

Appendix O

AWARD TERMS AND CONDITIONS

Demos

This document sets forth anticipated terms and conditions for the cooperative agreement awards for the [Advanced Reactor Demonstration](#) Program. It is a draft and is included in the Funding Opportunity Announcement (FOA) for informational purposes and to put applicants on notice of the anticipated terms and conditions DOE plans for the awards.

Additional and/or different T&Cs may be required in the actual award, e.g., if the project will be done as a public work, it may require Construction Labor Standards (formally Davis Bacon Act Wage Determinations, etc.); for any construction work to be done at a Government facility, etc.

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TERMS AND CONDITIONS
FOR THE
DEMOS COOPERATIVE AGREEMENT

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**TERMS AND CONDITIONS FOR THE ADVANCED REACTOR
DEMONSTRATION COOPERATIVE AGREEMENT**

(1)ADMINISTRATIVE REQUIREMENTS (DECEMBER 2014)

The administrative requirements for DOE grants and cooperative agreements are contained in 2 CFR § 200 as amended by 2 CFR § 910 [DOE Financial Assistance Regulation] (See: <http://www.eCFR.gov>).

(2)NOTICE REGARDING ELIGIBLE/INELIGIBLE ACTIVITIES

Eligible activities under this program include those which describe and promote the understanding of scientific and technical aspects of specific energy technologies, but not those which encourage or support political activities, such as the collection and dissemination of information related to potential, planned, or pending legislation.

(3)LEGAL AUTHORITY AND EFFECT (JUNE 2015)

A DOE financial assistance award is valid only if it is in writing and is signed, either in writing or electronically, by a DOE Contracting Officer. Recipients are free to accept or reject the award. A request to draw down DOE funds constitutes the Recipient's acceptance of the terms and conditions of this Award.

(4)RESOLUTION OF CONFLICTING CONDITIONS

Any apparent inconsistency between Federal statutes and regulations and the terms and conditions contained in this award must be referred to the DOE Award Administrator for guidance.

(5)AWARD AGREEMENT TERMS AND CONDITIONS (DECEMBER 2014)

This award/agreement consists of the Assistance Agreement cover page, plus the following:

Special terms and conditions.

Attachments:

Attachment No.Title

Intellectual Property Provisions

Statement of Project Objectives

Federal Assistance Reporting Checklist

Budget Pages

DOE Assistance Regulations, 2 CFR § 200 as amended by 2 CFR § 910 at <http://www.eCFR.gov>.

Application/proposal as approved by DOE.

National Policy Assurances to Be Incorporated as Award Terms in effect on date of award at:

<http://www.nsf.gov/awards/managing/rtc.jsp>.

(6)AWARD PROJECT PERIOD AND BUDGET PERIODS

The Project Period for this award is [mm/dd/yyyy] through [mm/dd/yyyy] consisting of the following Budget periods: *to be completed at time of award*

(7)CONFERENCE SPENDING (FEBRUARY 2015)

The recipient shall not expend any funds on a conference not directly and programmatically related to the purpose for which the grant or cooperative agreement was awarded that would defray the cost to the United States Government of a conference held by any Executive branch department, agency, board, commission, or office for which the cost to the United States Government would otherwise exceed \$20,000, thereby circumventing the required notification by the head of any such Executive Branch department, agency, board, commission, or office to the Inspector General (or senior ethics official for any entity without an Inspector General), of the date, location, and number of employees attending such conference.

(8) PAYMENT PROCEDURES - REIMBURSEMENT THROUGH THE AUTOMATED CLEARING HOUSE (ACH) VENDOR INQUIRY PAYMENT ELECTRONIC REPORTING SYSTEM (VIPERS)

Method of Payment. Payment will be made by reimbursement through ACH.

Requesting Reimbursement. Requests for reimbursements must be made electronically through Department of Energy's Oak Ridge Financial Service Center (ORFSC) VIPERS. To access and use VIPERS, you must enroll at <https://vipers.doe.gov>. Detailed instructions on how to enroll are provided on the website.

For non-construction awards, you must submit a Standard Form (SF) 270, "Request for Advance or Reimbursement" at <https://vipers.doe.gov> and attach a file containing appropriate supporting documentation. The file attachment must show the total federal share claimed on the SF 270, the non-federal share claimed for the billing period, if cost sharing is required, and cumulative expenditures to date (both Federal and non-Federal) for each of the following categories: salaries/wages and fringe benefits; equipment; travel; participant/training support costs, if any; other direct costs, including subawards/contracts; and indirect costs. For construction awards, you must submit a SF 271, "Outlay Report and Request for Reimbursement for Construction Programs," through VIPERS.

Timing of submittals. Submittal of the SF 270 or SF 271 should coincide with your normal billing pattern, but not more frequently than every two weeks. Requests for reimbursement must be limited to the amount of disbursements made during the billing period for the federal share of direct project costs and the proportionate share of any allowable indirect costs incurred during that billing period.

Adjusting payment requests for available cash. You must disburse any funds that are available from repayments to and interest earned on a revolving fund, program income, rebates, refunds, contract settlements, audit recoveries, credits, discounts, and interest earned on any of those funds before requesting additional cash payments from DOE.

Payments. The DOE approving official will approve the invoice as soon as practicable but not later than 30 days after your request is received, unless the billing is improper. Upon receipt of an invoice payment authorization from the DOE approving official, the ORFSC will disburse payment to you. You may check the status of your payments at the VIPER web site. All payments are made by electronic funds transfer to the bank account identified on the ACH Vendor/Miscellaneous Payment Enrollment Form (SF 3881) that you filed.

(9) INCREMENTAL FUNDING AND MAXIMUM OBLIGATION - DIFFERENT BUDGET PERIOD AND PROJECT PERIOD

If at any time during the award a budget period is funded on an incremental basis, the maximum obligation of the DOE is limited to the amount shown on the Award Agreement. You are not obligated to continue performance of the project beyond the total amount obligated and your pro rata share of the project costs, if cost sharing is required.

Subject to the availability of additional funds appropriated by Congress for the purpose of this program and the availability of future-year budget authority, DOE anticipates obligating the total estimated amount for the current budget period

(10)COST SHARING FFRDC'S PARTICIPATE

a. Total Estimated Project Cost is the sum of the Government share, including Federally Funded Research and Development Center (FFRDC) contractor costs, and Recipient share of the estimated project costs. The DOE/NNSA FFRDC contractor cost is not included in the total approved budget for this award, because DOE/NNSA will pay the DOE/NNSA FFRDC contractor portion of the effort under an existing DOE/NNSA contract. Recipient is not responsible for reporting on that portion of the total estimated cost that is paid directly to the DOE/NNSA FFRDC contractor.

The Recipient's cost share must come from non-Federal sources unless otherwise allowed by law. By accepting federal funds under this award, you agree that you are liable for your percentage share of allowable project costs, on a budget period basis, even if the project is terminated early or is not funded to its completion. This cost is shared as follows: *to be completed at time of award*

b. If you discover that you may be unable to provide cost sharing of at least the amount identified in paragraph a of this term, you should immediately provide written notification to the DOE Award Administrator indicating whether you will continue or phase out the project. If you plan to continue the project, the notification must describe how replacement cost sharing will be secured.

c. You must maintain records of all project costs that you claim as cost sharing, including in-kind costs, as well as records of costs to be paid by DOE/NNSA. Such records are subject to audit.

d. Failure to provide the cost sharing required by this term may result in the subsequent recovery by DOE/NNSA of some or all the funds provided under the award.

(11)DIRECT PAYMENT BY DOE OF FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTER (FFRDC) CONTRACTOR COST

For the purposes of this term, Total Estimated Cost of Project includes DOE FFRDC contractor costs. The DOE FFRDC contractor cost is not included in the total approved budget for this award, because DOE will pay the DOE FFRDC contractor portion of the effort under an existing DOE contract. Recipient is not responsible for reporting on that portion of the total estimated cost that is paid directly to the DOE FFRDC contractor.

(12)REBUDGETING AND RECOVERY OF INDIRECT COSTS - REIMBURSABLE INDIRECT COSTS AND FRINGE BENEFITS

If actual allowable indirect costs are less than those budgeted and funded under the award, you may use the difference to pay additional allowable direct costs during the project period. If at the completion of the award the Government's share of total allowable costs (i.e., direct and indirect), is less than the total costs reimbursed, you must refund the difference.

Recipients are expected to manage their indirect costs. DOE will not amend an award solely to provide additional funds for changes in indirect cost rates. DOE recognizes that the inability to obtain full reimbursement for indirect costs means the recipient must absorb the underrecovery. Such underrecovery may be allocated as part of the organization's required cost sharing.

(13)PRE-AWARD COSTS (DECEMBER 2014) – (if prior approval is received from the DOE Contracting Officer)

You are entitled to reimbursement for costs incurred on or after [*MonthDayYear: to be completed at time of award*] as authorized by the pre-award costs letter dated [*Date of Approval Letter*], if such costs are allowable in accordance with the applicable Federal cost principles referenced in 2 CFR § 200 as amended by 2 CFR § 910.

(14)USE OF PROGRAM INCOME - ADDITION

If you earn program income during the project period as a result of this award, you may add the program income to the funds committed to the award and use it to further eligible project objectives.

(15)STATEMENT OF FEDERAL STEWARDSHIP

DOE will exercise normal Federal stewardship in overseeing the project activities performed under this award. Stewardship activities include, but are not limited to, conducting site visits; reviewing performance and financial reports; providing technical assistance and/or temporary intervention in unusual circumstances to correct deficiencies that develop during the project; assuring compliance with terms and conditions; and reviewing technical performance after project completion to ensure that the award objectives have been accomplished.

(16)STATEMENT OF SUBSTANTIAL INVOLVEMENT PROVIDED AS ATTACHMENT

A Statement of Substantial Involvement applicable to this cooperative agreement is provided as Attachment [*Number: to be completed at time of award*] to this award.

(17)SITE VISITS

DOE's authorized representatives have the right to make site visits at reasonable times to review project accomplishments and management control systems and to provide technical assistance, if required. You must provide, and must require your subrecipients to provide, reasonable access to facilities, office space, resources, and assistance for the safety and convenience of the government representatives in the performance of their duties. All site visits and evaluations must be performed in a manner that does not unduly interfere with or delay the work.

(18)REPORTING REQUIREMENTS (APRIL 2018)

Requirements. The reporting requirements for this award are identified on the Federal Assistance Reporting Checklist, DOE F 4600.2, attached to this award. Failure to comply with these reporting requirements is considered a material noncompliance with the terms of the award. Noncompliance may result in withholding of future payments, suspension, or termination of the current award, and withholding of future awards. A willful failure to perform, a history of failure to perform, or unsatisfactory performance of this and/or other financial assistance awards, may also result in a debarment action to preclude future awards by Federal agencies.

Dissemination of scientific/technical reporting products. Reporting project results in scientific and technical information (STI) publications/products to the DOE Office of Scientific and Technical Information (OSTI) ensures dissemination of research results to the public as well as preservation of the results. The DOE form F 4600.2, B. Scientific/Technical Reporting, has instructions for the DOE Energy Link (E-Link) system managed by OSTI. Scientific/technical reports and other STI products submitted under this award will be disseminated publicly on the Web via OSTI.GOV (<https://www.osti.gov>), unless the STI contains patentable material, protected data, or SBIR/STTR data, which must be indicated per instructions in DOE4600.2.

Restrictions. STI products submitted to the DOE via E-link must not contain any Protected Personally Identifiable Information (PII), classified information, information subject to export control classification, or other information not subject to release.

(19)PUBLICATIONS

You are encouraged to publish or otherwise make publicly available the results of the work conducted under the award.

An acknowledgment of Federal support and a disclaimer must appear in the publication of any material, whether

copyrighted or not, based on or developed under this project, as follows:

Acknowledgment: "This material is based upon work supported by the Department of Energy under Award Number(s) [Enter the award number(s)]."

Disclaimer: "This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof."

(20) FEDERAL, STATE, AND MUNICIPAL REQUIREMENTS

You must obtain any required permits and comply with applicable federal, state, and municipal laws, codes, and regulations for work performed under this award.

(21) INTELLECTUAL PROPERTY PROVISIONS

Special Intellectual Property Provisions will apply to Agreements awarded under this FOA. These include special data protection provisions and the issuance of a class patent waiver to enhance commercialization of technology developed under this program. Additionally, specific intellectual property provisions can be found in Appendix R, and will be amended as directed under any class patent waiver.

Special Protected Data Statutes. This program is covered by a special protected data statute. The provisions of the statute provide for the protection from public disclosure, for a period of up to five (5) years, technical data or commercial or financial data first produced in the performance of the award which if it had been obtained from and first produced by a non-federal party, would be a trade secret or commercial or financial information that is privileged or confidential under the meaning of 5 U.S.C. 552(b)(4), and which data is marked as being protected data by a party to the award. Generally, the provision entitled, Rights in Data – Programs Covered Under Special Protected Data Statutes, (2 CFR 910 Appendix A to Subpart D —Patent and Data Provisions), would apply, but may be modified to accommodate NE program requirements. Otherwise, the government has unlimited rights in technical data created under the DOE agreement. Delivery or third-party licensing of proprietary software or data developed solely at private expense will not normally be required except as specifically negotiated in an agreement or patent waiver to satisfy DOE's needs or to ensure the commercialization of technology developed under the DOE agreement.

Class Patent Waiver: DOE is expecting to issue a class patent waiver for agreements awarded under this FOA, which will cover most large business recipients and lower-tier subrecipients under this FOA. The patent waiver will provide those recipients, not subject to the Bayh-Dole Act, the option to retain title to their own inventions, subject to the same government retained rights identified in the Act above. To qualify for the class waiver, a recipient must maintain the required cost-share under the program and agree to substantially manufacture technology created under this FOA in the U.S., or provide other economic benefits to the U.S. Specifically, the recipient must agree to the following U.S. Competitiveness clause:

The Contractor agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States unless the Contractor can show to the satisfaction of the DOE that it is not commercially feasible to do so. In the event the DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in an

appropriate, legally binding manner. The Contractor agrees that it will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements. Should the Contractor or other such entity receiving rights in the invention(s): (1) undergo a change in ownership amounting to a controlling interest, or (2) sell, assign, or otherwise transfer title or exclusive rights in the invention (s), then the waiver, assignment, license, or other transfer of rights in the waived invention(s) is/are suspended until approved in writing by the DOE. Approval of any modification of this provision, shall require the concurrence of the Assistant Secretary for Nuclear Energy, the Acting Assistant Secretary, or the cognizant Principal Deputy Assistant Secretary.

