Government; or
 - (4) Specified in the design of a building or work, or incorporated during its construction, renovation, or maintenance.
- (c) The requirements of paragraph (b) apply to the Subcontractor (including any lower-tier Subcontractor) unless—
 - (1) The energy-consuming product is not listed in the ENERGY STAR® Program or FEMP; or
 - (2) Otherwise approved in writing by the NREL Subcontract Administrator.
- (d) Information about these products is available for—
 - (1) ENERGY STAR® at <http://www.energystar.gov/products>; and
 - (2) FEMP at http://www1.eere.energy.gov/femp/procurement/eep_requirements.html.

CYBERSECURITY: GENERAL REQUIREMENTS (DEC 2022)

(This clause applies to all Subcontracts requiring access to, use of, management of, or alteration of NREL or subcontracted computing systems, or electronic information that NREL owns or of which NREL is a custodian.)

- (a) Definitions. As used in this clause—
- (1) “NREL Data” means all information processed or stored on computers or other electronic media by NREL or on NREL’s behalf, or provided to Subcontractor for such processing or storage, as well as information derived from such information in whole or in part. NREL Data includes, without limitation: (i) information on paper or other non-electronic media provided to subcontractor, and lower tier subcontractors, hereinafter “Subcontractor(s),” for computer processing or storage, or information formerly on electronic media; (ii) information provided to Subcontractor by NREL customers, users, employees, or other third parties; and (iii) Sensitive NREL Data. For the sake of clarification, “NREL Data” and “Sensitive NREL Data” shall not be considered “Data” or “Technical Data” generated under this subcontract as defined in and governed by the Intellectual Property provisions in Appendix C of this subcontract.
 - (2) “Sensitive NREL Data” means data that poses a risk to NREL, its employees, customers, partners, and the public if improperly disclosed or accessed, including without limitation personally identifiable information, financial information, protected health information, proprietary information, critical infrastructure information, information officially designated as sensitive (Controlled Unclassified Information, Official Use Only information), information that is proprietary by nature such as access codes or passwords, and other proprietary information as identified by NREL within the Subcontract. For the sake of clarification, “NREL Data” and “Sensitive NREL Data” shall not be considered “Data” or “Technical Data” generated under this subcontract as defined in and governed by the Intellectual Property provisions in Appendix C of this subcontract.
 - (3) “System” means any on premises, hosted, or cloud-based business information or a critical infrastructure system that is designed and installed by the Subcontractor or necessary for the proper operation of applications and infrastructure designed and installed by the Subcontractor. The system scope includes but is not specifically limited to applications, databases, supporting infrastructure (network devices; endpoint servers, workstations, mobile devices, or special appliances and their respective firmware, operating systems, and middleware), contracted or NREL partner services, and all related configuration and interconnections that are required for proper operation of the system.
 - (4) “Information System Security Officer” means the security expert designated by NREL to assess and address cybersecurity risk to NREL and to oversee compliance with NREL’s security requirements.
- (b) General Requirements
- (1) Compliance with the Law. Subcontractor will comply with all applicable Local, State and Federal Laws and Executive Orders.
 - (2) Compliance with NREL Security Requirements. Subcontractors and lower tier subcontractors involved in the development or use of NREL systems and applications shall comply with NREL’s cybersecurity requirements (as attached to this subcontract). NREL reserves the right to remove or restrict access to subcontractors who fail to comply with the requirements.
 - (3) Security Audits. NREL reserves the right to perform a security audit of the Subcontractor as it relates to the product or service to obtain assurance the Subcontractor is meeting the requirements described in this Clause.
 - (4) Lower Tier Subcontractors. Any lower tier subcontracted services, including cloud-based services, used in the delivery of services under the Subcontract must be disclosed to and approved by NREL, must be based in the United States, and must comply with the requirements in the Cybersecurity Clauses attached to this

Standard Terms and Conditions for Research and Development Subcontracts

Firm Fixed Price and Fixed Unit Price

subcontract. Subcontractor shall not permit any lower tier subcontractor to access NREL Data or systems (finished or in development) unless such lower tier subcontractor is subject to a written contract with Subcontractor agreeing to protect NREL Data and systems, with terms and conditions substantially equivalent to those of this provision. Subcontractor shall exercise reasonable efforts to ensure that each lower tier Subcontractor complies with all the terms of the Subcontract related to NREL Data and systems.

- (5) Authorization. Subcontractor shall not put any system or application into operational use, or test a system or application using operationally viable interconnections or data, until the system has been authorized by NREL's Information System Security Officer. Following initial Information Security Officer authorization, any subsequent major system changes or development efforts that will impact the security or privacy of NREL data, including but not specifically limited to changes to system scope, design, or security controls, will require re-authorization by NREL's Information System Security Officer.
- (6) Security Control Non-Disclosure. Subcontractor shall not publish or disclose in any manner beyond what is authorized by this Subcontract the details of any safeguards designed or developed by the Subcontractor.
- (7) Exceptions. Departures from the above requirements may be necessary to suit the type of system or application that is being designed or implemented under the Statement of Work. The Subcontractor shall present in writing any proposed exceptional cases to NREL's Information System Security Officer with recommended alternatives for their authorization prior to finalizing the proposed design and implementation plan for any technical components.

CYBERSECURITY: GENERAL REQUIREMENTS FOR EDUCATIONAL INSTITUTIONS (DEC 2022)

(This clause applies to all Subcontracts with a university or similar educational institution requiring personnel affiliated with such university or similar educational institution, hereafter "Affiliate," to access, use, manage, or alter NREL or subcontracted computing systems, or electronic information that NREL owns or of which NREL is a custodian. As used in this clause, the term "Subcontractor" shall include any Affiliate.)

- (a) Definitions. As used in this clause—
- (1) "NREL Data" means all information processed or stored on computers or other electronic media by NREL or on NREL's behalf, or provided to Subcontractor for such processing or storage, as well as information derived from such information in whole or in part. NREL Data includes, without limitation: (i) information on paper or other non-electronic media provided to subcontractor, and lower tier subcontractors, hereinafter "Subcontractor(s)," for computer processing or storage, or information formerly on electronic media; (ii) information provided to Subcontractor by NREL customers, users, employees, or other third parties; and (iii) Sensitive NREL Data. For the sake of clarification, "NREL Data" and "Sensitive NREL Data" shall not be considered "Data" or "Technical Data" generated under this subcontract as defined in and governed by the Intellectual Property provisions in Appendix C of this subcontract.
 - (2) "Sensitive NREL Data" means data that poses a risk to NREL, its employees, customers, partners, and the public if improperly disclosed or accessed, including without limitation personally identifiable information, financial information, protected health information, proprietary information, critical infrastructure information, information officially designated as sensitive (Controlled Unclassified Information, Official Use Only information), information that is proprietary by nature such as access codes or passwords, and other proprietary information as identified by NREL within the Subcontract. For the sake of clarification, "NREL Data" and "Sensitive NREL Data" shall not be considered "Data" or "Technical Data" generated under this subcontract as defined in and governed by the Intellectual Property provisions in Appendix C of this subcontract.
 - (3) "System" means any on premises, hosted, or cloud-based business information or a critical infrastructure system that is designed and installed by the Subcontractor or necessary for the proper operation of applications and infrastructure designed and installed by the Subcontractor. The system scope includes but is not specifically limited to applications, databases, supporting infrastructure (network devices; endpoint servers, workstations, mobile devices, or special appliances and their respective firmware, operating systems, and middleware), contracted or NREL partner services, and all related configuration and interconnections that are required for proper operation of the system.
 - (4) "Information System Security Officer" means the security expert designated by NREL to assess and address cybersecurity risk to NREL and to oversee compliance with NREL's security requirements.
- (b) General Requirements
- (1) Compliance with the Law. Subcontractor will comply with all applicable Local, State and Federal Laws and Executive Orders.
 - (2) Compliance with NREL Security Requirements. Subcontractors and lower tier subcontractors involved in the development or use of NREL systems and applications shall comply with NREL's cybersecurity requirements (as attached to this subcontract). NREL reserves the right to remove or restrict access to subcontractors who fail to comply with the requirements.
 - (3) Security Audits. NREL reserves the right to perform a security audit of the Subcontractor as it relates to the product or service to obtain assurance the Subcontractor is meeting the requirements described in this Clause.
 - (4) Lower Tier Subcontractors. Any lower tier subcontracted services, including cloud-

Standard Terms and Conditions for Research and Development Subcontracts

Firm Fixed Price and Fixed Unit Price

based services, used in the delivery of services under the Subcontract must be disclosed to and approved by NREL, must be based in the United States, and must comply with the requirements in the Cybersecurity Clauses attached to this subcontract. Subcontractor shall not permit any lower tier subcontractor to access NREL Data or systems (finished or in development) unless such lower tier subcontractor is subject to a written contract with Subcontractor agreeing to protect NREL Data and systems, with terms and conditions substantially equivalent to those of this provision. Subcontractor shall exercise reasonable efforts to ensure that each lower tier Subcontractor complies with all the terms of the Subcontract related to NREL Data and systems.

- (5) Authorization. Subcontractor shall not put any system or application into operational use, or test a system or application using operationally viable interconnections or data, until the system has been authorized by NREL's Information System Security Officer. Following initial Information Security Officer authorization, any subsequent major system changes or development efforts that will impact the security or privacy of NREL data, including but not specifically limited to changes to system scope, design, or security controls, will require re-authorization by NREL's Information System Security Officer.
- (6) Security Control Non-Disclosure. Subcontractor shall not publish or disclose in any manner beyond what is authorized by this Subcontract the details of any safeguards designed or developed by the Subcontractor.
- (7) Exceptions. Departures from the above requirements may be necessary to suit the type of system or application that is being designed or implemented under the Statement of Work. The Subcontractor shall present in writing any proposed exceptional cases to NREL's Information System Security Officer with recommended alternatives for their authorization prior to finalizing the proposed design and implementation plan for any technical components.