If the recipient is unable to maintain the required cost-share or is unable to manufacture substantially in the U.S., the waiver may be terminated by DOE.

If DOE does not issue a class waiver or if applicants do not meet the criteria of the class waiver, applicants may request a waiver of all or any part of the rights of the United States in inventions conceived or first actually reduced to practice in performance of an agreement as a result of this FOA, in advance of or within 30 days after the effective date of the award. Even if such advance waiver is not requested or the request is denied, the recipient will have a continuing right under the award to request a waiver of the rights of the United States in identified inventions, i.e., individual inventions conceived or first actually reduced to practice in performance of the award. Any patent waiver that may be granted is subject to certain terms and conditions in 10 CFR 784.

Small Businesses and Nonprofits: Domestic small businesses and domestic nonprofit organizations will receive the patent rights clause at 37 CFR 401.14, i.e., the implementation of the Bayh-Dole Act. This clause permits domestic small business and domestic nonprofit organizations to retain title to subject inventions. Therefore, small businesses and nonprofit organizations do not need to request a waiver.

(22)CONTINUATION APPLICATION AND FUNDING - AWARDS UNDER 2 CFR § 200 AS AMENDED BY 2 CFR § 910

Continuation Application. A continuation application is a non-competitive application for an additional budget period within a previously approved project period. At least 90 days before the end of each budget period, you must submit your continuation application to the DOE Program Manager whose name is in block 15 of the Award Agreement and to the Agreements Officer/Administrator whose name is in block 25 and address is listed in block 16 of the Award Agreement

Your continuation application must include the following information:

A report on your progress towards meeting the objectives of the project, including any significant findings, conclusions, or developments, and an estimate of any unobligated balances remaining at the end of the budget period. If the remaining unobligated balance is estimated to exceed 20 percent of the funds available for the budget period, explain why the excess funds have not been obligated and how they will be used in the next budget period.

A detailed budget and supporting justification for the upcoming budget period if additional funds are requested, a reduction of funds is anticipated, or a budget for the upcoming budget period was not approved at the time of award, or other annual bilateral budgetary pricing adjustments by the parties, if necessary, as the project progresses.

A description of your plans for the conduct of the project during the upcoming budget period, if there are changes from the DOE approved application.

Continuation Funding. Continuation funding is contingent on (1) availability of funds appropriated by Congress for the purpose of this program; (2) the availability of future-year budget authority; (3) substantial progress towards meeting the objectives of your approved application; (4) submittal of required reports; and (5) compliance with the terms and conditions of the award.

(23) NOTICE REGARDING THE PURCHASE OF AMERICAN-MADE EQUIPMENT AND PRODUCTS -- SENSE OF CONGRESS

It is the sense of the Congress that, to the greatest extent practicable, all equipment and products purchased with funds made available under this award should be American-made.

(24) ENVIRONMENTAL, SAFETY AND HEALTH (ES&H) PERFORMANCE OF WORK AT DOE FACILITIES

With respect to the performance of any portion of the work under this award which is performed at a DOE-owned or controlled site, the recipient agrees to comply with all State and Federal ES&H regulations and with all other ES&H requirements of the operator of such site.

Prior to the performance on any work at a DOE-Owned or controlled site, the recipient shall contact the site facility manager for information on DOE and site-specific ES&H requirements.

The recipient shall apply this term to its sub-recipients and contractors.

(25) FUNDING OF BUDGET PERIODS

DOE has obligated \$[*Total Amount of Funds Obligated: to be completed at time of award*] for completion of the Project authorized by this agreement, however, only \$[*DOE Share of Budget Period Costs*] is available for work performed by the Recipient during Budget Period [*Number(s)*] of the Project. For Budget Period [*Number(s)*], the remainder or \$[*DOE Share of Budget Period Costs*] will be available contingent upon availability of funds appropriated by Congress for the purpose of this program; (2) the availability of future-year budget authority; (3) substantial progress towards meeting the objectives of your approved application; (4) submittal of required reports; (5) compliance with the terms and conditions of the award; (6) the submission by the Recipient of a continuation application; and (7) written approval of the continuation application by the DOE Contracting Officer.

In the event that the Recipient does not submit a continuation application for subsequent Budget Periods or DOE disapproves a continuation application for subsequent Budget Periods, the maximum DOE liability to the Recipient is the funds that are available for the current approved Budget Period(s). In such event, DOE reserves the right to deobligate any remaining funds.

(26) INSURANCE COVERAGE (DECEMBER 2014)

See 2 CFR 200.310 for insurance requirements for real property and equipment acquired or improved with Federal funds.

(27) REAL PROPERTY (DECEMBER 2014)

Subject to the conditions set forth in 2 CFR § § 200.311, title to real property acquired or improved under a Federal award will vest upon acquisition in the non-Federal entity.

The non-Federal entity cannot encumber this property and must follow the requirements of 2 CFR § § 200.311 before disposing of the property.

Except as otherwise provided by Federal statutes or by the Federal awarding agency, real property will be used for the originally authorized purpose as long as needed for that purpose. When real property is no longer needed for the originally authorized purpose, the non-Federal entity must obtain disposition instructions from the Federal awarding agency or pass-through entity. The instructions must provide for one of the following alternatives: (a) retain title after compensating the Federal awarding agency as described in 2 CFR § 200.311(c)(1); (b) Sell the property and compensate the federal awarding agency as specified in CFR § 200.311(c)(2); or transfer title to the Federal awarding agency or to a third Party

designated/approved by the Federal awarding agency as specified in CFR § 200.311(c)(3).

See 2 CFR §200.311 for additional requirements pertaining to real property acquired or improved under a Federal award. Also see 2 CFR § 910.360 for amended requirements for Real Property for For-Profit recipients.

(28)EQUIPMENT (DECEMBER 2014)

Subject to the conditions provided in 2 CFR 200.313, title to equipment (property) acquired under a Federal award will vest conditionally with the non-Federal entity.

The non-Federal entity cannot encumber this property and must follow the requirements of 2 CFR § 200.313 before disposing of the property.

States must use equipment acquired under a Federal award by the state in accordance with state laws and procedures.

Equipment must be used by the non-Federal entity in the program or project for which it was acquired as long as it is needed, whether or not the project or program continues to be supported by the Federal award. When no longer needed for the originally authorized purpose, the equipment may be used by programs supported by the Federal awarding agency in the priority order specified in 2 CFR § 200.313(c)(1)(i) and (ii).

Management requirements, including inventory and control systems, for equipment are provided in 2 CFR § 200.313(d).

When equipment acquired under a Federal award is no longer needed, the non-Federal entity must obtain disposition instructions from the Federal awarding agency or pass-through entity.

Disposition will be made as follows: (a) items of equipment with a current fair market value of \$5,000 or less may be retained, sold, or otherwise disposed of with no further obligation to the Federal awarding agency; (b) Non-Federal entity may retain title or sell the equipment after compensating the Federal awarding agency as described in 2 CFR § 200.313(e)(2); or (c) transfer title to the Federal awarding agency or to an eligible third Party as specified in CFR § 200.313(e)(3).

See 2 CFR § 200.313 for additional requirements pertaining to equipment acquired under a Federal award. Also see 2 CFR § 200.439 Equipment and other capital expenditures.

See 2 CFR § 910.360 for amended requirements for Equipment for For-Profit recipients.

(29)USE OF REAL PROPERTY AND EQUIPMENT ACQUIRED UNDER THE AWARD

For real property and equipment acquired in the performance of this award, the real property and equipment can continue to be used for the originally authorized purpose as long as needed for that purpose (i.e., as part of the power generation facilities of an electric utility system or in any other manner for the purpose of demonstrating the suitability for commercial application of the advanced nuclear reactor. Accordingly, at the end of the award project period, DOE will proceed with its normal award close out procedures; however, the recipient shall maintain conditional title to the property and continue to use it for its originally authorized purpose. The awardee cannot encumber this property, without prior written approval by Contracting Officer, and must follow the requirements set forth in 2 C.F.R. § 910.360 before disposing of the property.

It is anticipated that the recipient will continue to use the property for the originally authorized purpose as long as needed for that purpose, for the life of the plant/reactor (which could be of an extended duration). The awardee is solely responsible for the operation, maintenance and any other costs and liabilities (including accidents) associated with the plant/reactor, including all end of reactor service life decommissioning costs, unless otherwise agreed to in writing by the Contracting Officer. The recipient may make additions, improvements, modifications, replacements, rearrangements,

reinstallations, renovations or alterations to the property that materially increases its value or useful life (other than normal ordinary repairs and maintenance), but must obtain written concurrence from the Contracting Officer at least ninety calendar days in advance. The recipient must maintain records of any changes to the property, which shall be subject to DOE review, upon request.

Recipient will be allowed to continue to use all equipment and property acquired in connection with this award for the original purposes of the award after the award term has ended. Title to this equipment and property will be held by the recipient conditionally with the US Government maintaining a reversionary interest commensurate with the federal participation in the original project. Recipient shall provide a report at least once every five (5) years following the award term period of performance to describe the continued use and to certify that it is in accordance with current regulations, licensing and the original purpose(s) of the award. This report shall also include updated current Fair Market Value (FMV) of the aggregate equipment and property, hereafter referred to as the complex. (see next paragraph)

Within 90 days of initial award, recipient shall submit to the Contracting Officer (CO) a projected progressive FMV (in 2020 dollars) in 5 year increments lasting 75 years (or whatever the design time period for the operational life of the reactor is; e.g. value at construction completion, value at 5/10/15/20/25/..../75 years after construction) of the entire operational complex constructed for the award. The projected progressive FMV (in current year dollars) shall be updated and submitted to the CO within 90 days following completion of the complex construction. The projected FMV will serve as a basis for determining when the US Government will surrender all interest in the title of the complex acquired/constructed in connection with this award. Values should be projections of expected sales price if complex were to be advertised widely and sold to an open and competitive market. Do not use depreciated or book value. When the FMV of the complex is less than \$5,000, the US government will surrender/abandon claim to title for the complex acquired/constructed in connection with this award. FMV calculations should consider anticipated liabilities and costs associated with maintenance and end of life remediation.

Recipient will remain liable for all maintenance, remediation, and end of life disposition activities associated with the complex throughout its entire lifecycle.

If recipient desires to sell or transfer the complex to a different entity at any time prior to full title transfer, contact the CO for guidance.

During the time the property continues to be used, the recipient must report to DOE on the continued use of the property, as specified in the award's Reporting Requirements Checklist and in accordance with 2 CFR § 200.329. Further, at the time recipient decides to no longer use the property for its originally authorized purpose, the recipient shall proceed with obtaining disposition instructions, as specified in the terms and conditions of this award.

In addition, should the recipient, during reactor operation, sell or have a change of control, the parties will follow 2 CFR § 910.368 and §910.370, as applicable.

(30)SUPPLIES (DECEMBER 2014)

See 2 CFR § 200.314 for requirements pertaining to supplies acquired under a Federal award. See also § 200.453 Materials and supplies costs, including costs of computing devices.

(31)INTANGIBLE PROPERTY (DECEMBER 2014)

Title to intangible property (as defined in 2 CFR § 200.59) acquired under a Federal award vests upon acquisition in the non-Federal entity. Intangible property includes trademarks, copyrights, patents and patent applications.

See 2 CFR § 200.315 for additional requirements pertaining to intangible property acquired under a Federal award. Also

see 2 CFR § 910.362 for amended requirements for Intellectual Property for For-Profit recipients.

(32)PROPERTY TRUST RELATIONSHIP (DECEMBER 2014)

Real property, equipment, and intangible property, that are acquired or improved with a Federal award must be held in trust by the non-Federal entity as trustee for the beneficiaries of the project or program under which the property was acquired or improved.

See 2 CFR § 200.316 for additional requirements pertaining to real property, equipment, and intangible property acquired or improved under a Federal award.

(33)INSOLVENCY, BANKRUPTCY OR RECEIVERSHIP

You shall immediately notify the DOE of the occurrence of any of the following events: (i) you or your parent's filing of a voluntary case seeking liquidation or reorganization under the Bankruptcy Act; (ii) your consent to the institution of an involuntary case under the Bankruptcy Act against you or your parent; (iii) the filing of any similar proceeding for or against you or your parent, or its consent to, the dissolution, winding-up or readjustment of your debts, appointment of a receiver, conservator, trustee, or other officer with similar powers over you, under any other applicable state or federal law; or (iv) your insolvency due to your inability to pay your debts generally as they become due.

Such notification shall be in writing and shall: (i) specifically set out the details of the occurrence of an event referenced in the above paragraph; (ii) provide the facts surrounding that event; and (iii) provide the impact such event will have on the project being funded by this award.

Upon the occurrence of any of the four events described in the first paragraph, DOE reserves the right to conduct a review of your award to determine your compliance with the required elements of the award (including such items as cost share, progress towards technical project objectives, and submission of required reports). If the DOE review determines that there are significant deficiencies or concerns with your performance under the award, DOE reserves the right to impose additional requirements, as needed, including (i) change your payment method; or (ii) institute payment controls.

Failure of the Recipient to comply with this term may be considered a material noncompliance of this financial assistance award by the Contracting Officer.

(34)NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) REQUIREMENTS

National Environmental Policy Act (42 USC 4321, *et seq.*). The recipient is restricted from taking any action using Federal funds, which would have an adverse effect on the environment or limit the choice of reasonable alternatives prior to DOE providing either a NEPA clearance or a final NEPA decision regarding this project. Prohibited actions include: [*Activities that cannot be performed before the NEPA clearance or decision is completed*].

This restriction does not preclude the recipient from: [*activities that can be performed before the NEPA clearance or decision is completed*].

If the recipient moves forward with activities that are not authorized for federal funding by the DOE Contracting Officer in advance of the final NEPA decision, the recipient is doing so at the risk of not receiving federal funding and such costs may not be recognized as allowable cost share.

Where this award includes construction activities, the recipient must submit an Environmental Evaluation Notification Form, addressing NEPA issues prior to DOE initiating the NEPA process.

DOE's decision whether and how to distribute federal funds under this award is subject to NEPA. NEPA requires Federal agencies to integrate environmental values into their decision-making processes by considering the potential environmental impacts of their proposed actions. For additional background on NEPA, please see DOE's NEPA website, at <http://nepa.energy.gov/>.

While NEPA compliance is a Federal agency responsibility and the ultimate decisions remain with DOE, the recipient is required to assist in the timely and effective completion of the NEPA process in the manner most pertinent to the project. If DOE determines certain records must be prepared to complete the NEPA review process (e.g., biological evaluations or environmental assessments), the costs to prepare the necessary records may be included as part of the project costs. The recipient may be required to submit one or more environmental check lists.

(35) DECONTAMINATION AND/OR DECOMMISSIONING (D&D) COSTS

Notwithstanding any other terms of this Agreement, the Government shall not be responsible for or have any obligation to the recipient for (i) Decontamination and/or Decommissioning (D&D) of any of the recipient's facilities, or (ii) any costs which may be incurred by the recipient in connection with the D&D of any of its facilities due to the performance of the work under this Agreement, whether said work was performed prior to or subsequent to the effective date of this Agreement.

(36) HISTORIC PRESERVATION

Prior to the expenditure of Federal funds to alter any structure or site, the Recipient is required to comply with the requirements of Section 106 of the National Historic Preservation Act (NHPA), consistent with DOE's 2009 letter of delegation of authority regarding the NHPA. Section 106 applies to historic properties that are listed in or eligible for listing in the National Register of Historic Places. In order to fulfill the requirements of Section 106, the recipient must contact the State Historic Preservation Officer (SHPO), and, if applicable, the Tribal Historic Preservation Officer (THPO), to coordinate the Section 106 review outlined in 36 CFR § 800. SHPO contact information is available at the following link: <http://www.ncshpo.org/find/index.htm>. THPO contact information is available at the following link: <http://www.nathpo.org/map.html>.

Section 110(k) of the NHPA applies to DOE funded activities. Recipients shall avoid taking any action that results in an adverse effect to historic properties pending compliance with Section 106.

Recipients should be aware that the DOE Contracting Officer will consider the recipient in compliance with Section 106 of the NHPA only after the Recipient has submitted adequate background documentation to the SHPO/THPO for its review, and the SHPO/THPO has provided written concurrence to the Recipient that it does not object to its Section 106 finding or determination. Recipient shall provide a copy of this concurrence to the Contracting Officer.

(37) REPORTING SUBAWARDS AND EXECUTIVE COMPENSATION

a. Reporting of first-tier subawards.

- Applicability. Unless you are exempt as provided in paragraph d. of this award term, you must report each action that obligates \$25,000 or more in Federal funds that does not include Recovery funds (as defined in section 1512(a)(2) of the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5) for a subaward to an entity (see definitions in paragraph e. of this award term).
- Where and when to report.
 - You must report each obligating action described in paragraph a.1. of this award term to <http://www.fsrs.gov>.
 - For subaward information, report no later than the end of the month following the month in which the

obligation was made. (For example, if the obligation was made on November 7, 2010, the obligation must be reported by no later than December 31, 2010.)

- What to report. You must report the information about each obligating action that the submission instructions posted at <http://www.fsr.gov> specify.

b. Reporting Total Compensation of Recipient Executives.

- 1) Applicability and what to report. You must report total compensation for each of your five most highly compensated executives for the preceding completed fiscal year, if
 - a) the total Federal funding authorized to date under this award is \$25,000 or more;
 - b) in the preceding fiscal year, you received;
 - 80 percent or more of your annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and
 - \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and

c) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>.)
- 2) Where and when to report. You must report executive total compensation described in paragraph b.1. of this award term:
 - a) As part of your registration profile at <http://www.sam.gov>.
 - b) By the end of the month following the month in which this award is made, and annually thereafter.

c. Reporting of Total Compensation of Subrecipient Executives.

- Applicability and what to report. Unless you are exempt as provided in paragraph d. of this award term, for each first-tier subrecipient under this award, you shall report the names and total compensation of each of the subrecipient's five most highly compensated executives for the subrecipient's preceding completed fiscal year, if;
 - in the subrecipient's preceding fiscal year, the subrecipient received;
 - 80 percent or more of its annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and
 - \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts), and Federal financial assistance subject to the Transparency Act (and subawards); and
 - The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>.)
- Where and when to report. You must report subrecipient executive total compensation described in paragraph c.1. of this award term:

- To the recipient.
- By the end of the month following the month during which you make the subaward. For example, if a subaward is obligated on any date during the month of October of a given year (i.e., between October 1 and 31), you must report any required compensation information of the subrecipient by November 30 of that year.

d. Exemptions

If, in the previous tax year, you had gross income, from all sources, under \$300,000, you are exempt from the requirements to report:

- 1) Subawards, and
- 2) The total compensation of the five most highly compensated executives of any subrecipient.

a) Definitions. For purposes of this award term:

Entity means all of the following, as defined in 2 CFR part 25:

- A Governmental organization, which is a State, local government, or Indian tribe;
- A foreign public entity;
- A domestic or foreign nonprofit organization;
- A domestic or foreign for-profit organization;
- A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.

Executive means officers, managing partners, or any other employees in management positions.

Subaward:

- This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.
- The term does not include your procurement of property and services needed to carry out the project or program (for further explanation, see Sec. .210 of the attachment to OMB Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations).
- A subaward may be provided through any legal agreement, including an agreement that you or a subrecipient considers a contract.

Subrecipient means an entity that:

- Receives a subaward from you (the recipient) under this award; and
- Is accountable to you for the use of the Federal funds provided by the subaward.

Total compensation means the cash and noncash dollar value earned by the executive during the recipient's or subrecipient's preceding fiscal year and includes the following (for more information see 17 CFR 229.402(c)(2)):

- Salary and bonus.
- Awards of stock, stock options, and stock appreciation rights. Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments.
- Earnings for services under non-equity incentive plans. This does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.

- Change in pension value. This is the change in present value of defined benefit and actuarial pension plans.
- Above-market earnings on deferred compensation which is not tax-qualified.
- Other compensation, if the aggregate value of all such other compensation (e.g. severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the executive exceeds \$10,000.

(38) SUBAWARD AND EXECUTIVE REPORTING

Additional administrative requirements necessary for DOE grants and cooperative agreements to comply with the Federal Funding and Transparency Act of 2006 (FFATA) are contained in 2 CFR, Part 170. (See: <http://www.eCFR.gov>). Prime awardees must register with the new FRS database and report the required data on their first tier subawardees. Prime awardees must report the executive compensation for their own executives as part of their registration profile in the System for Award Management (SAM).

(39) SYSTEM FOR AWARD MANAGEMENT AND UNIVERSAL IDENTIFIER REQUIREMENTS

Requirement for Registration in the System for Award Management (SAM)

Unless you are exempted from this requirement under 2 CFR 25.110, you as the recipient must maintain the currency of your information in SAM until you submit the final financial report required under this award or receive the final payment, whichever is later. This requires that you review and update the information at least annually after the initial registration, and more frequently if required by changes in your information or another award term.

If you had an active registration in the CCR, you have an active registration in SAM.

Requirement for Data Universal Numbering System (DUNS) Numbers. If you are authorized to make subawards under this award, you must notify potential subrecipients that no entity (see definition in paragraph C of this award term) may receive a subaward from you unless the entity has provided its DUNS number to you.

May not make a subaward to an entity unless the entity has provided its DUNS number to you.

Definitions

For purposes of this award term:

System for Award Management (SAM) means the Federal repository into which an entity must provide information required for the conduct of business as a recipient. Additional information about registration procedures may be found at the SAM Internet site (currently at <http://www.sam.gov>).

Data Universal Numbering System (DUNS) number means the nine-digit number established and assigned by Dun and Bradstreet, Inc. (D&B) to uniquely identify business entities. A DUNS number may be obtained from D&B by telephone (currently 866-705-5711) or the Internet (currently at <http://fedgov.dnb.com/webform>).

Entity, as it is used in this award term, means all of the following, as defined at 2 CFR § 25, subpart C:

A Governmental organization, which is a State, local government, or Indian Tribe;

A foreign public entity;

A domestic or foreign nonprofit organization;

A domestic or foreign for-profit organization; and

A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.

Subaward:

This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.

The term does not include your procurement of property and services needed to carry out the project or program (for further explanation, see Sec. .210 of the attachment to OMB Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations).

A subaward may be provided through any legal agreement, including an agreement that you consider a contract.

Subrecipient means an entity that:

Receives a subaward from you under this award; and

Is accountable to you for the use of the Federal funds provided by the subaward.

(40)FINAL INCURRED COST AUDIT (DECEMBER 2014)

In accordance with 2 CFR § 200 as amended by 2 CFR § 910, DOE reserves the right to initiate a final incurred cost audit on this award. If the audit has not been performed or completed prior to the closeout of the award, DOE retains the right to recover an appropriate amount after fully considering the recommendations on disallowed costs resulting from the final audit.

(41)INDEMNITY

The Recipient shall indemnify the Government and its officers, agents, or employees for any and all liability, including litigation expenses and attorneys' fees, arising from suits, actions, or claims of any character for death, bodily injury, or loss of or damage to property or to the environment, resulting from the project, except to the extent that such liability results from the direct fault or negligence of Government officers, agents or employees, or to the extent such liability may be covered by applicable allowable costs provisions.

(42)FINANCIAL COMMITMENT/FUNDING PLAN

Not later than 90 days after the effective date of the award:

a. The Recipient shall provide to DOE an updated total project cost estimate along with evidence of firm commitments for the full private sector share of the project cost. Such evidence may include executed loans, bond financing agreements, state or local grants, and third party contribution agreements. For each non-governmental source of cost-sharing, the Recipient shall provide audited financial statements for the most recent two years.

b. If firm commitments for the full private sector share of the project cost have not been secured, Recipient shall provide evidence of firm commitments made to date, as set forth in paragraph a, and a detailed Funding Plan in accordance with the requirements set forth below:

- The Funding Plan will demonstrate a reasonable plan to obtain the balance of funding for the private sector share of the project cost. The Funding Plan must identify all anticipated sources of the private sector cost-share such as bank loans, bond offerings, state or local grants, and equity contributions.
- The Recipient shall provide a full description of any limitations, conditions or other factors that could affect the availability of funding. If third party financing will be a source of project funds, the Recipient shall discuss the timing, conditionality and terms and conditions of such financing.
- Audited financial statements for the most recent two fiscal years shall be provided for each non-governmental source of funds. If a source does not have audited financial statements, that source should provide equivalent financial statements prepared by the party, in accordance with Generally Accepted Accounting Principles, and certified as to accuracy and completeness by the Chief Financial Officer of the party providing the statements.

- The Recipient shall obtain and provide a commitment letter from each source, signed by an officer of the corporation or other entity that is authorized to commit the funding to the proposed project. The amount of funds to be provided, the timing of the funding, and any contingencies, should be specified. Commitment letters should identify the type of proposed cost sharing (e.g., cash, services, and/or property) to be contributed.
- If in-kind contributions of property or services are proposed, the Recipient shall provide support for their valuation and explain how the valuation was determined.
- If the project will be financed on a non-recourse basis, the Recipient shall provide a working financial model (in MS Excel 2003 or 2007) that provides projections of the project including an income statement, balance sheet, cash flow statement, and sources and uses of funds statement, all on an annual basis with appropriate supporting schedules. The financial projections should be developed in this financial model, commencing with the initial project development phase and extending through the period of operations needed to obtain funding. The model should be provided in electronic form including cell formulas so that review of the model assumptions and sensitivity calculations may be facilitated. The recipient shall provide a description and explanation for each of the financial, economic, and operating assumptions for the project. The assumptions should be consistent with and supported by the information provided in the project cost estimate.

In the event, DOE determines that the information provided by Recipient is inadequate to assure the availability of full funding for the private sector share of the project cost, DOE reserves the right, at DOE's discretion, to: (1) stop payment, (2) renegotiate the project scope and/or payment schedule, or (3) after Recipient is provided 30 days advance written notice and opportunity to cure, declare the grant terminated by mutual agreement. Should DOE declare the grant terminated, the Recipient shall be entitled to payment of DOE's share of allowable project cost incurred prior to the date of termination plus the reasonable cost of terminating contracts. DOE's maximum liability for project cost in the event of termination is [enter amount of max liability].

(43) LOBBYING RESTRICTIONS (MARCH 2012)

By accepting funds under this award, you agree that none of the funds obligated on the award shall be expended, directly or indirectly, to influence congressional action on any legislation 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.

(44) CORPORATE FELONY CONVICTION AND FEDERAL TAX LIABILITY ASSURANCES (MARCH 2014)

By entering into this agreement, the undersigned attests that [*insert corporation name*] has not been convicted of a felony criminal violation under Federal law in the 24 months preceding the date of signature.

The undersigned further attests that [*insert corporation name*] does not have any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

For purposes of these assurances, the following definitions apply:

A Corporation includes any entity that has filed articles of incorporation in any of the 50 states, the District of Columbia, or the various territories of the United States [but not foreign corporations]. It includes both for-profit and non-profit organizations.

(45) NONDISCLOSURE AND CONFIDENTIALITY AGREEMENTS ASSURANCES (JUNE 2015)

By entering into this agreement, the undersigned attests that [*insert awardee name*] does not and will not require its employees or contractors to sign internal nondisclosure or confidentiality agreements or statements prohibiting or otherwise restricting its employees or contractors from lawfully reporting waste, fraud, or abuse to a designated

investigative or law enforcement representative of a Federal department or agency authorized to receive such information.

The undersigned further attests that *[insert awardee name]* does not and will not use any Federal funds to implement or enforce any nondisclosure and/or confidentiality policy, form, or agreement it uses unless it contains the following provisions:

a. "These provisions are consistent with and do not supersede, conflict with, or otherwise alter the employee obligations, rights, or liabilities created by existing statute or Executive order relating to (1) classified information, (2) communications to Congress, (3) the reporting to an Inspector General of a violation of any law, rule, or regulation, or mismanagement, a gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety, or (4) any other whistleblower protection. The definitions, requirements, obligations, rights, sanctions, and liabilities created by controlling Executive orders and statutory provisions are incorporated into this agreement and are controlling."

The limitation above shall not contravene requirements applicable to Standard Form 312, Form 4414, or any other form issued by a Federal department or agency governing the nondisclosure of classified information.

Notwithstanding provision listed in paragraph (a), a nondisclosure or confidentiality policy form or agreement that is to be executed by a person connected with the conduct of an intelligence or intelligence-related activity, other than an employee or officer of the United States Government, may contain provisions appropriate to the particular activity for which such document is to be used. Such form or agreement shall, at a minimum, require that the person will not disclose any classified information received in the course of such activity unless specifically authorized to do so by the United States Government. Such nondisclosure or confidentiality forms shall also make it clear that they do not bar disclosures to Congress, or to an authorized official of an executive agency or the Department of Justice, that are essential to reporting a substantial violation of law.