CYBERSECURITY: DATA PROTECTION (DEC 2022)

(This clause applies to all Subcontracts requiring access to, use of, management of, or alteration of NREL or subcontracted computing systems, or electronic information that NREL owns or of which NREL is a custodian.)

- (a) Definitions. As used in this clause—
- (1) “NREL Data” means all information processed or stored on computers or other electronic media by NREL or on NREL’s behalf, or provided to Subcontractor for such processing or storage, as well as information derived from such information. NREL Data includes, without limitation: (i) information on paper or other non-electronic media provided to subcontractor, and lower tier subcontractors, hereinafter “Subcontractor(s),” for computer processing or storage, or information formerly on electronic media; (ii) information provided to Subcontractor by NREL customers, users, employees, or other third parties; and (iii) Sensitive NREL Data as that term is defined below. For the sake of clarification, “NREL Data” and “Sensitive NREL Data” shall not be considered “Data” or “Technical Data” generated under this subcontract as defined in and governed by the Intellectual Property provisions in Appendix C of this subcontract.
 - (2) “Sensitive NREL Data” means data that poses a risk to NREL, its employees, customers, partners, and the public if improperly disclosed or accessed, including without limitation personally identifiable information, financial information, protected health information, proprietary information, critical infrastructure information, information officially designated as sensitive (Controlled Unclassified Information, Official Use Only information), information that is proprietary by nature such as access codes or passwords, and other proprietary information as identified by NREL within the Subcontract. For the sake of clarification, “NREL Data” and “Sensitive NREL Data” shall not be considered “Data” or “Technical Data” generated under this subcontract as defined in and governed by the Intellectual Property provisions in Appendix C of this subcontract.
 - (3) “System” means any on premises, hosted, or cloud-based business information or a critical infrastructure system that is designed and installed by the Subcontractor or necessary for the proper operation of applications and infrastructure designed and installed by the Subcontractor. The system scope includes but is not specifically limited to applications, databases, supporting infrastructure (network devices; endpoint servers, workstations, mobile devices, or special appliances and their respective firmware, operating systems, and middleware), contracted or NREL partner services, and all related configuration and interconnections that are required for proper operation of the system.
- (b) Data Protection Requirements
- (1) Subcontractor’s Access and Use of NREL Data. Subject to Section 4 below, unless it receives NREL’s prior written consent, Subcontractor shall not: (i) access, process, or otherwise use NREL Data other than as necessary to facilitate the work under this Subcontract; (ii) give any employee access to NREL Data except to the extent that such individual needs access to facilitate performance under this Subcontract; (iii) give any third party access to NREL Data, including without limitation Subcontractor’s other customers, except Subcontractor’s authorized lower tier subcontractors as required to fulfill the Statement of Work; and (iv) sell or transfer NREL Data to any third party. Notwithstanding the foregoing, Subcontractor may disclose NREL Data as required by applicable law or by proper legal or governmental authority. Subcontractor shall give NREL prompt notice of any such legal or governmental demand and shall cooperate with NREL in any effort to seek a protective order or otherwise to contest such required disclosure, at NREL’s expense.
 - (2) Ownership of NREL Data. NREL possesses and retains all rights, title, and interest in and to NREL Data, and Subcontractor’s use and possession thereof is solely on NREL’s behalf. Upon NREL’s request, NREL may access and copy any NREL

Standard Terms and Conditions for Research and Development Subcontracts

Firmed Fixed Price and Fixed Unit Price

Data in Subcontractor's possession at any time, at no cost to NREL. Subcontractor shall facilitate such access after receiving NREL's request.

- (3) Retention and Deletion of Data. Subcontractor shall follow any commercially reasonable written instructions from NREL regarding retention and erasure of NREL Data; provided, however, Subcontractor shall not retain any NREL Data beyond thirty (30) days after termination of this Subcontract unless otherwise requested and approved in writing in advance by NREL. NREL Data shall be available to NREL to retrieve at any time and at no additional charge throughout the term of this Subcontract and for no more than thirty (30) days after expiration or termination of this Subcontract for any reason. Promptly after erasure of NREL Data or any copy thereof, Subcontractor shall certify such erasure to NREL in writing. In purging or erasing NREL Data as required by this Subcontract, Subcontractor shall leave no data recoverable on its computers or other media, to the maximum extent technically feasible.
- (4) Applicable Law. Subject to applicable intellectual property requirements incorporated into the Subcontract, the Subcontractor shall comply with all applicable laws and regulations governing the handling of NREL Data and shall not engage in any activity related to NREL Data that would place NREL in violation of any applicable law, regulation, government request, or judicial process.
- (5) Data Breach. Subcontractor shall use industry-standard best practices to prevent unauthorized exposure or disclosure of NREL Data. In the event of a confirmed data breach or unauthorized disclosure, Subcontractor shall (i) notify NREL by telephone within 72 hours of discovery of the breach or unauthorized disclosure; and (ii) cooperate with NREL, Department of Energy, and law enforcement agencies, where applicable, to investigate and resolve the matter, including without limitation notifying injured third parties. Subcontractor shall give NREL prompt access to such records related to a data breach or unauthorized disclosure as NREL may reasonably request, provided that Subcontractor shall not be required to provide NREL with records belonging to, or compromising the security of, Subcontractor's other customers. In the event of a confirmed data breach or unauthorized disclosure caused solely by the act or omission of the Subcontractor or any of its agents, employees, or lower tier subcontractors, to the extent permitted by applicable law, the Subcontractor shall indemnify, defend and hold harmless NREL, DOE and its employees and agents against any costs incurred with respect to: (i) notification to all affected individuals using a reasonable method (e.g., email or standard regular mail; overnight courier is not reasonable); (ii) one year of credit monitoring for all affected individuals; and (iii) any other penalties and fines related to the breach or unauthorized disclosure as required by applicable law. The provisions of this Subcontract do not limit NREL's other rights and remedies, if any, resulting from a data breach or unauthorized disclosure.
- (6) Information Sharing. Subcontractor shall provide a secure repository for the exchange of data related to this project, or at NREL's option, use a secure repository provided by NREL for this purpose. Any such repository shall (i) encrypt data in transmission and at rest, (ii) allow NREL to administer access to the repository to those NREL individuals with a business need to access, and (iii) be restricted (via access control mechanisms) to only those Subcontractors who are participating in the Work. Subcontractor-based sharing repositories must be based in the United States.
- (7) Privacy. Upon NREL's request, the Subcontractor shall provide NREL with a copy of its Privacy Notice, Privacy Policy, and related documents pertaining to privacy governance.
- (8) Backup and Recovery. Subcontractor shall ensure the recoverability of NREL Data lost due to operator error, system error or other unforeseen circumstances. In such event that NREL Data is lost as a result of Subcontractor-managed system failure or Subcontractor error, Subcontractor shall recover NREL's data at no charge to

Standard Terms and Conditions for Research and Development Subcontracts
Firm Fixed Price and Fixed Unit Price

NREL.

- (9) Multi-Tenancy. Should NREL Data be processed or stored in a multi-tenant environment, security controls shall be in place to ensure that a tenant with weak security settings cannot affect or interfere with the security of NREL Data as well as to ensure that data is not co-mingled within servers or stacks.
- (10) Restrictions on Sensitive NREL Data. Subcontractor agrees to treat all Sensitive NREL Data disclosed to Subcontractor by NREL, whether such original disclosure is written or oral as confidential and proprietary, and not to disclose Sensitive NREL Data to any third party for a period of five (5) years from date this Subcontract expires or is terminated, whichever occurs first. However, oral disclosure of information (i.e., information expressed by spoken words) by NREL to Subcontractor shall be considered Sensitive NREL Data upon being identified as such at the time of disclosure and reduced to writing and a copy thereof being provided by NREL to Subcontractor within thirty (30) days of such disclosure. Upon expiration or termination of the subcontract, Subcontractor shall certify in writing that all copies and partial copies of such Sensitive NREL Data have either been returned or destroyed.

CYBERSECURITY: DATA PROTECTION FOR EDUCATIONAL INSTITUTIONS (DEC 2022)

(This clause applies to all Subcontracts with a university or similar educational institution requiring personnel affiliated with such university or similar educational institution, hereafter "Affiliate," to access, use, manage, or alter NREL or NREL subcontracted computing systems, or electronic information that NREL owns or of which NREL is a custodian. As used in this clause, the term "Subcontractor" shall include any Affiliate.)

(a) Definitions. As used in this clause—

- (1) "NREL Data" mean all information processed or stored on computers or other electronic media by NREL or on NREL's behalf, or provided to Subcontractor for such processing or storage, as well as information derived from such information. NREL Data includes, without limitation: (i) information on paper or other non-electronic media provided to Subcontractor and lower tier subcontractors for computer processing or storage, or information formerly on electronic media; (ii) information provided to the Subcontractor by NREL customers, users, employees, or other third parties; and (iii) Sensitive NREL Data as that term is defined below. For the sake of clarification, "NREL Data" and "Sensitive NREL Data" shall not be considered "Data" or "Technical Data" generated under this subcontract as defined in and governed by the Intellectual Property provisions in Appendix C of this subcontract.
- (2) "Sensitive NREL Data" means data that poses a risk to NREL, its employees, customers, partners, and the public if improperly disclosed or accessed, including without limitation personally identifiable information, financial information, protected health information, proprietary information, critical infrastructure information, information officially designated as sensitive (Controlled Unclassified Information, Official Use Only information), information that is proprietary by nature such as access codes or passwords, and other proprietary information as identified by NREL within the Agreement. For the sake of clarification, "NREL Data" and "Sensitive NREL Data" shall not be considered "Data" or "Technical Data" generated under this subcontract as defined in and governed by the Intellectual Property provisions in Appendix C of this subcontract.
- (3) "System" means any on premises, hosted, or cloud-based business information or a critical infrastructure system that is designed and installed by the Subcontractor or necessary for the proper operation of applications and infrastructure designed and installed by the Subcontractor. The system scope includes but is not specifically limited to applications, databases, supporting infrastructure (network devices; endpoint servers, workstations, mobile devices, or special appliances and their respective firmware, operating systems, and middleware), contracted or NREL partner services, and all related configuration and interconnections that are required for proper operation of the system.