(46) DATA MANAGEMENT PLAN (SEPT 2015)

a. (1) Not later than 90 days after the effective date of the award the Recipient must provide the Contracting Officer with a Data Management Plan. A Data Management Plan ("DMP") explains how data generated in the course of the research or work performed under an assistance award will be shared and preserved or, when justified, explains why data sharing or preservation is not possible or scientifically appropriate. (2) In the event the Recipient fails to submit the DMP within 90 days after award or DOE determines that the information provided by the Recipient in its DMP does not meet the requirements in section (b), DOE may take one or more of the actions identified in 2 CFR 200.388, including, but not limited to, temporarily withholding payments to the Recipient pending correction of the deficiency, or wholly or partially suspending or terminating the Federal award.

b. DMP Requirements - In order for a DMP to be considered acceptable, the DMP must address the following:

- At a minimum, the DMP must describe how data sharing and preservation will enable validation of the results from the proposed work, or how results could be validated if data are not shared or preserved.
- The DMP must provide a plan for making all research data displayed in publications resulting from the proposed work digitally accessible at the time of publication. This includes data that are displayed in charts, figures, images, etc. In addition, the underlying digital research data used to generate the displayed data should be made as accessible as possible in accordance with the principles stated above. This requirement could be met by including the data as supplementary information to the published article, or through other means. The published article should indicate how these data can be accessed.
- The DMP should consult and reference available information about data management resources to be used in the course of the proposed research work. In particular, a DMP that explicitly or implicitly commits data management resources at a facility beyond what is conventionally made available to approved users should be accompanied by written approval from that facility. In determining the resources available for data management at DOE User

Facilities, researchers should consult the published description of data management resources and practices at that facility and reference it in the DMP. Information about other DOE facilities can be found in the additional guidance from the sponsoring program.

- The DMP must protect confidentiality, personal privacy, Personally Identifiable Information, and U.S. national, homeland, and economic security; recognize proprietary interests, business confidential information, and intellectual property rights; avoid significant negative impact on innovation, and U.S. competitiveness; and otherwise be consistent with all laws (e.g., export control laws), and DOE regulations, orders, and policies.

c. Data Determination for a DMP

The Principal Investigator should determine which data should be the subject of the DMP and, in the DMP, propose which data should be shared and/or preserved in accordance with the DMP Requirements noted above.

For data that will be generated through the course of the proposed research/work, the Principal Investigator should indicate what types of data should be protected from immediate public disclosure by DOE (referred to as “protected data”) and what types of data that DOE should be able to release immediately. Similarly, for data developed outside of the proposed research work at private expense that will be used in the course of the proposed research work, the Principal Investigator should indicate whether that type of data will be subject to public release or kept confidential (referred to as “limited rights data”). Any use of limited rights data or labeling of data as “protected data” must be consistent with the DMP Requirements noted above.

d. Suggested Elements for a DMP - The following list of elements for a DMP provides suggestions regarding the data management planning process and the structure of the DMP:

- **Data Types and Sources:** A brief, high-level description of the data to be generated or used through the course of the proposed research work and which of these are considered digital research data necessary to validate the research findings or results.
- **Content and Format:** A statement of plans for data and metadata content and format including, where applicable, a description of documentation plans, annotation of relevant software, and the rationale for the selection of appropriate standards. Existing, accepted community standards should be used where possible. Where community standards are missing or inadequate, the DMP could propose alternate strategies for facilitating sharing, and should advise the sponsoring program of any need to develop or generalize standards.
- **Sharing and Preservation:** A description of the plans for data sharing and preservation. This should include, when appropriate: the anticipated means for sharing and the rationale for any restrictions on who may access the data and under what conditions; a timeline for sharing and preservation that addresses both the minimum length of time the data will be available and any anticipated delay to data access after research findings are published; any special requirements for data sharing, for example, proprietary software needed to access or interpret data, applicable policies, provisions, and licenses for re-use and re-distribution, and for the production of derivatives, including guidance for how data and data products should be cited; any resources and capabilities (equipment, connections, systems, software, expertise, etc.) requested in the research proposal that are needed to meet the stated goals for sharing and preservation (this could reference the relevant section of the associated research proposal and budget request); and whether/where the data will be preserved after direct project funding ends and any plans for the transfer of responsibilities for sharing and preservation.
- **Protection:** A statement of plans, where appropriate and necessary, to protect confidentiality, personal privacy, Personally Identifiable Information, and U.S. national, homeland, and economic security; recognize proprietary interests, business confidential information, and intellectual property rights; and avoid significant negative impact on innovation, and U.S. competitiveness.
- **Rationale:** A discussion of the rationale or justification for the proposed data management plan including, for example, the potential impact of the data within the immediate field and in other fields, and any broader societal impact.

e. Additional Guidance

In determining which data should be shared and preserved, researchers must consider the data needed to validate research findings as described in the DMP Requirements, and are encouraged to consider the potential benefits of their data to their own fields of research, fields other than their own, and society at large.

DMPs should reflect relevant standards and community best practices and make use of community accepted repositories whenever practicable.

Costs associated with the project description/scope of work and resources articulated in a DMP may be included in the proposed research budget as permitted by the applicable cost principles.

To improve the discoverability of and attribution for datasets created and used in the course of research, DOE encourages the citation of publicly available datasets within the reference section of publications, and the identification of datasets with persistent identifiers such as Digital Object Identifiers (DOIs). In most cases, DOE can provide DOIs free of charge for data resulting from DOE-funded research through its Office of Scientific and Technical Information (OSTI) DataID Service.

f. Definitions

Data Preservation: Data preservation means providing for the usability of data beyond the lifetime of the research activity that generated them.

Data Sharing: Data sharing means making data available to people other than those who have generated them. Examples of data sharing range from bilateral communications with colleagues, to providing free, unrestricted access to anyone through, for example, a web-based platform.

Digital Research Data: The term digital data encompasses a wide variety of information stored in digital form including: experimental, observational, and simulation data; codes, software and algorithms; text; numeric information; images; video; audio; and associated metadata. It also encompasses information in a variety of different forms including raw, processed, and analyzed data, published and archived data.

Research Data: The recorded factual material commonly accepted in the scientific community as necessary to validate research findings, but not any of the following: preliminary analyses, drafts of scientific papers, plans for future research, peer reviews, or communications with colleagues. This 'recorded' material excludes physical objects (e.g., laboratory samples). Research data also do not include:

- Trade secrets, commercial information, materials necessary to be held confidential by a researcher until they are published, or similar information which is protected under law; and
- Personnel and medical information and similar information the disclosure of which would constitute a clearly unwarranted invasion of personal privacy, such as information that could be used to identify a particular person in a research study."

Validate: In the context of DMPs, validate means to support, corroborate, verify, or otherwise determine the legitimacy of the research findings. Validation of research findings could be accomplished by reproducing the original experiment or analyses; comparing and contrasting the results against those of a new experiment or analyses; or by some other means.

(47)REPORTING OF MATTERS RELATED TO RECIPIENT INTEGRITY AND PERFORMANCE (DECEMBER 2015)

a. General Reporting Requirement

If the total value of your currently active grants, cooperative agreements, and procurement contracts from all Federal awarding agencies exceeds \$10,000,000 for any period of time during the period of performance of this Federal award, then you as the recipient during that period of time must maintain the currency of information reported to the System for Award Management (SAM) that is made available in the designated integrity and performance system (currently the Federal Awardee Performance and Integrity Information System FAPIIS)) about civil, criminal, or administrative proceedings described in paragraph 2 of this award term and condition. This is a statutory requirement under section 872 of Public Law 110-417, as amended (41 U.S.C. 2313). As required by section 3010 of Public Law 111-212, all information posted in the designated integrity and performance system on or after April 15, 2011, except past performance reviews required for Federal procurement contracts, will be publicly available.

b. Proceedings About Which You Must Report

Submit the information required about each proceeding that:

1. Is in connection with the award or performance of a grant, cooperative agreement, or procurement contract from the Federal Government;
2. Reached its final disposition during the most recent five year period; and
3. Is one of the following:
 - 1) A criminal proceeding that resulted in a conviction, as defined in paragraph 5 of this award term and condition;
 - 2) A civil proceeding that resulted in a finding of fault and liability and payment of a monetary fine, penalty, reimbursement, restitution, or damages of \$5,000 or more;
 - 3) An administrative proceeding, as defined in paragraph 5. of this award term and condition, that resulted in a finding of fault and liability and your payment of either a monetary fine or penalty of \$5,000 or more or reimbursement, restitution, or damages in excess of \$100,000; or
 - 4) Any other criminal, civil, or administrative proceeding if:
 - a) It could have led to an outcome described in paragraph 2.c.(1), (2), or (3) of this award term and condition;
 - b) It had a different disposition arrived at by consent or compromise with an acknowledgment of fault on your part; and
 - c) The requirement in this award term and condition to disclose information about the proceeding does not conflict with applicable laws and regulations.

c. Reporting Procedures

Enter in the SAM Entity Management area the information that SAM requires about each proceeding described in paragraph 2 of this award term and condition. You do not need to submit the information a second time under assistance awards that you received if you already provided the information through SAM because you were required to do so under Federal procurement contracts that you were awarded.

d. Reporting Frequency

During any period of time when you are subject to the requirement in paragraph 1 of this award term and condition, you must report proceedings information through SAM for the most recent five year period, either to report new information about any proceeding(s) that you have not reported previously or affirm that there is no new information to report. Recipients that have Federal contract, grant, and cooperative agreement awards with a cumulative total value greater than \$10,000,000 must disclose semiannually any information about the criminal, civil, and administrative proceedings.

e. Definitions

For purposes of this award term and condition:

1. Administrative proceeding means a non-judicial process that is adjudicatory in nature in order to make a determination of fault or liability (e.g., Securities and Exchange Commission Administrative proceedings, Civilian Board of Contract Appeals proceedings, and Armed Services Board of Contract Appeals proceedings). This includes proceedings at the Federal and State level but only in connection with performance of a Federal contract or grant. It does not include audits, site visits, corrective plans, or A. Reporting of Matters Related to Recipient Integrity and Performance.
2. Conviction, for purposes of this award term and condition, means a judgment or conviction of a criminal offense by any court of competent jurisdiction, whether entered upon a verdict or a plea, and includes a conviction entered upon a plea of nolo contendere.
3. Total value of currently active grants, cooperative agreements, and procurement contracts includes—
 - 1) Only the Federal share of the funding under any Federal award with a recipient cost share or match; and
 - 2) The value of all expected funding increments under a Federal award and options, even if not yet exercised.

(48)PERSONNEL (DECEMBER 2014)

The individual named in Block 14 of the Assistance Agreement is designated a key person; additional key personnel are listed below. Changes to designated key personnel or participating organizations require prior written DOE approval in accordance with 2 CFR 200.308.

To be completed at time of award

(49)PROHIBITION ON PERSONALLY IDENTIFIABLE INFORMATION (PII)

The Recipient / Contractor must not provide PII, either printed or electronic, to the U.S. Department of Energy within any deliverable, report or submittal under this agreement / contract. Personally Identifiable Information (PII) is any information maintained by the Contractor / Recipient about an individual, including but not limited to, education, financial transactions, medical history and criminal or employment history, and information that can be used to distinguish or trace an individual's identity, such as his/her name, social security number, date and place of birth, mother's maiden name, biometric data, etc., and including any other personal information that is linked or linkable to a specific individual. This requirement must be incorporated into any and all subcontracts or subagreements to the lowest tier.

(50)CONFIDENTIAL BUSINESS INFORMATION

The Government acknowledges that the recipient or its subcontractors may provide to DOE confidential or proprietary business, technical or financial information. DOE will manage this information consistent with the Trade Secrets Act, 18 U.S.C. §1905. DOE will also process any request for release of this information to the public consistent with the Freedom of Information Act (FOIA), 5 U.S.C. §552 and DOE's FOIA regulations, 10 C.F.R Part 1004. DOE agrees that any confidential business, financial, and legal information provided by the recipient is not "data" within the meaning of the Rights in Data clause.

(51)CHANGE OF CONTROL

Change of Control is defined as any of the following:

- 1) Any event by which any individual or entity other than the recipient becomes the beneficial owner of more than 50% of total voting power of the voting stock of the recipient;

- 2) The recipient merges with or into any entity other than a transaction in which the shares of the recipient's voting stock are converted into a majority of the voting stock of the surviving entity.
- 3) The sale, lease or transfer of all or substantially all of the assets of the recipient to any individual or entity other than the recipient in one or a series of related transactions.
- 4) The adoption of a plan relating to the liquidation or dissolution of the recipient; or
- 5) Where the recipient is a wholly-owned subsidiary at the time of award or novation, and the recipient's parent entity undergoes a Change of Control as defined in this section.

Upon any Change of Control or if DOE requests the information in writing, the recipient must provide the Contracting Officer with documentation identifying all parties who exercise control in the recipient at the time of award.

When there is a Change of Control of a recipient, or the recipient has reason to know a Change of Control is likely, the recipient must notify the Contracting Officer within thirty (30) days of its knowledge of such Change of Control. Such notification must include, at a minimum, copies of documents necessary to reflect the transaction that resulted or will result in the Change of Control, and identification of all entities, individuals or other parties to such transaction. Failure to notify the Contracting Officer of a Change of Control is grounds for suspension of the award or termination for failure to comply with the terms and conditions of the award.

The Contracting Officer must authorize a Change of Control for the purposes of the award. Failure to receive the Contracting Officer's authorization for a Change of Control may lead to a suspension of the award, termination for failure to comply with the terms and conditions of the award, or imposition of special award conditions pursuant to 10 CFR 600.304. Special award conditions may include, but are not limited to: Additional reporting requirements related to the Change of Control; and Suspension of payments due to the recipient.

(52)AWARD PERIOD DURATION AND EXTENSION

Awards are for 5 – 7 years, as proposed by the applicant and approved by DOE (see term titled “Award Project Period and Budget Periods”. In addition, awards may be extended; such extensions may be exercised more than once, but the total extension of performance hereunder shall not exceed 3 years (for a total period of performance of 8 – 10 years). Note that these extensions are not considered “one-time cost extensions”, as contemplated by 2 CFR 200.308(d)(2).

Period of performance extensions must remain within the programmatic boundaries of the original Funding Opportunity Announcement (FOA) and be considered meritorious under the original merit review criteria of the announcement (FOA). Substantial changes to the project’s budget and/or scope or objectives will not be approved under this provision if the changes would not be acceptable under the original announcement.

Should the Recipient desire an extension of the period of performance, a written request is to be provided to the Contracting Officer no later than six months prior to the scheduled expiration of the project period. The request must detail the rationale/justification for the extension, as well as detail any other changes needed for the award to implement the extended period of performance.

The Contracting Officer will review the request and consider the value to the overall success of the project or increased significance and value to the extended project when reviewing request(s) for period of performance extensions. The Contracting Officer will provide the Recipient a preliminary written notice of its intent to extend the period of performance extension within 60 days after receipt of the request and request the recipient provide a revised project plan, budget and supporting documentation, and any other needed information. The preliminary notice does not commit the Government to an extension to the award.

After submission of any of the required information and DOE review and approval of it, the Contracting Officer may

exercise the period of performance extension by written amendment to the award.

(53)ONE TIME EXTENSION

As permitted by 2 CFR 200.308(d)(2), a one-time extension of the period of performance by up to 12 months. However, the following restriction applies: Unilateral no cost time extensions by the recipient will NOT be permitted under this award.

The recipient must request any extension from DOE at least 3 months prior to the award's period of performance end date, unless otherwise agreed to by DOE. Any no cost time extension must receive prior written approval from the DOE Contracting Officer.

(54)SPECIAL DISPOSITION OF PROPERTY AT THE END OF THE AWARD

The Government does not anticipate furnishing any Government Furnished Property (GFP) for this award. However, there will be substantial awardee acquired property. Property acquired under the award will need to be dispositioned at the end of the award; this is typically done by the awardee either returning it to DOE or by the awardee reimbursing DOE for the fair market value of the cost sharing which DOE contributed to the award. As this is a cost shared award under the financial assistance rules an awardee would normally reimburse DOE for the fair market value of DOE's share of any property acquired during performance of the award. However, DOE intends to permit the recipient to continue to use the property after the project period until its useful life (and value) are exhausted. The intent of the ARD Project is for the recipient to own the reactor at the end of the program.

(55)COOPERATIVE AGREEMENT TERMINATION OR RECIPIENT SUSPENSION OF PROJECT WORK

In addition to the requirements set forth at 2 CFR 200.339(a)(4), regarding awardee termination of the award or suspension of work, the awardee must provide the Contracting Officer written notification of its intent to terminate or otherwise suspend work under the award at least 90 days prior to any termination decision/proposed termination date or suspension of work. DOE and the recipient must concur on the terms of the termination or work suspension. To protect DOE's interest, and notwithstanding other terms and conditions of this award, DOE will become the owner of all intellectual property acquired or developed under the agreement with unlimited rights in that intellectual property unless otherwise agreed to in writing by the Contracting Officer. Also, if the recipient terminates the award early prior to completion of the objectives or otherwise suspends work, property and equipment acquired under the award must be dispositioned in accordance with 2 CF 200.311 and 2 CFR 200.313.

(56)COST SHARING ON INVOICES SUBMITTED FOR PAYMENT

The recipient must at least meet its cost sharing minimum obligation (as calculated based on total cost incurred to date) on every invoice submitted for payment to ensure that the awardee's cost sharing requirement is always met on an on-going basis throughout performance, unless otherwise authorized by the Contracting Officer.

The recipients must contribute the required cost share amount incrementally over the life of the award. Standard Form 270, Request for Advance or Reimbursement (hereafter "Invoice") is to be used for invoices. The recipient is required to submit an Invoice to DOE for payment for reimbursement as the project progresses; the recipient's cost share amount listed for each billing period must always reflect not less than 50 percent from nonfederal sources overall cost share ratio for the current Budget Period, i.e., the amount of cost sharing included on each Invoice – and the cumulative amount of cost sharing listed relative to the total costs billed - must always be at least equal to the figure calculated by multiplying the total costs of the project incurred to date (including costs incurred by the FFRDC/NL) by the cost sharing percentage required by the award. If the recipient has incurred a greater amount of cost sharing than is required at that point in the Budget Period, the higher amount of cost sharing may be reflected on the Invoice - but in no case may the Invoice ever

reflect a lower amount of cost share than is required.

(57)TEST AND EVALUATION

Test and evaluation of the advanced demonstration reactors will primarily be done by the U.S. Nuclear Regulatory Commission (NRC) for reactors to be licensed by the NRC.

(58)MILESTONE PAYMENTS

This award uses a milestone for payments approach. Specifically, payments will be made upon the successful completion of performance milestones as proposed by the applicant or as negotiated with DOE.

The project milestones, along with milestone payments, performance metrics and measurements, and quality assurance requirements, submitted and approved in the application shall be maintained and implemented by the recipient throughout the project period of performance. Regular updates to the milestones shall be made by the recipient, as necessary, during project performance. All updates shall be submitted to DOE for review and approval. These milestones must include structuring budget periods around go/no-go decisions, special reporting requirements and milestone-based payment schedules.

Invoice payments will be tied to the successful achievement of milestones. As this is a cost-reimbursable award, payments will only be made for actual allowable, allocable, and reasonable costs incurred. Accordingly, invoices submitted can only include actual costs made. Milestones and the associated milestone based payment amounts proposed and negotiated/accepted by the parties prior to award are estimates and are cost caps that may not be exceeded, except as agreed to in writing by the Contracting Officer. Upon successful completion of a milestone, the recipient may invoice for the achievement of that milestone, at the actual amount of costs incurred reaching that milestone, in an amount not to exceed the milestone cost cap.

Any changes to proposed application milestone-based payments or proposed different/additional milestones will be proposed by the recipient at least 120 calendar days prior to the milestone completion date for DOE review and approval and negotiation with the recipient, if necessary. If the parties cannot agree on the milestones, milestone payments, amounts, etc., the Contracting Officer will issue a unilateral decision regarding these which is not subject to appeal.

The award not only requires milestone achievement for certain payments but also for continuation awards under the project. These will be done to include "off ramps" during performance should the Department need to down select the number of awards.

(59)LIABILITY DURING OPERATION OF THE ADVANCED DEMONSTRATION REACTOR

Notwithstanding any other terms of this Agreement, the Government shall not be responsible for or have any obligation to the recipient for operation of the advanced demonstration reactor or other recipient facilities operated in connection with the reactor, including any costs which may be incurred by the recipient in connection with the operation of the reactor or related facilities due to the performance of the work under this Agreement, whether said work was performed prior to or subsequent to the effective date of this Agreement or following the end of the project period of this agreement.

(60)POST AWARD CONFERENCE

The recipient is required to attend a post-award conference. The recipient will contact the designated TPO for details regarding this meeting. DOE may limit the number of recipient personnel attending. All recipient personnel attending must have a valid ID for security clearance into the building.

(61)PROJECT MANAGEMENT PLAN

The Project Management Plan (PMP) submitted and approved in the application shall be maintained and implemented by the recipient throughout the project period of performance. Regular updates to the PMP shall be made by the recipient, as necessary, during project performance. All updates shall be submitted to DOE for review and approval.

Within 30 days following the post award conference as a first task, the recipient will revise the version of the PMP that was submitted with its application by including details from the negotiation process. The PMP is updated by the recipient as the project progresses, and the recipient uses this plan to report schedule and budget variances. The PMP contains the project cost and schedule baseline and is used as a basis to report budget and schedule variances.

Post award, in conjunction with a PMP, DOE will jointly develop quality assurance requirements and plans with the awardee to monitor performance to ensure standards are met. The PMP will not specify how the award recipient will do the work, but rather describe the work in terms of outcomes or results. The PMP will provide flexibility to account for variations and changes in requirements as the project progresses.

(62)COORDINATION AND MANAGEMENT PLAN

If the recipient uses multiple project managers (PMs), the recipient must provide for DOE approval a “Coordination and Management Plan” that describes the organization structure of the project as it pertains to the designation of multiple PMs. This plan must be updated by the recipient throughout the project period, as necessary (with a copy of any update provided to DOE). The plan must include (at a minimum):

- Process for making decisions on scientific/technical direction
- Publications
- Intellectual property issues
- Communication plans
- Procedures for resolving conflicts
- PMs’ roles and administrative, technical, and scientific responsibilities for the project.

(63)WAIVER REQUESTS: PERFORMANCE OF WORK IN THE UNITED STATES

All work performed under DOE awards must be performed in the United States. This requirement does not apply to the purchase of supplies and equipment less than \$250,000; however, the Prime Recipient should make every effort to purchase supplies and equipment within the United States. The Prime Recipient must flow down this requirement to its subrecipients. DOE may deny reimbursement for the work conducted outside the United States and such costs may not be recognized as allowable recipient cost share. The Prime Recipient is responsible should any work under this award be performed outside the United States, absent a waiver, regardless whether the work is performed by the Prime Recipient, subrecipients, contractors or other project partners. There may be limited circumstances where it is in the interest of the project to perform a portion of the work outside the United States. To seek a waiver of the Performance of Work in the United States requirement, the applicant must submit a written waiver request to the DOE Contracting Officer.

(64)DOE APPROVAL FOR SUBAWARDS AND SUBCONTRACTS

The Recipient is required to obtain DOE approval on all subcontracts or subawards over \$5 million, including all options and/or material modifications thereto, unless these are already otherwise listed in the award’s approved project narrative and/or as listed below: *LIST*

For subawards, DOE intends to allow the recipient to make subawards to entities that are in the economic interest of the United States; this would be to companies that are either United States-owned, or that are incorporated or organized under the laws of any State and that have a parent company which is incorporated or organized under the laws of a

country which affords to the United States-owned companies opportunities, comparable to those afforded to any other company, to participate in any joint venture similar to those authorized under the Energy Policy Act of 1992, 42 U.S.C. 13525; affords to United States-owned companies local investment opportunities comparable to those afforded to any other company; and affords adequate and effective protection for the intellectual property rights of United States-owned companies.

In addition, any subaward entity receiving funds of more than \$200,000 under the DOE Advanced Small Modular Reactor Research and Development (R&D) program is ineligible to receive funding under this award for the advanced reactor demonstration project.

(65) TECHNICAL DIRECTION

Performance of the work under this award shall be subject to the technical direction of the DOE Technical Project Officer (TPO). The term “technical direction” is defined to include, without limitation:

- Providing direction to the Recipient that redirects award effort, shift work emphasis between work areas or tasks, require pursuit of certain lines of inquiry, fill in details, or otherwise serve to accomplish the project.
- Providing written information to the Recipient that assists in interpreting drawings, specifications, or technical portions of the work description.
- Reviewing and, where required by the award, approving, technical reports, drawings, specifications, and technical information to be delivered by the Recipient to the Government.
- The Recipient will receive a copy of the written TPO designation from the Contracting Officer. It will specify the extent of the TPO's authority to act on behalf of the Contracting Officer.

Technical direction must be within the scope of work stated in the award. The TPO does not have the authority to, and may not, issue any technical direction that—

- Constitutes an assignment of additional work outside the Project Narrative;
- Constitutes a change;
- In any manner causes an increase or decrease in the total estimated award project cost or the time required for award performance;
- Changes any of the expressed terms, conditions or specifications of the award; or
- Interferes with the Recipient's right to perform the terms and conditions of the award.

All technical direction shall be issued in writing by the TPO.

The Recipient must proceed promptly with the performance of technical direction duly issued by the TPO in the manner prescribed by this clause and within its authority under the provisions of this clause. If, in the opinion of the Recipient, any instruction or direction by the TPO falls within one of the categories defined in this clause, the Recipient must not proceed and must notify the Contracting Officer in writing within five (5) working days after receipt of any such instruction or direction and must request the Contracting Officer to modify the award accordingly. Upon receiving the notification from the Recipient, the Contracting Officer must—

Advise the Recipient in writing within thirty (30) days after receipt of the Recipient's letter that the technical direction is within the scope of the award effort and does not constitute a change under the Changes clause of the award;
Advise the Recipient in writing within a reasonable time that the Government will issue a written change order; or
Advise the Recipient in writing within a reasonable time not to proceed with the instruction or direction of the TPO.

A failure of the Recipient and Contracting Officer either to agree that the technical direction is within the scope of the award or to agree upon the award action to be taken with respect to the technical direction will be subject to a final decision by the Contracting Officer.

(66) TECHNICAL PROJECT OFFICER/PROJECT MANAGER AUTHORITY

The DOE Technical Project Officer/Project Manager assigned to this award is not authorized to issue, and the Recipient is not required to follow, any technical advice that constitutes work which:

- is not within the agreed work scope approved by the award;
- in any manner causes an increase or decrease in the total estimated Project cost or in the time required for performance of the Project;
- has the effect of changing any of the terms or conditions of the award;
- unduly interferes with the recipient's contractual negotiations or obligations with third-parties;
- unduly interferes with recipient's health, safety, security, and environmental obligations whether provided by statute, ordinance or regulation ("law"), or recipient corporate policy that is consistent with law; or
- interferes with the recipient's right to perform the project in accordance with the terms and conditions of the award.

(67) AWARD TERMINATION

Government financial assistance rules permit a cooperative agreement to be terminated in whole or in part by the non-Federal entity upon sending to DOE written notification setting forth the reasons for such termination, the effective date, and, in the case of partial termination, the portion to be terminated. However, given the importance of the ARD, an awardee can only terminate the award with prior notice to DOE at least 90 days prior to the planned termination date, unless a different time period is approved by the Contracting Officer.

(68) ADMINISTRATION BY NON-FEDERAL PERSONNEL

The Government may use non-Federal personnel to conduct award oversight and administrative activities. Non-Federal personnel used must sign conflict of interest and non-disclosure agreements prior to doing any of this kind of work regarding the award.

(69) RECIPIENT INSPECTION REQUIREMENTS

The recipient is responsible for performing or having performed all inspections and tests necessary to substantiate that the work done under this cooperative agreement conforms to award requirements, including the award's project plan as well as any applicable technical requirements for specified manufacturers' parts. DOE may also perform specialized inspections or tests.

"Work," as used in this term, includes services performed, workmanship, and material furnished or used in performing work under the award.

The recipient shall provide and maintain an inspection system acceptable to the Government covering the work under this award.

Complete records of all inspection work performed by the recipient shall be maintained and made available to the Government during award performance and for as long afterwards as the award requires.

The Government has the right to inspect and test all work called for by the award, to the extent practicable at all places and times during the term of the award. The Government shall perform inspections and tests in a manner that will not unduly delay the work.

If any of the work performed does not conform with award requirements, the Government may require the recipient to perform the work again in conformity with award requirements. In accordance with 2 CFR § 200.338, if the recipient fails to comply with Federal statutes, regulations or the terms and conditions of the award, DOE may impose one or more of the

additional specific award conditions described in § 200.207 *Specific conditions*, as appropriate for the circumstances. In addition to the additional specific award conditions in §200.207, DOE may take one or more of the actions listed below. The additional specific award conditions in § 200.207 which may be imposed may include, but are not limited to:

- Withholding authority to proceed to the next phase until receipt of evidence of acceptable performance within a given period of performance;
- Requiring additional, more detailed financial reports;
- Requiring additional project monitoring;
- Requiring the recipient to obtain technical or management assistance; or
- Establishing additional prior approvals.