(b) Data Protection Requirements

- (1) Subcontractor's Access and Use of NREL Data. Subject to Section 4 below, unless it receives NREL's prior written consent, Subcontractor shall not: (i) access, process, or otherwise use NREL Data other than as necessary to facilitate the work under this Agreement; (ii) give any employee access to NREL Data except to the extent that such individual needs access to facilitate performance under this Agreement; (iii) give any third party access to NREL Data, including without limitation Subcontractor's other customers, except Subcontractor's authorized lower tier Subcontractors as required to fulfill the Statement of Work; and (iv) sell or transfer NREL Data to any third party. Notwithstanding the foregoing, Subcontractor may disclose NREL Data as required by applicable law or by proper legal or governmental authority. Subcontractor shall give NREL prompt notice of any such legal or governmental demand and shall cooperate with NREL in any effort to seek a protective order or otherwise to contest such required disclosure, at NREL's expense.
- (2) Ownership of NREL Data. NREL possesses and retains all rights, title, and interest

Standard Terms and Conditions for Research and Development Subcontracts

Firmed Fixed Price and Fixed Unit Price

in and to NREL Data, and Subcontractor's use and possession thereof is solely on NREL's behalf. Upon NREL's request, NREL may access and copy any NREL Data in Subcontractor's possession at any time, at no cost to NREL. Subcontractor shall facilitate such access after receiving NREL's request.

- (3) Retention and Deletion of Data. Subcontractor shall follow any commercially reasonable written instructions from NREL regarding retention and erasure of NREL Data; provided, however, Subcontractor shall not retain any NREL Data beyond thirty (30) days after termination of this Agreement unless otherwise requested and approved in writing in advance by NREL. NREL Data shall be available to NREL to retrieve at any time and at no additional charge throughout the term of this Agreement and for no more than thirty (30) days after expiration or termination of this Agreement for any reason. Promptly after erasure of NREL Data or any copy thereof, Subcontractor shall certify such erasure to NREL in writing. In purging or erasing NREL Data as required by this Agreement, Subcontractor shall leave no data recoverable on its computers or other media, to the maximum extent technically feasible.
- (4) Applicable Law. Subject to applicable intellectual property requirements incorporated into the Agreement, the Subcontractor shall comply with all applicable laws and regulations governing the handling of NREL Data and shall not engage in any activity related to NREL Data that would place NREL in violation of any applicable law, regulation, government request, or judicial process.
- (5) Data Breach. Subcontractor shall use industry-standard best practices to prevent unauthorized exposure or disclosure of NREL Data. In the event of a confirmed data breach or unauthorized disclosure, Subcontractor shall (i) notify NREL by telephone within 72 hours of discovery of the breach or unauthorized disclosure; and (ii) cooperate with NREL, Department of Energy, and law enforcement agencies, where applicable, to investigate and resolve the matter, including without limitation notifying injured third parties. Subcontractor shall give NREL prompt access to such records related to a data breach or unauthorized disclosure as NREL may reasonably request, provided that Subcontractor shall not be required to provide NREL with records belonging to, or compromising the security of, Subcontractor's other customers. In the event of a confirmed data breach or unauthorized disclosure caused solely by the negligent act or omission or willful misconduct of the Subcontractor or any of its agents, employees, or lower tier subcontractors, to the extent permitted by applicable law and Subcontractor policies, the Subcontractor shall be responsible for any costs related to the data breach or unauthorized disclosure to be identified and agreed upon by Subcontractor, NREL and DOE, as necessary. Such costs may include: (i) notification to all affected individuals using a reasonable method (e.g., email or standard regular mail; overnight courier is not reasonable); (ii) one year of credit monitoring for all affected individuals; and (iii) any other penalties and fines related to the breach or unauthorized disclosure as required by applicable law. The provisions of this Agreement do not limit NREL's other rights and remedies, if any, resulting from a data breach or unauthorized disclosure.
- (6) Information Sharing. Subcontractor shall provide a secure repository for the exchange of data related to this project, or at NREL's option, use a secure repository provided by NREL for this purpose. Any such repository shall (i) encrypt data in transmission and at rest, (ii) allow NREL to administer access to the repository to those NREL individuals with a business need to access, and (iii) be restricted (via access control mechanisms) to only those Affiliates who are participating in the Work. Subcontractor-based sharing repositories must be based in the United States.
- (7) Privacy. Upon NREL's request, the Subcontractor shall provide NREL with a copy of its Privacy Notice, Privacy Policy, and related documents pertaining to privacy governance.

Standard Terms and Conditions for Research and Development Subcontracts

Firm Fixed Price and Fixed Unit Price

- (8) Backup and Recovery. Subcontractor shall ensure the recoverability of NREL Data lost due to operator error, system error or other unforeseen circumstances. In such event that NREL Data is lost as a result of Subcontractor-managed system failure or Subcontractor error, Subcontractor shall recover NREL's data at no charge to NREL.
- (9) Multi-Tenancy. Should NREL Data be processed or stored in a multi-tenant environment, security controls shall be in place to ensure that a tenant with weak security settings cannot affect or interfere with the security of NREL Data as well as to ensure that data is not co-mingled within servers or stacks.
- (10) Restrictions on Sensitive NREL Data. Subcontractor agrees to treat all Sensitive NREL Data disclosed to Subcontractor by NREL, whether such original disclosure is written or oral as confidential and proprietary, and not to disclose Sensitive NREL Data to any third party for a period of five (5) years from date this Agreement expires or is terminated, whichever occurs first. However, oral disclosure of information (i.e., information expressed by spoken words) by NREL to Subcontractor shall be considered Sensitive NREL Data upon being identified as such at the time of disclosure and reduced to writing and a copy thereof being provided by NREL to Subcontractor within thirty (30) days of such disclosure. Upon expiration or termination of the Agreement, Subcontractor shall certify in writing that all copies and partial copies of such Sensitive NREL Data have either been returned or destroyed.

CYBERSECURITY: COMMERCIAL PRODUCTS (DEC 2022)

(This clause applies to Subcontracts that involve the evaluation, acquisition, or installation of commercially available technology products, services, or Products, as defined below.)

- (a) Definitions. As used in this clause—
- (1) “DOE Sensitive Countries List” means a confidential list of countries maintained by the U.S. Department of Energy to which particular consideration is given for policy reasons during NREL internal review and approval processes.
 - (2) “Product” means any commercial off-the-shelf computer hardware or software component provided by a Subcontractor (e.g., reseller) paid for with Government funds and will become property of NREL via physical acquisition or be licensed for use by NREL and will be used on the NREL network or in conjunction with other NREL technologies.
 - (3) “Networked Product, or Product(s)” means any hardware or software component that must communicate or integrate with another device on the NREL network or across the Internet.
 - (4) “Safety or security sensitive” means that while in use at NREL, the Product will play a critical role in physical safety or security control, monitoring, or alerting functions.
 - (5) “NREL Data” means all information processed or stored on computers or other electronic media by NREL or on NREL’s behalf, or provided to Subcontractor for such processing or storage, as well as information derived from such information in whole or in part. NREL Data includes, without limitation: (i) information on paper or other non-electronic media provided to subcontractor, and lower tier subcontractors, hereinafter “Subcontractor(s),” for computer processing or storage, or information formerly on electronic media; (ii) information provided to Subcontractor by NREL customers, users, employees, or other third parties; and (iii) Sensitive NREL Data. For the sake of clarification, “NREL Data” and “Sensitive NREL Data” shall not be considered “Data” or “Technical Data” generated under this subcontract as defined in and governed by the Intellectual Property provisions in Appendix C of this subcontract.
 - (6) “Sensitive NREL Data” means data that poses a risk to NREL, its employees, customers, partners, and the public if improperly disclosed or accessed, including without limitation personally identifiable information, financial information, protected health information, proprietary information, critical infrastructure information, information officially designated as sensitive (Controlled Unclassified Information, Official Use Only information), information that is proprietary by nature such as access codes or passwords, and other proprietary information as identified by NREL within the Subcontract. For the sake of clarification, “NREL Data” and “Sensitive NREL Data” shall not be considered “Data” or “Technical Data” generated under this subcontract as defined in and governed by the Intellectual Property provisions in Appendix C of this subcontract.
 - (7) “Production systems or data” means any computer system or data processed therein that is in regular operational use, the disruption, corruption, loss, or exposure of which would cause negative impact to NREL’s mission or business operations. For the sake of clarification, “NREL Data” and “Sensitive NREL Data” shall not be considered “Data” or “Technical Data” as defined in and generated under the subcontract governed by Appendix C-2, Intellectual Property Terms and Conditions.
- (b) Commercial Product Requirements
- (1) Minimum Viable Use. Unless otherwise specified in the Statement of Work, the Product(s) shall have a minimum viable use of three years from the date of purchase. Products that are end of life or scheduled for sunset within three years of the date of purchase are ineligible for use under the Subcontract. Should the Product purchase be part of an overarching service contract that includes the ongoing purchase, installation, and maintenance of commercially available

Standard Terms and Conditions for Research and Development Subcontracts

Firmed Fixed Price and Fixed Unit Price

equipment over a fixed term, purchased Products must be replaced by Subcontractor when they reach their end of life status.