When imposing additional specific award requirements, DOE will notify the recipient in writing as to:

- The nature of the additional requirements;
- The reason why the additional requirements are being imposed;
- The nature of the action needed to remove the additional requirement, if applicable;
- The time allowed for completing the actions if applicable;
- The method for requesting reconsideration of the additional requirements imposed, and;
- Which actions authorized under 2 CFR 200.388 DOE may take if the recipient does not achieve compliance by the time specified in the notice, or does not provide satisfactory assurances that actions have been initiated that will achieve compliance in a timely manner.

If DOE determines that the noncompliance cannot be remedied by imposing the additional specific award conditions, DOE may take one or more of the following actions:

- Temporarily withhold cash payments pending correction of the deficiency by the recipient or more severe enforcement action by DOE.
- Disallow (that is, deny both use of funds and any applicable matching credit for) all or part of the cost of the activity or action not in compliance.
- Wholly or partly suspend or terminate the award (in accordance with 2 CFR §§ 200.338 - 200.342).
- Initiate suspension or debarment proceedings as authorized under 2 CFR part 180 and DOE regulations.
- Withhold further Federal awards for the project or program.
- Take other remedies that may be legally available.

(70)REAL ESTATE (LAND) TRANSACTION APPROVAL

Should the awardee propose to acquire land for the project, the awardee must comply with the Uniform Relocation and Assistance and Real Property Acquisition Act (URA), as implemented by 49 CFR § 24. At least 60 days prior to consummating a land acquisition under the award, the awardee must submit the proposed real estate transaction to DOE for review and approval by a DOE Real Estate Contracting Officer (RECO). This will be done within 30 days of the awardee's submission of the real estate transaction to DOE.

Should the awardee propose that the project is located on DOE- or other Federally-controlled land, an out grant agreement will be required. This will provide a grant of interest or right to the awardee to use government real property by a lease, easement, license, or permit for the project. This agreement will be subject to normal DOE real estate activity rules and procedures; the awardee must contact the Contracting Officer at least 150 days in advance of the land need date for guidance and to begin making the arrangements for the out grant.

(71)PREPARATION OF PROPOSAL-CONSTRUCTION OF THE ADVANCED DEMONSTRATION REACTOR

a.As agreed to by the parties during performance, the recipient must submit a proposal for the construction portion of the Advanced Demonstration Reactor; the proposal must be (1) submitted on the forms agreed to by the parties or on copies

of those forms; and (2) manually signed. The person signing a proposal must initial each erasure or change appearing on any proposal form.

b. The proposal form may require the recipient to submit proposed prices for one or more items on various bases, including-

- 1) Lump sum price;
- 2) Alternate prices;
- 3) Units of construction; or
- 4) Any combination of paragraphs (b)(1) through (b)(3) of this term.

c. If the recipient does not submit the proposal on all required items, failure to do so may result in the award being terminated without further consideration.

(72) SITE INVESTIGATION AND CONDITIONS AFFECTING CONSTRUCTION WORK FOR THE ADVANCED DEMONSTRATION REACTOR

Upon submission to DOE of the Project Plan for the construction of the Advanced Demonstration Reactor, the Recipient acknowledges that it has taken steps reasonably necessary to ascertain the nature and location of the work, and that it has investigated and satisfied itself as to the general and local conditions that can affect the work or its cost, including but not limited to (1) conditions bearing upon transportation, disposal, handling, and storage of materials; (2) the availability of labor, water, electric power, and roads; (3) uncertainties of weather, river stages, tides, or similar physical conditions at the site; (4) the conformation and conditions of the ground; and (5) the character of equipment and facilities needed preliminary to and during work performance. The Recipient also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by the Government, as well as from the drawings and specifications made a part of this award. Any failure of the Recipient to take the actions described and acknowledged in this paragraph will not relieve the Recipient from responsibility for estimating properly the difficulty and cost of successfully performing the work, or for proceeding to successfully perform the work without additional expense to the Government.

The Government assumes no responsibility for any conclusions or interpretations made by the Recipient based on the information made available by the Government. Nor does the Government assume responsibility for any understanding reached or representation made concerning conditions which can affect the work by any of its officers or agents before the execution of this award or Government approval of the Project Plan for the construction of the Advanced Demonstration Reactor, unless that understanding, or representation is expressly stated in this award.

(73) CLEANING UP - CONSTRUCTION WORK FOR THE ADVANCED DEMONSTRATION REACTOR

The Recipient shall at all times keep the work area, including storage areas, free from accumulations of waste materials. Before completing the work, the Recipient shall remove from the work and premises any rubbish, tools, scaffolding, equipment, and materials. Upon completing the work, the Recipient shall leave the work area in a clean, neat, and orderly condition satisfactory to the Contracting Officer.

(74) ACCIDENT PREVENTION - CONSTRUCTION WORK FOR THE ADVANCED DEMONSTRATION REACTOR

a. The Recipient shall provide and maintain work environments and procedures which will-

- 1) Safeguard the public and Government personnel, property, materials, supplies, and equipment exposed to Recipient operations and activities;

- 2) Avoid interruptions of Government operations and delays in project completion dates; and
- 3) Control costs in the performance of this award.

b. For these purposes the Recipient shall-

- 1) Provide appropriate safety barricades, signs, and signal lights;
- 2) Comply with the standards issued by the Secretary of Labor at 29 CFR Part 1926 and 29 CFR Part 1910; and
- 3) Ensure that any additional measures the Contracting Officer determines to be reasonably necessary for the purposes are taken.

c. Whenever the Contracting Officer becomes aware of any noncompliance with these requirements or any condition which poses a serious or imminent danger to the health or safety of the public or Government personnel, the Contracting Officer shall notify the Recipient orally, with written confirmation, and request immediate initiation of corrective action. This notice, when delivered to the Recipient or the Recipient's representative at the work site, shall be deemed sufficient notice of the noncompliance and that corrective action is required.

d. After receiving the notice, the Recipient shall immediately take corrective action. If the Recipient fails or refuses to promptly take corrective action, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. The Recipient shall not be entitled to any equitable adjustment of the budget for additional Federal funding or extension of the performance schedule on any stop work order issued under this clause.

e. The Recipient shall insert this clause, including this paragraph (e), with appropriate changes in the designation of the parties, in subawards.

f. Before commencing the work, the Recipient shall-

- 1) Submit a written proposed plan for implementing this clause. The plan shall include an analysis of the significant hazards to life, limb, and property inherent in award work performance and a plan for controlling these hazards; and
- 2) Meet with representatives of the Contracting Officer to discuss and develop a mutual understanding relative to administration of the overall safety program.

(75) SCHEDULES FOR CONSTRUCTION OF THE ADVANCED REACTOR DEMONSTRATION PROJECT

The Recipient shall, within five days after the work commences on the construction portion of this award or another period of time determined by the Contracting Officer, prepare and submit to the Contracting Officer for approval a practicable schedule showing the order in which the Recipient proposes to perform the work, and the dates on which the Recipient contemplates starting and completing the several salient features of the work (including acquiring materials, plant, and equipment). The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the period. If the Recipient fails to submit a schedule within the time prescribed, the Contracting Officer may withhold approval of payments until the Recipient submits the required schedule.

The Recipient shall enter the actual progress on the chart as directed by the Contracting Officer, and upon doing so shall immediately deliver the annotated schedule to the Contracting Officer. If, in the opinion of the Contracting Officer, the Recipient falls behind the approved schedule, the Recipient shall take steps necessary to improve its progress, including those that may be required by the Contracting Officer, without additional cost to the Government share of the award. In this circumstance, the Contracting Officer may require the Recipient to increase the number of shifts, overtime operations, days of work, and/or the amount of construction plant, and to submit for approval any supplementary schedule or schedules in chart form as the Contracting Officer deems necessary to demonstrate how the approved rate of progress will

be regained.

Failure of the Recipient to comply with the requirements of the Contracting Officer under this clause shall be grounds for a determination by the Contracting Officer that the Recipient is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the award. Upon making this determination, the Contracting Officer may terminate the Recipient's right to proceed with the work, or any separable part of it, in accordance with the terms of this award.

(76) ORGANIZATION AND DIRECTION OF THE CONSTRUCTION WORK FOR THE ADVANCED DEMONSTRATION REACTOR

When the construction portion of this award is executed, the Recipient shall submit to the Contracting Officer a chart showing the general executive and administrative organization, the personnel to be employed in connection with the work under this award, and their respective duties. The Recipient shall keep the data furnished current by supplementing it as additional information becomes available.

Work performance under this award shall be under the full-time resident direction of (1) the Recipient, if the Recipient is an individual; (2) one or more principal partners, if the Recipient is a partnership; or (3) one or more senior officers, if Recipient is a corporation, association, or similar legal entity. However, if the Contracting Officer approves, the Recipient may be represented in the direction of the work by a specific person or persons holding positions other than those identified in this paragraph.

(77) SUBAWARDS

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

Approved purchasing system" means a Recipient's purchasing system that has been reviewed and approved by DOE.

"Consent to subaward" means the Contracting Officer's written consent for the Recipient to enter into a particular subaward.

The terms *Subaward* and *Subrecipient* are defined in 2 CFR 200, Subpart A.

b. If the Recipient does not have an approved purchasing system, consent to subaward is required for any subaward that was not already approved as part of the recipient's initial application submitted and selected for award in response to the Funding Opportunity Announcement for this program and that (1) Is of the cost-reimbursement, time-and-materials, or labor-hour type; or (2) Is fixed-price and exceeds either \$250,000 or 5 percent of the total estimated cost of the award.

(a)(1) The Recipient shall notify the Contracting Officer reasonably in advance of placing any subrecipient modification thereof for which consent is required under paragraph (b) of this clause, including the following information:

- i. A description of the supplies or services to be subawarded.
- ii. Identification of the type of subaward to be used.
- iii. Identification of the proposed subrecipient.
- iv. The proposed subaward price.
- v. A negotiation memorandum reflecting-
 - 1) The principal elements of the subaward price negotiations;
 - 2) The most significant considerations controlling establishment of initial or revised prices;
 - 3) The reasons for any significant difference between the Recipient's price objective and the price negotiated;
 - (a) The Recipient is not required to notify the Contracting Officer in advance of entering into any subaward for which consent is not required under paragraph (b) of this clause

1. Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subaward nor approval of the Recipient's purchasing system shall constitute a determination:

- 1) Of the acceptability of any subaward terms or conditions;
- 2) Of the allowability of any cost under this award; or
- 3) To relieve the Recipient of any responsibility for performing this award

c. The Recipient shall give the Awarding Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Recipient by any subrecipient or vendor that, in the opinion of the Recipient, may result in litigation related in any way to this award, with respect to which the Recipient may be entitled to reimbursement from the Government.

(78) SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION OF THE ADVANCED DEMONSTRATION REACTOR

a. Following DOE approval of the recipient's drawings and specifications for the actual construction of the reactor, the Recipient shall keep on the work site a copy of the drawings and specifications and shall at all times give the Contracting Officer access thereto. Anything mentioned in the specifications and not shown on the drawings, or shown on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both. In case of difference between drawings and specifications, the specifications shall govern. In case of discrepancy in the figures, in the drawings, or in the specifications, the matter shall be promptly submitted to the Contracting Officer, who shall promptly make a determination in writing. Any adjustment by the Recipient without such a determination shall be at its own risk and expense without an increase in the Government's cost share. The Recipient shall furnish from time to time such detailed drawings and other information as considered necessary, unless otherwise provided.

b. Wherever in the specifications or upon the drawings the words "directed," "required," "ordered," "designated," "prescribed," or words of like import are used, it shall be understood that the "direction," "requirement," "order," "designation," or "prescription," of the Contracting Officer is intended, and similarly the words "approved," "acceptable," "satisfactory," or words of like import shall mean "approved by," or "acceptable to," or "satisfactory to" the Contracting Officer, unless otherwise expressly stated.

c. Where "as shown," "as indicated," "as detailed," or words of similar import are used, it shall be understood that the reference is made to the drawings accompanying this award unless stated otherwise. The word "provided" as used herein shall be understood to mean "provide complete in place," that is "furnished and installed."

d. Shop drawings means drawings, submitted to the Government by the Recipient, subrecipient, or any lower tier subrecipient or subcontractor pursuant to the construction portion of this award, showing in detail (1) the proposed fabrication and assembly of structural elements, and (2) the installation (*i.e.*, fit, and attachment details) of materials or equipment. It includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials furnished by the recipient to explain in detail specific portions of the work required by the award. The Government may duplicate or use for Government purposes only shop drawings delivered under this award.

e. If this award requires shop drawings, the Recipient shall coordinate all such drawings, and review them for accuracy, completeness, and compliance with award requirements and shall indicate its approval thereon as evidence of such coordination and review. Shop drawings submitted to the Contracting Officer without evidence of the Recipient's approval may be returned for resubmission. The Contracting Officer will indicate an approval or disapproval of the shop drawings and, if not approved as submitted, shall indicate the Government's reasons therefor. Any work done before such approval shall be at the Recipient's risk. Approval by the Contracting Officer shall not relieve the Recipient from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of this award, except with respect to variations described and approved in accordance with this clause.

f. If shop drawings show variations from the award requirements, the Recipient shall describe such variations in writing,

separate from the drawings, at the time of submission. If the Contracting Officer approves any such variation, the Contracting Officer shall issue an appropriate award modification, except that, if the variation is minor or does not involve a change in price or in time of performance, a modification need not be issued.

g. The Recipient shall submit to the Contracting Officer for approval four copies (unless otherwise indicated) of all shop drawings as called for under the various headings of these specifications. Three sets (unless otherwise indicated) of all shop drawings, will be retained by the Contracting Officer and one set will be returned to the Recipient.

(79) CONSTRUCTION DESIGN WITHIN FUNDING LIMITATIONS

a. The Recipient shall accomplish the reactor construction design services required under this award so as to permit the construction of the reactor designed at a price that does not exceed the estimated construction award price as set forth in paragraph (c) of this clause.

When proposals for the construction award are received that exceed the estimated price, the recipient shall perform such redesign and other services as are necessary to permit award within the funding limitation. These additional services shall be performed at no increase in the Government's cost share of this award. However, the Recipient shall not be required to perform such additional services at no cost to the Government if the unfavorable bids or proposals are the result of conditions beyond its reasonable control.

b. The Recipient will promptly advise the Contracting Officer if it finds that the project being designed will exceed or is likely to exceed the funding limitations and it is unable to design a usable facility within these limitations. Upon receipt of such information, the Contracting Officer will review the Recipient's revised estimate of construction cost. The Government may, if it determines that the estimated construction award price set forth in this award is so low that award of a construction award not in excess of such estimate is improbable, authorize a change in scope or materials as required to reduce the estimated construction cost to an amount within the estimated construction award price set forth in paragraph (c) of this clause, or the Government may adjust such estimated construction award price. When bids or proposals are not solicited or are unreasonably delayed, the Government shall prepare an estimate of constructing the design submitted and such estimate shall be used in lieu of bids or proposals to determine compliance with the funding limitation.

c. The estimated construction award price for the project described in this award is as shown in the Project Management Plan incorporated into the award.

(80) RESPONSIBILITY OF THE ENGINEERING, PROCUREMENT, CONSTRUCTION CONTRACT AND/OR RECIPIENT/SUBRECIPIENT

The Recipient shall be responsible for the professional quality, technical accuracy, and the coordination of all designs, drawings, specifications, and other services furnished by the Recipient under this award. The Recipient shall, without additional Government cost share, correct or revise any errors or deficiencies in its designs, drawings, specifications, and other services.

Neither the Government's review, approval or acceptance of, nor payment for, the services required under this award shall be construed to operate as a waiver of any rights under this award or of any cause of action arising out of the performance of this award, and the Recipient shall be and remain liable to the Government in accordance with applicable law for all damages to the Government caused by the Recipient's negligent performance of any of the services furnished under this award.

The rights and remedies of the Government provided for under this award are in addition to any other rights and remedies provided by law.

If the Recipient is comprised of more than one legal entity, each such entity shall be jointly and severally liable hereunder.

(81)WORK OVERSIGHT IN ENGINEERING, PROCUREMENT, CONSTRUCTION CONTRACT AWARDS

The extent and character of the work to be done by the Recipient shall be subject to the general oversight direction, and approval of the Contracting Officer.

(82)PRECONSTRUCTION CONFERENCE

If the Contracting Officer decides to conduct a preconstruction conference, the recipient will be notified and will be required to attend. The Contracting Officer's notification will include specific details regarding the date, time, and location of the conference, any need for attendance by subrecipients, and information regarding the items to be discussed.

(83)ARCHITECTURAL BARRIERS ACT OF 1968 (42 U.S.C. § 4151 ET SEQ.) - CONSTRUCTION OF THE ADVANCED DEMONSTATION REACTOR

The Recipient must ensure that all persons have ready access to, and use, of buildings regardless of disability in the design, construction or alteration of buildings and facilities financed with Federal funds.

(84)EQUAL EMPLOYMENT OPPORTUNITY UNDER E.O. 11246 – CONSTRUCTION OF THE ADVANCED DEMONSTATION REACTOR

E.O. 11246, as amended, requires the recipient and subrecipients performing federally assisted construction projects to provide equal opportunity, without regard to race, color, religion, sex or national origin, to persons employed or seeking employment with them.

(85)PERFORMANCE AND PAYMENT BONDS- CONSTRUCTION OF THE ADVANCED DEMONSTATION REACTOR

Prior to commencement of construction of the advanced reactor, bonding requirements must be met by the recipient. To do this, the recipient may provide DOE with its proposed bonding policy and requirements; these should be submitted to DOE concurrent with the recipient's continuation award budget(s) which include construction work, but in any event must be provided to the Contracting Officer for review/approval at least 120 days prior to the planned beginning of construction. DOE may accept the bonding policy and requirements of the recipient provided that the Contracting Officer makes a determination that the Federal interest is adequately protected. Otherwise, if such a determination is not made or not been made, the minimum requirements must be as follows:

A bid guarantee from the recipient equivalent to five percent of the construction bid price. The "bid guarantee" must consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying a bid as assurance that the recipient will, upon acceptance of the bid (construction budget request), execute such contractual documents as may be required within the time specified.

A performance bond on the part of the recipient for 100 percent of the construction price. A "performance bond" is one executed in connection with a contract for the construction to secure fulfillment of all the recipient's/subcontractor's obligations under such contract/subcontract.

A payment bond on the part of the recipient/subcontractor for 100 percent of the construction contract price. A "payment bond" is one executed in connection with the construction contract to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the contract.

Other information pertaining to this is as follows:

Definitions. As used in this clause-

a. "Original award ceiling" means the award price of the award portions for the construction of the advanced reactor. Original award price does not include the price of any options, except those options exercised at the time of award.

b. *Forms for required bonds.* The recipient shall furnish performance and payment bonds to the Contracting Officer as follows:

Performance bonds – use [Standard Form 25](#).

Payment Bonds – use [Standard Form 25A](#)

Additional bond protection

c. The Government may require additional performance and payment bond protection if the price for the construction of the advanced reactor is increased. The increase in protection generally will equal 100 percent of the increase in award price.

d. The Government may secure the additional protection by directing the Recipient to increase the penal amount of the existing bond or to obtain an additional bond.

e. *Furnishing executed bonds.* The Recipient shall furnish all executed bonds, including any necessary reinsurance agreements, to the Contracting Officer, within the time period specified by the Contracting Officer, but in any event, at least 120 days prior to starting work.

f. *Surety or other security for bonds.* The bonds shall be in the form of firm commitment, supported by corporate sureties whose names appear on the list contained in Treasury Department Circular 570, individual sureties, or by other acceptable security such as postal money order, certified check, cashier's check, irrevocable letter of credit, or, in accordance with Treasury Department regulations, certain bonds or notes of the United States. Treasury Circular 570 is published in the *Federal Register* or may be obtained from the:

U.S. Department of the Treasury,
Financial Management,
Service Surety Bond Branch,
3700 East West Highway,
Room 6 F01,
Hyattsville, MD 20782.

Or via the internet at <http://www.fms.treas.gov/c570/>.

g. *Notice of subrecipient waiver of protection (40 U.S.C. 3133(c)).* Any waiver of the right to sue on the payment bond is void unless it is in writing, signed by the person whose right is waived, and executed after such person has first furnished labor or material for use in the performance of the award.

(86) ADDITIONAL BOND SECURITY - CONSTRUCTION OF THE ADVANCED DEMONSTATION REACTOR

The Recipient shall promptly furnish additional security required to protect the Government and persons supplying labor or materials under this award if-

- Any surety upon any bond, or issuing financial institution for other security, furnished with this award becomes unacceptable to the Government;
- Any surety fails to furnish reports on its financial condition as required by the Government;
- The award price is increased so that the penal sum of any bond becomes inadequate in the opinion of the Contracting Officer; or
- An irrevocable letter of credit (ILC) used as security will expire before the end of the period of required security. If the Recipient does not furnish an acceptable extension or replacement ILC, or other acceptable substitute, at least 30 days before an ILC's scheduled expiration, the Contracting Officer has the right to immediately draw on

the ILC.

(87) PROSPECTIVE SUBRECIPIENT REQUESTS FOR BONDS - CONSTRUCTION OF THE ADVANCED DEMONSTATION REACTOR

In accordance with section 806(a)(3) of Pub. L. 102-190, as amended by sections 2091 and 8105 of Pub. L. 103-355 ([10 U.S.C. 2302 note](#)), upon the request of a prospective subrecipient or supplier offering to furnish labor or material for the performance of this award for which a payment bond has been furnished to the Government pursuant to 40 U.S.C. chapter 31, subchapter III, Bonds, the Recipient shall promptly provide a copy of such payment bond to the requester.

(88) PLEDGES OF ASSETS - CONSTRUCTION OF THE ADVANCED DEMONSTATION REACTOR

a. The recipient shall obtain from each person acting as an individual surety on a bid guarantee, a performance bond, or a payment bond.

b. Pledge of assets; and [Standard Form 28](#), Affidavit of Individual Surety.

c. Pledges of assets from each person acting as an individual surety shall be in the form of-

(1) Evidence of an escrow account containing cash, certificates of deposit, commercial or Government securities, or other asset as described below, and/or (2) A recorded lien on real estate. The recipient will be required to provide-

- i. A mortgagee title insurance policy, in an insurance amount equal to the amount of the lien, or other evidence of title that is consistent with the requirements of Section 2 of the United States Department of Justice Title Standards at <https://www.justice.gov/enrd/page/file/922431/download>. This title evidence must show fee simple title vested in the surety along with any concurrent owners; whether any real estate taxes are due and payable; and any recorded encumbrances against the property, including the lien filed in favor of the Government. See paragraph (e) below for specific requirements.
- ii. Evidence of the amount due under any encumbrance shown in the evidence of title;
- iii. A copy of the current real estate tax assessment of the property or a current appraisal dated no earlier than 6 months prior to the date of the bond, prepared by a professional appraiser who certifies that the appraisal has been conducted in accordance with the generally accepted appraisal standards as reflected in the Uniform Standards of Professional Appraisal Practice, as promulgated by the Appraisal Foundation.

d. The Government will accept only cash, readily marketable assets, or irrevocable letters of credit from a federally insured financial institution from individual sureties to satisfy the underlying bond obligations.

1. Acceptable assets include-

- i. Cash, or certificates of deposit, or other cash equivalents with a federally insured financial institution;
- ii. United States Government securities at market value. An escrow account is not required if an individual surety offers Government securities held in book entry form at a depository institution. In lieu thereof, the individual shall provide evidence that the depository institution has-
 - a) Placed a notation against the individual's book entry account indicating that the security has been pledged in favor of the respective agency;
 - a) Agreed to notify the agency prior to maturity of the security; and
 - b) Agreed to hold the proceeds of the security subject to the pledge in favor of the agency until a substitution of securities is made or the security interest is formally released by the agency;
- iii. Stocks and bonds actively traded on a national U.S. security exchange with certificates issued in the name of the individual surety. National security exchanges are: (i) the New York Stock Exchange; (ii) the American

Stock Exchange; (iii) the Boston Stock Exchange; (iv) the Cincinnati Stock Exchange; (v) the Midwest Stock Exchange; (vi) the Philadelphia Stock Exchange; (vii) the Pacific Stock Exchange; and (viii) the Spokane Stock Exchange. These assets will be accepted at 90 percent of their 52-week low, as reflected at the time of submission of the bond. Stock options and stocks on the over-the-counter (OTC) market or NASDAQ Exchanges will not be accepted. Assistance in evaluating the acceptability of securities may be obtained from the-

Securities and Exchange Commission
Division of Enforcement
450 Fifth Street NW
Washington, DC 20549.

- iv. Real property owned in fee simple by the surety without any form of concurrent ownership, except as provided in paragraph (c)(3)(ii) of this subsection, and located in the United States or its outlying areas. These assets will be accepted at 100 percent of the most current tax assessment value (exclusive of encumbrances) or 75 percent of the properties' unencumbered market value provided a current appraisal is furnished.
- v. Irrevocable letters of credit (ILC) issued by a federally insured financial institution in the name of the contracting agency and which identify the agency and solicitation or contract number for which the ILC is provided.

2. Unacceptable assets include but are not limited to-

- i. Notes or accounts receivable;
- ii. Foreign securities;
- iii. Real property as follows:
 - a) Real property located outside the United States and its outlying areas.
 - b) Real property which is a principal residence of the surety.
 - c) Real property owned concurrently regardless of the form of co-tenancy (including joint tenancy, tenancy by the entirety, and tenancy in common) except where all co-tenants agree to act jointly.
 - d) Life estates, leasehold estates, or future interests in real property.
 - e) Personal property other than that listed in paragraph (b) of this subsection (*e.g.*, jewelry, furs, antiques);
 - f) Stocks and bonds of the individual surety in a controlled, affiliated, or closely held concern of the offeror/contractor;
 - g) Corporate assets (*e.g.*, plant and equipment);
 - h) Speculative assets (*e.g.*, mineral rights);
 - i) Letters of credit.

e. The following format, or any document substantially the same, shall be signed by all owners of the property and used by the surety and recorded in the local recorder's office when a surety pledges real estate on [Standard Form 28](#), Affidavit of Individual Surety.

Lien on Real Estate

I/we agree that this instrument constitutes a lien in the amount of \$_____ on the property described in this lien. The rights of the United States Government shall take precedence over any subsequent lien or encumbrance until the lien is formally released by a duly authorized representative of the United States. I/we hereby grant the United States the power of sale of subject property, including the right to satisfy its reasonable administrative costs, including legal fees associated with any sale of subject property, in the event of contractor default if I/we otherwise fail to satisfy the underlying () bid guarantee, () performance bond, () or payment bond obligations as an individual surety on solicitation/contract number

_____. The lien is upon the real estate now owned by me/us described as follows: (legal description, street address and other identifying description)

In witness hereof, I/we have hereunto affixed my/our hand(s) and seal(s) this ___ Day of ____ 20 __.

Witness:

(Seal)

I, _____, a Notary Public in and for the (City) _____, (State) _____, do hereby certify that _____, a party or parties to a certain Agreement bearing the date ___ day of _____ 20 __, and hereunto annexed, personally appeared before me, the said _____ being personally well known to me as the person(s) who executed said lien, and acknowledged the same to be his/her heir act and deed. Given under my hand and seal this ___ day of ___ 20 __.

Notary Public State

My commission expires:

(89)SUBSTITUTION OF ASSETS - CONSTRUCTION OF THE ADVANCED DEMONSTATION REACTOR

An individual surety may request the Government to accept a substitute asset for that currently pledged by submitting a written request to the Contracting Officer, who may agree to the substitution of assets upon determining that the substitute assets to be pledged are adequate to protect the outstanding bond or guarantee obligations. If acceptable, the substitute assets shall be pledged as provided for in this cooperative agreement.

(90)PERFORMANCE OF CONSTRUCTION WORK BY RECIPIENT

To assure adequate interest in and supervision of all work involved in the construction portion of the project, the recipient shall be required to perform a significant part of the work with its own forces. Specialties such as plumbing, heating, and electrical work are usually subcontracted, and are not considered in establishing the amount of work required to be performed by the recipient. The recipient shall perform on the site, and with its own organization, work equivalent to at least 10 percent of the total amount of work to be performed under the award for the actual construction of the advanced reactor itself. This percentage may be reduced by an amendment to the award if, during performing the work, the recipient requests a reduction and the Contracting Officer determines that the reduction is appropriate.

At all times during performance of this contract and until the work is completed and accepted, the Contractor shall directly superintend the work or assign and have on the worksite a competent superintendent who is satisfactory to the Contracting Officer and has authority to act for the Contractor.

Work Oversight in Construction

The extent and character of the work to be done by the Recipient shall be subject to the general approval of the Contracting Officer.