- (2) **Responsible Sourcing.** Products (i) with Department of Homeland Security directives against purchase, (ii) prohibited by the National Defense Authorization Act, or (iii) sold or manufactured by companies on the Department of Labor Office of Federal Contract Compliance Programs Debarred Companies list are ineligible for use under the Subcontract. Such ineligible products include, but are not limited to, Products containing components manufactured by debarred companies, and Products manufactured in countries on the DOE Sensitive Countries List. Subcontractor must submit a request for authorization to NREL Technical Monitor if Subcontractor intends to use a Product manufactured in a country other than the United States. NREL Technical Monitor shall deny any such requests if the subject country of manufacture appears on the DOE Sensitive Countries List. If the subject country of manufacture does not appear on the DOE Sensitive Countries List, NREL Technical Monitor may approve or deny any such request in NREL Technical Monitor's sole discretion.
- (3) **Logging.** The Product(s) must support or facilitate logging and forwarding of application security events for operational failure, security incident, and security monitoring purposes.
- (4) **Access Control and Authority.** The Product must be able to operate with user level authority and must not require that a user be logged in as an administrator to operate properly. Product(s) that are intended for use by more than one individual must contain features that allow administrators to control user and system access to functions, features, or system components on a need-to-know basis, and, to the extent practicable, role-based and with the option to integrate with existing Single Sign On / multi-factor authentication systems. Users and administrators of the Product must be able to change and otherwise manage their credentials (including, but not limited to, the capability to establish a password and perform password resets).
- (5) **Compatibility with Security Functions and Products.** The Product(s) must be capable of operating concurrently with standard industry security products, such as antimalware programs, log collection and monitoring agents, and web application firewalls. The Product must tolerate periodic vulnerability scanning, operating system patching and upgrades, and basic system hardening (for example, changing of default passwords and disabling unnecessary services). Products that require an out-of-support operating system or do not tolerate operating system patching for at least three years from the date of purchase will be considered out of compliance with the Minimum Viable Use requirement.
- (6) **Data Security.** Products that are intended for the storage, processing, or transfer of sensitive NREL Data must support strong encryption at rest using an unbroken encryption algorithm, and that is FIPS 140-2 compliant to the extent practicable. Products that communicate over the Internet for authentication, maintenance purposes, or remote management, must facilitate encryption in transit using an unbroken encryption algorithm. Products that store sensitive data must tolerate and/or enforce purging data for which NREL determines it longer has a business need to retain.
- (7) **Proof of Concept.** Proof of concept systems and environments must be physically and logically separate from NREL production systems and must not require the use of any NREL production data.
- (8) **Special Purpose Equipment.** Should the Product(s) require the installation of proprietary hardware, software, or a hardware/software combination for management, maintenance, or use, either (a) NREL must have administrative access to the management system and permission to manage its settings in order to apply and verify NREL's required security controls, or (b) the system must be separated from the NREL internal network using, at a minimum, logical access

Appendix B-2
Standard Terms and Conditions for Research and Development Subcontracts
Firmed Fixed Price and Fixed Unit Price
controls to restrict the system to the least necessary access to perform services
under the Subcontract.

CYBERSECURITY: APPLICATION SECURITY (DEC 2022)

(This clause applies to all Subcontracts related to the development of custom applications, as defined below.)

- (a) Definitions. As used in this clause—
- (1) “Custom application or Product” means any code that is not generally commercially available, but was created for NREL, that is used to create, modify, integrate, or support computer functions for end users.
 - (2) “Production systems or data” means any computer system or data processed therein that is in regular operational use, the disruption, corruption, loss, or exposure of which would cause negative impact to NREL’s mission or business operations.
 - (3) “NREL Data” means all information processed or stored on computers or other electronic media by NREL or on NREL’s behalf, or provided to Subcontractor for such processing or storage, as well as information derived from such information in whole or in part. NREL Data includes, without limitation: (i) information on paper or other non-electronic media provided to subcontractor, and lower tier subcontractors, hereinafter “Subcontractor(s),” for computer processing or storage, or information formerly on electronic media; (ii) information provided to Subcontractor by NREL customers, users, employees, or other third parties; and (iii) Sensitive NREL Data. For the sake of clarification, “NREL Data” and “Sensitive NREL Data” shall not be considered “Data” or “Technical Data” generated under this subcontract as defined in and governed by the Intellectual Property provisions in Appendix C of this subcontract.
 - (4) “Sensitive NREL Data” means data that poses a risk to NREL, its employees, customers, partners, and the public if improperly disclosed or accessed, including without limitation personally identifiable information, financial information, protected health information, proprietary information, critical infrastructure information, information officially designated as sensitive (Controlled Unclassified Information, Official Use Only information), information that is proprietary by nature such as access codes or passwords, and other proprietary information as identified by NREL within the Subcontract. For the sake of clarification, “NREL Data” and “Sensitive NREL Data” shall not be considered “Data” or “Technical Data” generated under this subcontract as defined in and governed by the Intellectual Property provisions in Appendix C of this subcontract.
 - (5) “Plan of Actions and Milestones” means a schedule of activities that will be or are being undertaken to resolve a security weakness or control deficiency.
 - (6) “Information System Security Officer” means the security expert designated by NREL to assess and address cybersecurity risk to NREL and to oversee compliance with NREL’s security requirements.
- (b) Application Security Requirements
- (1) Design Specifications. Application design documents, requirements, or specifications must include a description of all custom-developed, installed, configured, or integrated application features that are designed to address data security and privacy risks. The developed, installed, configured, or integrated security features must, at a minimum, meet NREL’s security and design requirements in the following areas:
 - (i) Logging. The Product must facilitate logging and forwarding of application security events for operational failure, security incidents, and security monitoring purposes.
 - (ii) Access Control and Authority. The Product must be configured to allow administrators to assign role-based user access permissions to functions, features, or components of the application. The Product must be able to operate with user level authority and must not require that a user be logged

Standard Terms and Conditions for Research and Development Subcontracts

Firmed Fixed Price and Fixed Unit Price

in as an administrator to operate properly. Access control functions facilitated across a network must be configured to validate all users' identities before access can be established or changed (e.g., by sending an expiring token to the user through a separate channel). Users and administrators of the Product must be able to self-manage their credentials (e.g., by establishing a password and performing password resets).

- (iii) Compatibility with Security Functions and Products. The Product must be capable of operating concurrent with customary industry security products, including but not limited to antimalware programs, log collection and monitoring agents, and web application firewalls. The Product must be able to run on a manufacturer-supported operating system and tolerate periodic vulnerability scanning, operating system patching and upgrades, and basic system hardening (for example, changing of default passwords and disabling unnecessary services).
 - (iv) Data Security. Products that are intended for the storage, processing, or transfer of sensitive data must facilitate encryption at rest using an unbroken encryption algorithm, and that is FIPS 140-2 compliant to the extent practicable. Products that communicate over the Internet, for example, for authentication, maintenance purposes, or remote management, must facilitate encryption in transit using an unbroken encryption algorithm. Products that store sensitive data must tolerate and/or enforce purging data that NREL determines no longer has a business need to be retained.
 - (v) Back Doors and Covert Features. Covert software features such as backdoors are incompatible with NREL's business practices and are prohibited.
- (2) Test and Development Environments. Test and development software environments and production software environments must be kept strictly separate through physically separate computer systems or separate directories or libraries with strictly enforced access controls.
 - (3) Open Source and Third-Party Components. All open source and external software packages and versions used within the application must be approved by NREL's designated Information System Security Officer. These include but are not limited to open-source application versions, linked libraries, database applications, and encryption packages. Subcontractors shall provide proof of license for all licensed software, software components, and third-party libraries used within the application. The use of public domain, shareware, or freeware software not specified in the Statement of Work is subject to NREL's review and written approval.
 - (4) Test Data. Subcontractors may never use production data to perform testing of applications that are designed to collect, process, store, or transmit sensitive data. Test data sets may be fabricated or may be produced from sanitized production data. Subcontractor must ensure that the sanitization process has completely removed and/or replaced all details that may be valuable, critical, sensitive, or private before sanitized production data is used for testing.
 - (5) Security Testing. At NREL's discretion, Subcontractor must conduct, or permit NREL to conduct, initial vulnerability analysis and penetration testing prior to the release of the application. Should the Subcontractor not have a relationship or resources to perform such testing, or should such testing be excluded from the Scope of Work, the Subcontractor must cooperate with NREL and NREL's agents (if applicable) to facilitate and perform security testing prior to launch of any custom application.
 - (6) Vulnerability Remediation. Subcontractor must support the remediation of known exploitable security vulnerabilities or vulnerabilities discovered in the application by the Subcontractor, NREL, or an external party during security testing, security

Standard Terms and Conditions for Research and Development Subcontracts

Firm Fixed Price and Fixed Unit Price

incident reporting, or in the normal course of operations for the duration of the project. Critical or high-risk exploitable vulnerabilities (categorized by the Common Vulnerability Scoring System) for which a patch is available must be repaired and re-tested to confirm repair within thirty (30) days of when the vulnerability is first reported to the Subcontractor. The Subcontractor must provide a Plan of Actions and Milestones to repair medium or lower-rated vulnerabilities on a timetable established by NREL, but in no event greater than 180 days from the date the vulnerability was reported to the Subcontractor or identified by NREL. Repair plans may consist of a custom code adjustment (version), patch, or upgrade.

- (7) Source Code Management. Source code that facilitates transactions with Sensitive NREL Data or related sensitive business functions may not be publicly released or published and must be access controlled. Public-facing non-compiled source code (including when used in web application programming) must be obfuscated to hide the business logic behind the application. Source code must otherwise be stored in an access-controlled code management repository to prevent unauthorized changes.

CYBERSECURITY: SYSTEM DESIGN AND IMPLEMENTATION (DEC 2022)

(This clause applies to all Subcontracts related to the design, installation, or configuration of an NREL information system, as defined below.)

- (a) Definitions. As used in this clause—
- (1) “System” or “information system” means any on premises, hosted, or cloud-based business information or critical infrastructure system that is designed and installed by the Subcontractor or necessary for the proper operation of applications and infrastructure designed and installed by the Subcontractor. The system scope includes but is not specifically limited to applications, databases, supporting infrastructure (network devices; endpoint servers, workstations, mobile devices, or special appliances and their respective firmware, operating systems, and middleware), contracted or NREL partner services, and all related configuration and interconnections that are required for proper operation of the system.
 - (2) “Industrial Control System” (also referred to as “control system”) means a system of networks, computers, and appliances that function as a unit to provide essential services and commodities. This includes, but is not specifically limited to, technologies used on and within supervisory control and data acquisition (SCADA) systems, and other technology appliances that are used to program, send commands to, monitor, and acquire data from controllers, sensors, actuators, and related operational equipment.
 - (3) “Information System Security Officer” means the security expert designated by NREL to assess and address cybersecurity risk to NREL and to oversee compliance with NREL’s security requirements.
 - (4) “Production systems or data” means any computer system or data processed therein that is in regular operational use, the disruption, corruption, loss, or exposure of which would cause negative impact to NREL’s mission or business operations.
- (b) System Design and Implementation Requirements
- (1) Security Design. Subcontractor shall incorporate NREL’s security recommendations into the system design. These recommendations shall be provided by NREL’s Information System Security Officer upon review of the proposed system design. Additional requirements for industrial control systems are specified under Industrial Control System Network Design and Architecture.
 - (2) Industrial Control System Network Design and Architecture. Where required in the Statement of Work, the Subcontractor shall design and/or configure, as appropriate, physical architectures and/or logical security controls for control systems that (a) maintain boundary separation between the control system and the public Internet such that there is no direct connection to or from the control system and the public Internet, (b) maintain appropriate separation between the control system and the general internal network such that only those communications required for the system’s maintenance or operation are permitted and (c) segment the internals of the control system into security domains or enclaves by common level of trust, management responsibility, and security policy. Internal control system network security domains must include, at minimum, a safety zone and a control zone. The controls shall be designed and configured in accordance with the latest versions of NIST Special Publication 800-82: Guide to Industrial Control Systems (ICS) Security Section 5 and (or equivalent documents if superseded during the life of the Subcontract) for acceptable segmentation methods. Logical groupings of systems without access control (ex. open VLANs) are insufficient to satisfy this requirement.
 - (3) Network Protocol. All system and network components will be IPV6 compliant to the extent possible while preserving system operation.
 - (4) System Development. As required in the Statement of Work, Subcontractor shall maintain access control for the system throughout its development and installation in accordance with the principle of least privilege. Subcontractor shall not use

Appendix B-2

Standard Terms and Conditions for Research and Development Subcontracts

Firm Fixed Price and Fixed Unit Price

shared or open administrative access during system development. Subcontractor shall not use any NREL production data in the test and development processes unless specifically authorized by NREL security officials.

- (5) Design Changes. Subcontractor shall communicate any necessary changes in the system design (as required in Requirement 1) to the NREL designated Information System Security Officer prior to implementation of the change. Design changes that follow Authorization of the system and affect the system composition, data flows, or security and privacy controls require approval of NREL's designated Information System Security Officer.

CYBERSECURITY: CLOUD, HOSTED, OR OUTSOURCED SYSTEMS AND RELATED SERVICES (DEC 2022)

(This clause applies to all Subcontracts related to the design, installation, configuration, or maintenance of an information system or parts thereof, as defined below, on NREL's behalf under a services contract.)

- (a) Definitions. As used in this clause—
- (1) “System” or “information system” means any on premises, hosted, or cloud-based business information or a critical infrastructure system that is designed and installed by the Subcontractor or necessary for the proper operation of applications and infrastructure designed and installed by the Subcontractor. The system scope includes but is not specifically limited to applications, databases, supporting infrastructure (network devices; endpoint servers, workstations, mobile devices, or special appliances and their respective firmware, operating systems, and middleware), underlying services, and all related configuration and interconnections that are required for proper operation of the system. The information system may be housed within a facility or multiple facilities separate from NREL's physical network maintained in whole, or part for NREL's benefit. Examples of applicable services may include, but are not limited to, collocated data center services, information system hosting, or cloud environments (Infrastructure as a Service, Platform as a Service, or Software as a Service).
 - (2) “NREL Data” means all information processed or stored on computers or other electronic media by NREL or on NREL's behalf, or provided to Subcontractor for such processing or storage, as well as information derived from such information. NREL Data includes, without limitation: (i) information on paper or other non-electronic media provided to subcontractor, and lower tier subcontractors, hereinafter “Subcontractor(s),” for computer processing or storage, or information formerly on electronic media; (ii) information provided to Subcontractor by NREL customers, users, employees, or other third parties; and (iii) Sensitive NREL Data as that term is defined below. For the sake of clarification, “NREL Data” and “Sensitive NREL Data” shall not be considered “Data” or “Technical Data” generated under this subcontract as defined in and governed by the Intellectual Property provisions in Appendix C of this subcontract.
 - (3) “Sensitive NREL Data” means data that poses a risk to NREL, its employees, customers, partners, and the public if improperly disclosed or accessed, including without limitation personally identifiable information, financial information, protected health information, proprietary information, critical infrastructure information, information officially designated as sensitive (Controlled Unclassified Information, Official Use Only information), information that is proprietary by nature such as access codes or passwords, and other proprietary information as identified by NREL within the Subcontract. For the sake of clarification, “NREL Data” and “Sensitive NREL Data” shall not be considered “Data” or “Technical Data” generated under this subcontract as defined in and governed by the Intellectual Property provisions in Appendix C of this subcontract.
 - (4) “Plan of Actions and Milestones” means a schedule of activities that will be or are being undertaken to resolve a security weakness or control deficiency.
 - (5) “Information System Security Officer” means the security expert designated by NREL to assess and address cybersecurity risk to NREL and to oversee compliance with NREL's security requirements.
 - (6) “NREL System Administrator” means an NREL employee who oversees the maintenance and security of an information system and has elevated rights and privileges to perform those duties.
- (b) Cloud or Hosted System Security Requirements
- (1) Disaster Recovery and Business Continuity. Subcontractor shall maintain and implement a disaster recovery and business continuity plan to ensure continuity of the services provided to NREL pursuant to this Subcontract and the recovery of

Standard Terms and Conditions for Research and Development Subcontracts

Firmed Fixed Price and Fixed Unit Price

- any functionality lost due to operator error, system error or other unplanned circumstances. Upon NREL's written request, Subcontractor will issue to NREL a summary statement on the design of the disaster recovery and business continuity management plan. The disaster recovery and business continuity shall be tested at least annually and must be included in any third-party assessment scope (see SOC 2 Type 2 Report).
- (2) Data Processing and Storage Locations. Subcontractor shall not store or process Sensitive NREL Data outside of the United States. Hosting services with multiple geographic locations shall restrict NREL Data processing and storage to locations within the United States.
 - (3) On Premises Systems. Should the Subcontractor require the installation of an on-premises system to support the scope of work, either (a) NREL must have administrative access to the system to verify and implement security controls, or (b) the system must be separated from the NREL internal network using, at a minimum, logical access controls to restrict the system to the least necessary access to perform services under the Subcontract. Any system placed on the NREL network must conform to NREL's security requirements, including but not limited to the following specifications: (a) a supported operating system or firmware version; (b) patched or updated to close security vulnerabilities; (c) support access controls that maintain user least-privilege; (d) able to undergo configuration hardening; and (e) capable of running antimalware software (endpoints only).
 - (4) Multi-Tenancy. Should NREL Data be processed or stored in a multi-tenant environment, security controls shall be in place to ensure that a tenant with weak security settings cannot affect or interfere with the security of NREL Data as well as to ensure that data is not co-mingled within servers or stacks.
 - (5) Data Security. Services and environments that are intended for the storage, processing, or transfer of Sensitive NREL Data must facilitate encryption at rest using an unbroken encryption algorithm that is FIPS 140-2 compliant to the extent practicable. Communication that occurs over the Internet must be encrypted in transit using an unbroken encryption algorithm. Products that store sensitive data must tolerate and/or enforce purging data that NREL determines it no longer has a business need to retain.
 - (6) Access Control. Subcontractor systems must support Active Directory / LDAPS integration, SAML authentication and authorization, the ability to specify access levels or assign permissions by user (job) role, and two-factor authentication for system administrator roles or roles with access to view or manage Sensitive NREL Data.
 - (7) Logging and Monitoring. Subcontractor systems must facilitate capture (for example, activity logging) and where feasible, forwarding of recorded events for operational failure, security incidents, and security monitoring purposes. Where security logging and monitoring are the Subcontractor's responsibility under the Statement of Work or a customer responsibility matrix (see Customer Responsibility Matrix), the Subcontractor shall follow the provisions under Security Incident Reporting.
 - (8) Security Incident Reporting. Subcontractor shall (i) notify NREL by telephone within 72 hours of confirmation of a cybersecurity incident that affects NREL contracted resources or the data contained therein (for example, but not limited to, a service interruption, loss, disclosure, or confirmed evidence of a suspicious or malicious presence); and (ii) cooperate with NREL and their delegates, where applicable, to investigate and resolve the matter, including without limitation providing access to logged evidence and other artifacts necessary to substantiate the security investigation.
 - (9) SOC 2 Type 2 Report. No greater than fourteen calendar days after issuance of the Subcontract, Subcontractor shall provide to NREL its most recent Service Organization Control (SOC) 2 Type 2 report pertaining to the scope of services

Standard Terms and Conditions for Research and Development Subcontracts

Firmed Fixed Price and Fixed Unit Price

provided to NREL. Thereafter for the term of this Subcontract, the Subcontractor shall provide updated SOC 2 Type 2 reports to NREL annually. If Subcontractor's SOC 2 Type 2 report is qualified, then Subcontractor will provide a written Plan of Actions and Milestones to notify NREL of what actions they are taking to correct any findings and the expected resolution date for those corrections. Should a SOC 2 Type 2 not be performed or available, an alternative third-party control audit report may be acceptable to NREL with prior notice, sufficiency of criteria review, and approval from NREL.

- (10) FedRAMP Compliance. Where the Services rendered by the Subcontractor are certified to the Moderate level under the FedRAMP program, and where they are continually maintained in compliance with the FedRAMP program, the Subcontractor is exempt from Requirement 8, SOC 2 Type 2 Report. Additional security assurance, in the form of a third-party report (ex. SOC 2 Type 2 report) to the extent practicable, must be provided for FedRAMP Low and FedRAMP In-Progress services.
- (11) Corrective Actions. If defects in security or compliance are reported in an annual report, Subcontractor shall provide NREL with a Plan of Actions and Milestones that details the actions and timeline to resolve such defects. Subcontractor shall resolve such security and compliance defects in the scope of the Subcontractor's supported services at no additional charge to NREL.
- (12) Notice of Change. Subcontractor shall notify NREL in writing of planned significant changes to the services or services platform no less than thirty (30) days prior to the planned change. Significant changes include, but are not limited to, the launch of a new feature, migration of services to a new data center, changes in system or data security and privacy controls, or major application or system version upgrades.
- (13) Notice of Outage. In the event of a planned service outage, Subcontractor shall notify NREL by telephone or in writing at least five (5) business days in advance of such outage. In the event of an unplanned service outage, Subcontractor shall notify NREL as soon as possible, and in any event within four (4) business hours.
- (14) Customer Responsibility Matrix. Subcontractor shall provide NREL with a written matrix of security and privacy functions that describes which security features the Subcontractor will configure and manage and which features NREL is responsible to configure and manage. Subcontractor shall provide an updated matrix as updates to the Statement of Work annually or as the provided services occur. For any security feature NREL is responsible to configure, Subcontractor shall provide the NREL Information System Security Officer and System Administrators with documentation of or ongoing access to clear and unambiguous written instructions for the configuration of such features, including without limitation a description of available access controls mechanisms and access roles.

**CYBERSECURITY: SUBCONTRACTOR NETWORK ACCESS AND SUBCONTRACTOR
EMPLOYEE CRIMINAL BACKGROUND CHECKS AND DRUG TESTING (DEC 2022)**

(This clause applies to all Subcontracts that require Subcontractor personnel to directly access NREL Internal Networks and related computing systems either at the NREL campus, or via remote link.)

- (a) Definitions. As used in this clause—
- (1) “DOE Sensitive Countries List” means a confidential list of countries maintained by the U.S. Department of Energy to which particular consideration is given for policy reasons during NREL internal review and approval process for visits, assignments, and access by Foreign Nationals. Countries may appear on the list of national security, nuclear nonproliferation, or terrorism support reasons.
 - (2) “Foreign National” means a person born outside the jurisdiction of the United States, is a citizen of a foreign government, and has not been naturalized under U.S. law.
 - (3) “NREL Internal Networks” means any computers or computer networks that are hosted, maintained, and operated by NREL that are logically positioned interior to the NREL-managed network boundary (interior to an NREL firewall and not part of a defined Demilitarized Zone or DMZ) and require NREL-provided credentials to access. An example is a computer or computer network that requires the use of NREL-provided credentials on a local system or through a Virtual Private Networking or VPN. This definition does not include, and therefore this clause does not apply to, receipt or access to information from NREL through a managed external gateway (for example, an external-facing file-sharing platform, NREL website, an online collaboration tool, externally-allocated computer resources, or similar) with no direct access to NREL Internal Networks.
 - (4) “NREL Facilities” means any NREL-maintained and operated location that is physically accessible, including but not limited to: offices, data centers, stations, communications closets or houses, maintenance facilities, sheds or outbuildings, utility conduits or utility access ports.
 - (5) “NREL Technical Monitor” means the individual accountable for the stewardship of the Subcontractor’s technical project performance. NREL Technical Monitor is not authorized to direct to the Subcontractor binding modifications and changes to the Subcontractor’s technical project performance, including scope of work, schedule, budget, performance period, or terms and conditions under this Subcontract.
 - (6) “Operationally Critical Devices” means computers or other appliances that are so important to the operation of NREL’s information systems that any disruption, tampering, corruption, or outage would cause severe impact to NREL’s ability to carry out its mission or business operations.
 - (7) “Systems Management Devices” means computers or other appliances that are used to manage, monitor, or make changes to other computers that support an information system.
 - (8) “NREL System Administrator” means an NREL employee who is in charge of the maintenance and security of an information system and has elevated rights and privileges to perform those duties.
- (b) Network Access Requirements
- (1) NREL Security Policies and Procedures. In the event the Subcontractor’s personnel or lower tier subcontractors require access to NREL facilities or Networks, or related systems, whether physically or remotely, to provide installation, integration, interconnection, support, or other services, Subcontractor personnel will abide by NREL’s Acceptable Use Agreement. Subcontractor personnel shall attend subcontractor cybersecurity training that covers the requirements of this policy prior to access being granted and annually thereafter (as long as access persists).
 - (2) Subcontractor Access Requests. Should Subcontractor access to NREL Facilities or NREL Networks be necessary to support the implementation or support of the services, Subcontractor shall provide to NREL’s designated Technical Monitor the

Standard Terms and Conditions for Research and Development Subcontracts

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contact information for the individuals requiring access, the necessary level of access, the business justification for each access, and the duration for which access is required (if not equal to the termination date of the Subcontract).

Subcontractor employees will not share passwords or accounts with one another or with lower tier subcontractors.

- (3) Access Limitations. Subcontractors will be provided with access only to facilities, systems, networks, and data necessary to perform the services. NREL shall determine the degree and methods of access necessary to support the scope of services per applicable internal security policies and procedures.
 - (4) Work Locations. Subcontractor personnel shall not access or interact with NREL internal networks while physically located in, or using systems that are located in, a country on the DOE Sensitive Countries List. Subcontractor must submit a request for authorization to NREL Technical Monitor if any Subcontractor personnel intends to access or interact with NREL internal networks while physically located in, or using systems that are located in, a country other than the United States. NREL Technical Monitor shall deny any such requests if the subject country appears on the DOE Sensitive Countries List. If the subject country does not appear on the DOE Sensitive Countries List, NREL Technical Monitor may approve or deny any such request in NREL Technical Monitor's sole discretion.
 - (5) Access Termination. Subcontractor must notify NREL Technical Monitor immediately upon actual or anticipated departure or change in job role for Subcontractor personnel with access to the NREL network.
 - (6) Privileged Access to Operationally Critical or Systems Management Devices. Subcontractors requiring direct, privileged access to operationally critical systems to perform the Statement of Work must additionally comply with Homeland Security Presidential Directive 12 (HSPD-12), Personal Identity Verification (PIV), a process facilitated by NREL and administered by the Department of Energy. This entails providing additional personnel background forms and information. If Subcontractor may have a privileged systems administration role, Subcontractor must identify relevant personnel to the NREL Technical Monitor and start the HSPD-12/PIV process as soon as possible upon endorsement of the Agreement, and no later than one month in advance of anticipated start of system management and implementation work.
 - (7) Maintenance Services. Subcontractors requiring infrequent local (access at NREL Facilities) or remote access to NREL-hosted equipment for periodic maintenance shall be accompanied and monitored by an NREL System Administrator for the duration of the maintenance activity. Subcontractor access to the equipment will be provided upon expressed need and rescinded when not in use. Unless such is specifically required in the Statement of Work, and the system to be maintained has been designed and authorized by NREL for such purposes, Subcontractors may not install remote maintenance software or system back doors to perform continuous maintenance without NREL personnel in attendance.
- (c) Subcontractor Employee Criminal Background Checks and Drug Testing
- (1) Upon identification of an individual proposed to work under this Subcontract, the Subcontractor shall perform or obtain a background check on such individual before assigning the individual to the Subcontract. At a minimum, the background check shall include each of the following:
 - (i) Criminal background check for the past seven years in Colorado state criminal system
 - (ii) Criminal background check for the past seven years in other counties in which the individual has lived outside the state of Colorado
 - (iii) Criminal background check for the past seven years in federal criminal system
 - (iv) Drug Testing (Basic 5 Panel Screen)
 - (v) Department of Motor Vehicle History (only if driving is required for the

Standard Terms and Conditions for Research and Development Subcontracts

Firmed Fixed Price and Fixed Unit Price
performance of work under the Subcontract)

- (vi) Social Security Trace
 - (vii) Employment Verification
- (2) The Subcontractor shall conduct a thorough review of the background check results.
- (i) When adverse finding(s) are identified, the Subcontractor shall evaluate and assess the type, surrounding circumstances, and date of occurrence(s) of the adverse finding(s) relative to the scope of the NREL assignment.
 - (ii) Based on the background check results, the Subcontractor shall determine whether or not the individual presents a risk to NREL if granted access to NREL Networks, Operationally Critical Devices, and/or Systems Management Devices necessary to perform work under this subcontract.
 - (iii) Under no circumstances shall the Subcontractor disclose the results of a background check or the type, surrounding circumstances, and date of occurrence(s) of any adverse findings to the NREL Subcontract Administrator or any other NREL employee.
- (3) The Subcontractor shall ensure that the Subcontractor's personnel assigned to NREL:
- (i) Satisfy all NREL access security requirements. Subcontractor personnel who are Foreign Nationals will be subject to additional access requirements and processing time regardless of any such individual's work location. The access requirements set forth in NREL Terms and Conditions, Security and Access Requirements clause shall apply to requests for access to NREL Facilities and NREL Internal Networks.
 - (ii) Satisfactorily complete all required NREL Safety Orientation and Safety Training.
- (4) In the event that the Subcontractor fails to satisfy or complete the requirements set forth in this Clause, NREL reserves the right to cancel any assignment and/or request the immediate removal of the Subcontractor's personnel from assignment to the subcontract by giving verbal or written notice (via facsimile, email, or letter mailed or otherwise delivered) to the Subcontractor.
- (5) Upon review of an individual's background check results and determination that the individual does not present a risk to NREL if granted access to NREL Networks, Operationally Critical Devices and/or Systems Management Devices necessary to perform work under this subcontract, the Subcontractor shall provide, via email to the Subcontract Administrator, the individual's name and the following certification: "A background check for the individual(s) listed below has been completed, reviewed, and analyzed in accordance with the terms of the subcontract. I hereby certify that the individual(s) listed below is authorized to perform work under NREL Subcontract No. _____."

**CYBERSECURITY: EDUCATIONAL INSTITUTION NETWORK ACCESS AND AFFILIATE
CRIMINAL BACKGROUND CHECKS AND DRUG TESTING (DEC 2022)**

(This clause applies to all Subcontracts with a university or similar educational institution requiring personnel affiliated with such university or education institution, hereafter "Affiliate," direct access to Internal Networks and related computing systems at the NREL campus or via remote link. As used in this clause, the term "Subcontractor" shall include any Affiliate.)

- (a) Definitions. As used in this clause—
- (1) "DOE Sensitive Countries List" means a confidential list of countries maintained by the U.S. Department of Energy to which particular consideration is given for policy reasons during NREL internal review and approval process for visits, assignments, and access by Foreign Nationals. Countries may appear on the list of national security, nuclear nonproliferation, or terrorism support reasons.
 - (2) "Foreign National" means a person born outside the jurisdiction of the United States, is a citizen of a foreign government, and has not been naturalized under U.S. law.
 - (3) "NREL Internal Networks" means any computers or computer networks that are hosted, maintained, and operated by NREL that are logically positioned interior to the NREL-managed network boundary (interior to an NREL firewall and not part of a defined Demilitarized Zone or DMZ) and require NREL-provided credentials to access. An example is a computer or computer network that requires the use of NREL-provided credentials on a local system or through a Virtual Private Networking or VPN. This definition does not include, and therefore this clause does not apply to, receipt or access to information from NREL through a managed external gateway (for example, an external-facing file-sharing platform, NREL website, an online collaboration tool, externally-allocated computer resources, or similar) with no direct access to NREL Internal Networks
 - (4) "NREL Facilities" means any NREL maintained and operated location that is physically accessible, including but not limited to: offices, data centers, stations, communications closets or houses, maintenance facilities, sheds or outbuildings, utility conduits or utility access ports.
 - (5) "NREL Technical Monitor" means the individual accountable for the stewardship of the Subcontractor's technical project performance. The NREL Technical Monitor is not authorized to direct to the Subcontractor binding modifications and changes to the Subcontractor's technical project performance, including scope of work, schedule, budget, performance period, or terms and conditions under this Subcontract.
 - (6) "Operationally Critical Devices" means computers or other appliances that are so important to the operation of NREL's information systems that any disruption, tampering, corruption, or outage would cause severe impact to NREL's ability to carry out its mission or business operations.
 - (7) "Systems Management Devices" means computers or other appliances that are used to manage, monitor, or make changes to other computers that support an information system,
 - (8) "NREL System Administrator" means an NREL employee who is in charge of the maintenance and security of an information system and has elevated rights and privileges to perform those duties.
- (b) Network Access Requirements
- (1) NREL Security Policies and Procedures. In the event the Subcontractor requires access to NREL facilities or Networks, or related systems, whether physically or remotely, to provide installation, integration, interconnection, support, or other services, Subcontractors will abide by NREL's Acceptable Use Agreement. Affiliates shall attend subcontractor cybersecurity training that covers the requirements of this policy prior to access being granted and annually thereafter (as long as access persists).

Standard Terms and Conditions for Research and Development Subcontracts

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- (2) **Affiliate Criminal Background Checks and Drug Testing.** As required by the Department of Energy, NREL shall conduct criminal background checks and drug testing on Affiliates requiring direct access to the NREL Internal Network, as defined above, prior to granting any access to the NREL Internal Network. Based on the background check results, NREL shall determine whether the individual presents a risk to NREL if granted access to NREL Internal Networks. When adverse finding(s) are identified, NREL shall evaluate and assess the type, surrounding circumstances, and date of occurrence(s) of the adverse finding(s) relative to the scope of the NREL assignment. Affiliates that are determined by NREL to present a significant potential risk to the integrity of NREL's security and operations will be denied access, unless otherwise approved by the Department of Energy. As applicable, NREL shall disclose the results of a background check and any adverse findings to the Subcontractor, to NREL and DOE employees who have a need to know and are directly involved in the adjudication of the results of the background check.
- (3) **Subcontractor Access Requests.** Should Subcontractor access to NREL Facilities or NREL Networks be necessary to support the implementation or support of the services, Subcontractor shall provide to NREL's designated point of contact (for example, the work administrator) the contact information for the individuals requiring access, the necessary level of access, the business justification for each access, and the duration for which access is required (if not equal to the termination date of the Subcontract). Affiliates will not share passwords or accounts with one another or with lower tier subcontractors.
- (4) **Access Limitations.** Subcontractor will be provided with access only to facilities, systems, networks, and data necessary to perform the services. NREL shall determine the degree and methods of access necessary to support the scope of services per applicable internal security policies and procedures.
- (5) **Work Locations.** Subcontractor personnel shall not access or interact with NREL internal networks while physically located in, or using systems that are located in, a country on the DOE Sensitive Countries List. The Subcontractor institution must submit a request for authorization to NREL Technical Monitor if any Subcontractor personnel intends to access or interact with NREL internal networks while physically located in, or using systems that are located in, a country other than the United States. NREL Technical Monitor shall deny any such requests if the subject country appears on the DOE Sensitive Countries List. If the subject country does not appear on the DOE Sensitive Countries List, NREL Technical Monitor may approve or deny any such request in NREL Technical Monitor's sole discretion.
- (6) **Access Termination.** Subcontractor must notify NREL Technical Monitor immediately upon actual or anticipated departure or change in job role for Affiliates with access to the NREL network.
- (7) **Privileged Access to Operationally Critical or Systems Management Devices.** Subcontractors requiring direct, privileged access to operationally critical systems to perform the Scope of Work must additionally comply with Homeland Security Presidential Directive 12 (HSPD-12), Personal Identity Verification (PIV), a process facilitated by NREL and administered by the Department of Energy. This entails providing additional personnel background forms and information to the Department of Energy. If Subcontractors may have a privileged systems administration role under the Scope of Work, Subcontractor must identify relevant personnel to their primary NREL point of contact and start the HSPD-12/PIV process as soon as possible upon endorsement of the Scope of Work, and no later than one month in advance of anticipated start of system management and implementation work.
- (8) **Maintenance Services.** Affiliates requiring infrequent local (access at NREL Facilities) or remote access to NREL-hosted equipment for periodic maintenance shall be accompanied and monitored by an NREL System Administrator for the

Appendix B-2

Standard Terms and Conditions for Research and Development Subcontracts

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duration of the maintenance activity. Subcontractor access to the equipment will be provided upon expressed need and rescinded when not in use. Unless such is specifically required in the Statement of Work, and the system to be maintained has been designed and authorized by NREL for such purposes, Subcontractor may not install remote maintenance software or system back doors to perform continuous maintenance without NREL personnel in attendance.

- (9) Non-Compliance. If Subcontractor fails to satisfy or complete the requirements set forth in this Clause, NREL reserves the right to cancel any assignment and/or request the immediate removal of any Affiliate from assignment to the Scope of Work by giving verbal or written notice (via facsimile, email, or letter mailed or otherwise delivered) to the Subcontractor.

CYBERSECURITY: CUSTODIANSHIP OF SENSITIVE NREL DATA (DEC 2022)

(This clause applies to all Subcontracts for the management of, access to, process of, or storage of NREL Data or Sensitive NREL Data, as defined below.)

- (a) Definitions. As used in this clause—
- (1) “NREL Data” means all information processed or stored on computers or other electronic media by NREL or on NREL’s behalf, or provided to Subcontractor for such processing or storage, as well as information derived from such information. NREL Data includes, without limitation: (i) information on paper or other non-electronic media provided to subcontractor, and lower tier subcontractors, hereinafter “Subcontractor(s),” for computer processing or storage, or information formerly on electronic media; (ii) information provided to Subcontractor by NREL customers, users, employees, or other third parties; and (iii) Sensitive NREL Data as that term is defined below. For the sake of clarification, “NREL Data” and “Sensitive NREL Data” shall not be considered “Data” or “Technical Data” generated under this subcontract as defined in and governed by the Intellectual Property provisions in Appendix C of this subcontract.
 - (2) “Sensitive NREL Data” means data that poses a risk to NREL, its employees, customers, partners, and the public if improperly disclosed or accessed, including without limitation personally identifiable information, financial information, protected health information, proprietary information, critical infrastructure information, information officially designated as sensitive (Controlled Unclassified Information, Official Use Only information), information that is proprietary by nature such as access codes or passwords, and other proprietary information as identified by NREL within the Subcontract. For the sake of clarification, “NREL Data” and “Sensitive NREL Data” shall not be considered “Data” or “Technical Data” generated under this subcontract as defined in and governed by the Intellectual Property provisions in Appendix C of this subcontract.
 - (3) “System” means any on premises, hosted, or cloud-based business information or a critical infrastructure system that is designed and installed by the Subcontractor or necessary for the proper operation of applications and infrastructure designed and installed by the Subcontractor. The system scope includes but is not specifically limited to applications, databases, supporting infrastructure (network devices; endpoint servers, workstations, mobile devices, or special appliances and their respective firmware, operating systems, and middleware), contracted or NREL partner services, and all related configuration and interconnections that are required for proper operation of the system.
- (b) Requirements for the Custodianship of Sensitive NREL Data
- (1) Scope. As applicable and necessary under the Statement of Work, NREL shall identify and / or approve (if generated or defined by the Subcontractor) what data may be created, collected, processed, transferred, or stored by the systems or processes supported by the Subcontractor such that it can be protected in accordance with the requirements below. No Sensitive NREL Data other than Sensitive NREL Data required to perform the Subcontractor’s services under the Statement of Work may be collected, processed, transferred, or stored.
 - (2) Access Control. Two-factor authentication shall be used for anyone who has access to proprietary and sensitive data from the Internet. Access shall be limited to only those individuals with a verified business need. Where feasible and applicable, role-based access control systems shall be implemented to enable user account administration by job role or function.
 - (3) Restrictions on Sensitive NREL Data. Subcontractor agrees to treat all Sensitive NREL Data disclosed to Subcontractor by NREL, whether such original disclosure is written or oral as confidential and proprietary, and not to disclose Sensitive NREL Data to any third party for a period of five (5) years from date this Subcontract expires or is terminated, whichever occurs first. However, oral disclosure of information (i.e., information expressed by spoken words) by NREL to

Standard Terms and Conditions for Research and Development Subcontracts

Firmed Fixed Price and Fixed Unit Price

Subcontractor shall be considered Sensitive NREL Data upon being identified as such at the time of disclosure and reduced to writing and a copy thereof being provided by NREL to Subcontractor within thirty (30) days of such disclosure. Upon expiration or termination of the subcontract, Subcontractor shall certify in writing that all copies and partial copies of such Sensitive NREL Data have either been returned or destroyed.

- (4) Logging. Where the Subcontractor stores, processes, and/or manages access to Sensitive NREL Data, the Subcontractor shall ensure that record and/or field level access controls are implemented on all databases containing Sensitive NREL Data and that security audit logging is implemented for all sensitive data accesses. The Subcontractor shall make security audit log data available to NREL for NREL's monitoring, or shall review log files daily for inappropriate access or suspicious access attempts and report any breach of security to NREL according to the clause titled CYBERSECURITY: GENERAL REQUIREMENTS.
- (5) Data Retention. No Sensitive NREL Data other than Sensitive NREL Data required to perform the Services and meet NREL's record retention requirements may be retained (whichever is more stringent). NREL shall communicate applicable data retention requirements to the customer prior to the collection of production data. Expired data shall be deleted from all managed systems and applications upon expiration, or within a commercially reasonable timeframe following the expiration date not to exceed thirty (30) days.
- (6) Sanitization. All Sensitive NREL Data on rewritable media shall be removed from systems by overwriting the media three times with ones and zeros before disposal or transfer of assets outside of NREL's use or the Subcontractor's custodianship. Read-only media must be degaussed or destroyed such that it is unrecoverable.
- (7) Encryption. Sensitive NREL Data stored in the system must be encrypted using an unbroken encryption algorithm, that is FIPS 140-2 compliant to the extent practicable. Sensitive data transmitted across the Internet to or by the system must be encrypted in transit using an unbroken encryption algorithm. Subcontractor must use encryption key management strategies that are designed to prevent the corruption or exposure of encryption keys or abuse by individuals without a business need.
- (8) Vulnerability Scanning. All systems that store, collect, transmit, or process Sensitive NREL Data that are accessible from the Internet shall undergo vulnerability scanning quarterly. All high-risk defects must be corrected with scans re-performed to demonstrate defects no longer exist.
- (9) Data Replication. Subcontractor shall not duplicate Sensitive NREL Data to other systems, including but not limited to test systems and databases, portable storage media, hardcopies, or other locations where it is not necessary for the business or technical function of the Subcontractor's services under the Statement of Work.
- (10) Security Assurance Reporting. For hosted or cloud systems used to collect, store, or process Sensitive NREL Data, practices used to maintain security of those Subcontractor-managed information systems in accordance with the above must be included in security reporting required in the clause titled CYBERSECURITY: CLOUD, HOSTED, OR OUTSOURCED SYSTEMS AND RELATED SERVICES.

CYBERSECURITY: CARDHOLDER DATA ENVIRONMENTS (AUG 2021)

(This clause applies to all Subcontracts for the design, installation, configuration, or maintenance of an information system, or part thereof, that collects, processes, transmits, or stores Cardholder Data, as defined below.)

- (a) Definitions. As used in this clause—
- (1) “Cardholder Data” or “CHD” means the full magnetic stripe contents of a credit card plus any of the following: cardholder name, expiration date, service code.
 - (2) “Cardholder Data Environment” or “CDE” means an area of a computer system or network that possesses cardholder data or sensitive authentication data (related to cards) and those systems that directly attach to such environments or otherwise support cardholder processing, storage, or transmission.
 - (3) “Sensitive Authentication Data” means security-related information including, but not limited to, card validation codes/values (e.g., three-digit or four-digit value printed on the front or back of a payment card, such as CVV2 and CVC2 data), full magnetic-stripe data, PINs, and PIN blocks) used to authenticate cardholders and/or authorize payment card transactions.
 - (4) “System” or “information system” means any on premises, hosted, or cloud-based business information or a critical infrastructure system that is designed and installed by the Subcontractor or necessary for the proper operation of applications and infrastructure designed and installed by the Subcontractor. The system scope includes but is not specifically limited to applications, databases, supporting infrastructure (network devices; endpoint servers, workstations, mobile devices, or special appliances and their respective firmware, operating systems, and middleware), underlying services, and all related configuration and interconnections that are required for proper operation of the system.
 - (5) “Plan of Actions and Milestones” means a schedule of activities that will be or are being undertaken to resolve a security weakness or control deficiency.
- (b) Cardholder Data Environments Requirements
- (1) PCI-DSS Compliance. Cardholder Data Environments shall comply with all requirements of the current effective version of the Payment Card Industry Data Security Standard (PCI-DSS) for Level 2 merchants throughout the lifecycle of the environment.
 - (2) Scope. As applicable and necessary under the Statement of Work, NREL shall disclose to the Subcontractor where cardholder data is stored in the target architecture such that it can be protected per the requirements below.
 - (3) CDE Boundary Controls. To limit the scope of PCI controls, Subcontractor shall separate systems that collect, store, process, or transmit cardholder data by using network security control methods that are (a) deemed sufficient under the PCI-DSS standard and (b) validated for sufficiency to the frequency required in the PCI-DSS.
 - (4) Multi-Tenancy. It is preferred that CDEs be separated by function and by customer. Should any of the CDEs be combined (across NREL, or across NREL and multiple customers, ex. multi-tenancy), in accordance with the PCI-DSS, Subcontractor shall implement and maintain access controls to adequately separate the functions of each environment such that actions taken in or for one CDE do not affect the security of other CDEs on the same architecture.
 - (5) Supporting Systems Compliance. Subcontractor shall maintain all systems that do not contain cardholder data but provide supporting services to those systems that do (for example, to provide support, reporting functions, or similar) in a manner consistent with PCI-DSS requirements.
 - (6) Control Responsibilities. Subcontractor shall participate with NREL in developing and reviewing a compliance scope matrix to document responsibility for the design and execution of PCI-compliant controls.
 - (7) Payment Applications. Subcontractor shall only offer and deploy Payment Application Data Security Standard (PA-DSS) or PCI Software Security Framework (when superseded in 2022) compliant products to NREL. Subcontractor shall

Standard Terms and Conditions for Research and Development Subcontracts

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ensure all Subcontractor-managed applications and their underlying support systems (for example, underlying operating systems) are patched and upgraded to maintain PA-DSS certification and / or framework compliance throughout the life of the Subcontract. Subcontractor shall provide a PA-DSS Implementation Guide (written document or website) to accompany their product that instructs NREL in applying the appropriate network configuration and system settings to achieve PCI-DSS compliance. NREL will not accept custom programming or one-off payment solutions that are not PA-DSS certified or framework compliant.

- (8) Attestation of Compliance. Subcontractor shall provide to NREL annually or earlier upon request, an Attestation of PCI-DSS Compliance signed by a qualified or internal security assessor (QSA or ISA) as validation of the controls under vendor's scope.
- (9) Compliance Auditing. Subcontractor shall permit NREL to test, inspect, or audit Subcontractor systems assigned to NREL or data residing on Subcontractor hosted systems to support NREL's compliance responsibilities.
- (10) Corrective Actions. Should defects in security or PCI compliance be reported in an Attestation of Compliance or disclosed in another security report, Subcontractor shall provide a Plan of Actions and Milestones that details the actions and timeline to resolve. Subcontractor shall resolve security and compliance defects in scope of the Subcontractor's supported services at no additional charge to NREL.