In addition to other provisions required by DOE and this award, all subcontracts made by the recipient under the award must contain provisions as set forth in Appendix II to 2 CFR § 200.

(91)CONSTRUCTION PERFORMANCE REPORTS

For the most part, onsite technical inspections and certified percentage of completion data will be relied on heavily by DOE to monitor progress under the award for construction. However, DOE may require additional performance reports when considered necessary and as directed by the Contracting Officer.

(92)REPORTING ON REAL PROPERTY

The recipient must submit reports at least annually on the status of real property in which the Federal Government retains an interest, unless the Federal interest in the real property extends 15 years or longer. If the Federal interest attached is for a period of 15 years or more, DOE, at its option, may require the recipient to report at various multi-year frequencies (e.g., every two years or every three years, not to exceed a five-year reporting period; or a Federal awarding agency or pass-through entity may require annual reporting for the first three years of a Federal award and thereafter require reporting every five years). Unless otherwise specified by the Contracting Officer, recipient format for this reporting is acceptable.

(93)MATERIAL AND WORKMANSHIP FOR THE CONSTRUCTION OF THE ADVANCED DEMONSTRATION REACTOR

All equipment, material, and articles incorporated into the work covered by this award shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in this award. References in the specifications prepared by the recipient and agreed to by the DOE to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition. The Recipient may, at its option, use any equipment, material, article, or process that, in the judgment of the Contracting Officer, is equal to that named in the specifications, unless otherwise specifically provided in this award.

The Recipient shall obtain the Contracting Officer's approval of the machinery and mechanical and other equipment to be incorporated into the work. When requesting approval, the Recipient shall furnish to the Contracting Officer the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the machinery and mechanical and other equipment. When required by this award or by the Contracting Officer, the Recipient shall also obtain the Contracting Officer's approval of the material or articles that the Recipient contemplates incorporating into the work. When requesting approval, the Recipient shall provide full information concerning the material or articles. When directed to do so, the Recipient shall submit samples for approval at the Recipient's expense, with all shipping charges prepaid. Machinery, equipment, material, and articles that do not have the required approval shall be installed or used at the risk of subsequent rejection.

All work under this award shall be performed in a skillful and workmanlike manner. The Contracting Officer may require, in writing, that the Recipient remove from the work any employee the Contracting Officer deems incompetent, careless, or otherwise objectionable.

(94)PERMITS AND RESPONSIBILITIES - CONSTRUCTION OF THE ADVANCED DEMONSTATION REACTOR

For the construction portion of this award, the recipient shall, without additional expense to the Government, be responsible for obtaining any necessary licenses and permits, and for complying with any Federal, State, and municipal laws, codes, and regulations applicable to the performance of the work. The recipient shall also be responsible for all damages to persons or property that occur as a result of the recipient's fault or negligence. The recipient shall also be responsible for all materials delivered and work performed until completion and acceptance of the entire work, except for any completed unit of work which may have been accepted under the award.

(95)EXCUSABLE DELAYS - CONSTRUCTION OF THE ADVANCED DEMONSTATION REACTOR

Except for defaults of subcontractors or subrecipients at any tier, the Recipient shall be in an excusable delay position because of any failure to perform this cooperative agreement under its terms if the failure arises from causes beyond the control and without the fault or negligence of the Recipient. Examples of these causes are (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 Recipient. "Default" includes failure to make progress in the work so as to endanger performance.

If the failure to perform is caused by the failure of a subcontractor or subrecipient at any tier to perform or make progress, and if the cause of the failure was beyond the control of both the Recipient and subcontractor/subrecipient, and without the fault or negligence of either, the Recipient shall not be deemed to be in default,- unless-

- The subcontracted supplies or services were obtainable from other sources;
- The Contracting Officer ordered the Recipient in writing to purchase these supplies or services from the other source; and
- The Recipient failed to comply reasonably with this order.

Upon request of the Recipient, the Contracting Officer shall ascertain the facts and extent of the failure. If the Contracting Officer determines that any failure to perform results from one or more of the causes above, the completion time shall be revised, subject to the rights of the Government to terminate this cooperative agreement.

(96) GUARANTEED MAXIMUM COST - CONSTRUCTION OF THE ADVANCED DEMONSTRATION REACTOR

Prior to beginning construction of the advanced reactor, the parties shall agree to a guaranteed maximum cost for the construction of the reactor. The Recipient is liable for cost overruns (i.e., costs above the maximum) and/or failure to complete the construction of the reactor on time, except as set for in the provision titled, EXCUSABLE DELAYS - CONSTRUCTION OF THE ADVANCED DEMONSTRATION REACTOR, of this award. For construction cost amounts below the guaranteed maximum cost for the construction of the reactor, the parties will share according to their cost share ratios (e.g., 50/50); this will occur by the recipient not billing for construction cost amounts below the maximum.

(97) BUDGET TRANSFERS BETWEEN CONSTRUCTION AND NON-CONSTRUCTION WORK

This award includes both construction and non-construction work. The recipient is required to obtain prior DOE approval before making any fund or budget transfers between the two types of work supported that exceed a cumulative value of \$250,000 within a specific budget period, considering the immediate transfer as well as all prior transfers within the current budget period, unless otherwise authorized by the Contracting Officer.

(98) DIRECT COST FUNDS TRANSFERS

The awardee is restricted from transferring funds between direct cost categories; the cumulative amount of such transfers must not exceed \$750,000 for the current Budget Period, as last approved by DOE. For funds transfers greater than \$750,000, the recipient must obtain prior DOE Contracting Officer approval.

(99) RESTRICTION ON SMR FUNDING

Any entity other than a national laboratory that receives fiscal year 2020 funds of more than \$200,000 under the US Department of Energy Advanced Small Modular Reactor Research and Development (SMR R&D) program is not eligible to receive fiscal year 2020 funds from within the Advanced Reactor Demonstration Program. Further, funds provided under the Advanced Reactor Demonstration project award are not permitted to be used for the SMR R&D award activities.

(100) CONTINGENCY FOR CONSTRUCTION OF THE ADVANCED DEMONSTRATION REACTOR

a. Contingency is that part of a budget estimate of future construction costs associated with possible events or conditions arising from causes the precise outcome of which is indeterminable at the time of estimate, and that experience shows will likely result, in aggregate, in additional costs for the project. Amounts for major project scope changes, unforeseen risks, or extraordinary events may be excluded from contingency estimates.

b. It is permissible for contingency amounts, other than those excluded in paragraph (a) of this clause, to be explicitly included in budget estimates for the construction portion of this award, to the extent they are necessary to improve the precision of those estimates. Amounts must be estimated using broadly-accepted cost estimating methodologies, specified in the budget documentation of the award, and accepted by DOE. As such, any contingency amounts are to be included in the award. In order for actual costs incurred to be allowable, they must comply with the cost principles, other requirements in this award, and national policy requirements; be necessary and reasonable for proper and efficient accomplishment of project; and be verifiable from the recipient's records.

c. Payments made by DOE to the recipient's "contingency reserve" or any similar payment, made for events the occurrence of which cannot be foretold with certainty as to the time or intensity, or with an assurance of their happening, are unallowable, except as noted in § 200.431 Compensation—fringe benefits regarding self-insurance, pensions, severance and post-retirement health costs, and § 200.447 Insurance and indemnification.

(101)VALUE ENGINEERING- CONSTRUCTION OF THE ADVANCED DEMONSTATION REACTOR

a. *General.* Given the anticipated dollar value of the construction of the advanced reactor, Recipient is encouraged to use value engineering, including in any subawards, to seek out reasonable opportunities for cost reductions. Value engineering is a systematic and creative analysis of each award item or task to ensure that its essential function is provided at the overall lower cost. The Recipient is encouraged to develop, prepare, and submit value engineering change proposals (VECP's) voluntarily. The Recipient shall share in any instant award savings realized from accepted VECP's, in accordance with paragraph (f) of this clause.

b. Definitions.

"Collateral costs," as used in this clause, means DOE costs of operation, maintenance, logistic support, or Government-furnished property.

"Collateral savings," as used in this clause, means those measurable net reductions resulting from a VECP in DOE's overall projected collateral costs, exclusive of acquisition savings, whether or not the acquisition cost changes.

"Recipient's development and implementation costs," as used in this clause, means those costs the Recipient incurs on a VECP specifically in developing, testing, preparing, and submitting the VECP, as well as those costs the Recipient incurs to make the award changes required by Government acceptance of a VECP.

"Government costs," as used in this clause, means those DOE costs that result directly from developing and implementing the VECP, such as any net increases in the cost of testing, operations, maintenance, and logistic support. The term does not include the normal administrative costs of processing the VECP.

"Instant award savings," as used in this clause, means the estimated reduction in Recipient cost of performance resulting from acceptance of the VECP, minus allowable Recipient's development and implementation costs, including subrecipients' development and implementation costs (see paragraph (h) of this clause).

"Value engineering change proposal (VECP)" means a proposal that (1) Requires a change to this, the instant award, to implement; and (2) Results in reducing the award price or estimated cost without impairing essential functions or characteristics; *provided*, that it does not involve a change-

- i. In deliverable end item quantities only; or
- ii. To the award type only.

c. *VECP preparation.* As a minimum, the Recipient shall include in each VECP the information described in paragraphs (c)(1) through (7) of this clause. If the proposed change is affected by award-required configuration management or similar procedures, the instructions in those procedures relating to format, identification, and priority assignment shall govern VECP preparation. The VECP shall include the following:

- 1) A description of the difference between the existing award requirement and that proposed, the comparative advantages and disadvantages of each, a justification when an item's function or characteristics are being altered, and the effect of the change on the end item's performance.
- 2) A list and analysis of the award requirements that must be changed if the VECP is accepted, including any suggested specification revisions.
- 3) A separate, detailed cost estimate for (i) the affected portions of the existing award requirement and (ii) the VECP. The cost reduction associated with the VECP shall take into account the Recipient's allowable development and implementation costs, including any amount attributable to subawards under paragraph (h) of this clause.
- 4) A description and estimate of costs the Government may incur in implementing the VECP, such as test and evaluation and operating and support costs.
- 5) A prediction of any effects the proposed change would have on collateral costs to the DOE.
- 6) A statement of the time by which a award modification accepting the VECP must be issued in order to achieve the maximum cost reduction, noting any effect on the award completion time or delivery schedule.
- 7) Identification of any previous submissions of the VECP, including the dates submitted, the agencies and award numbers involved, and previous Government actions, if known.

d. *Submission.* The Recipient shall submit VECP's to the Resident Engineer at the worksite, with a copy to the Contracting Officer.

e. *Government action.*

- 1) The Contracting Officer will notify the Recipient of the status of the VECP within 45 calendar days after the awarding office receives it. If additional time is required, the Contracting Officer will notify the Recipient within the 45-day period and provide the reason for the delay and the expected date of the decision. The Government will process VECP's expeditiously; however, it will not be liable for any delay in acting upon a VECP.
- 2) If the VECP is not accepted, the Contracting Officer will notify the Recipient in writing, explaining the reasons for rejection.
- 3) The Recipient may withdraw any VECP, in whole or in part, at any time before it is accepted by the Government. The Contracting Officer may require that the Recipient provide written notification before undertaking significant expenditures for VECP effort.
- 4) Any VECP may be accepted, in whole or in part, by the Contracting Officer's award of a modification to this award citing this clause. The Contracting Officer may accept the VECP, even though an agreement on price reduction has not been reached, by issuing the Recipient a notice to proceed with the change. Until a notice to proceed is issued or an award modification applies a VECP to this award, the Recipient shall perform in accordance with the existing award. The decision to accept or reject all or part of any VECP is a unilateral decision made solely at the discretion of the Contracting Officer.

f. *Sharing-*

1. *Rates.* The Government's share of savings is determined by subtracting Government costs from instant award savings and multiplying the result by-

- i. 45 percent for fixed-price awards; or

- ii. 75 percent for cost-reimbursement awards.

2. *Payment.* Payment of any share due the Recipient for use of a VECP on this award shall be authorized by a modification to this award to-

- i. Accept the VECP;
- ii. Reduce the award price or estimated cost by the amount of instant award savings; and
- iii. Provide the Recipient's share of savings by adding the amount calculated to the award price or fee.

g.Subawards. The Recipient shall include an appropriate value engineering clause in any subaward of \$70,000 or more, and may include one in subawards of lesser value. In computing any adjustment in this award's price under paragraph (f) of this clause, the Recipient's allowable development and implementation costs shall include any subrecipient's allowable development and implementation costs clearly resulting from a VECP accepted by the Government under this award, but shall exclude any value engineering incentive payments to a subrecipient. The Recipient may choose any arrangement for subrecipient value engineering incentive payments; *provided*, that these payments shall not reduce the Government's share of the savings resulting from the VECP.

h.Data. The Recipient may restrict the Government's right to use any part of a VECP or the supporting data by marking the following legend on the affected parts:

These data, furnished under the Value Engineering-Construction clause of award _____, shall not be disclosed outside the Government or duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate a value engineering change proposal submitted under the clause. This restriction does not limit the Government's right to use information contained in these data if it has been obtained or is otherwise available from the Recipient or from another source without limitations.

If a VECP is accepted, the Recipient hereby grants the Government unlimited rights in the VECP and supporting data, except that, with respect to data qualifying and submitted as limited rights technical data, the Government shall have the rights specified in the award modification implementing the VECP and shall appropriately mark the data.

(102) DOE RIGHT TO REVIEW RECIPIENT SYSTEMS

During performance of this award, DOE reserves the right for any reason to assess the recipient's continued ability to manage the financial aspects of an award and its plans to accomplish project activities with reasonable economy and efficiency. The standards for acceptable financial management are found at 2 CFR Part 200.302. This may include a review of different recipient systems, including but not limited to:

- 1) The recipient's accounting system to determine whether it is adequate for the accumulation and segregation of costs on a project-by-project basis and whether its books of account are adequate for and suited to the organization's business;
- 2) The recipient's purchasing procedures to determine if they exist in written form and whether they result in effective, economical, and well-documented procurement;
- 3) The recipient's personnel practices and procedures to determine if they exist in written form, whether they provide for adequate separation of responsibilities for hiring, dismissal, promotion, etc., and whether the organization can meet the cost principle standards for documenting its payroll;
- 4) The existence and adequacy of other written procedures governing travel, use of consultants, and property management;
- 5) The organizational structure and assignment of functional responsibilities to determine whether the organization can adequately safeguard its assets provide accurate and dependable financial and cost data, and whether employees can adequately discharge their responsibilities and adhere to established policies.
- 6) The recipient's make-or-buy program when necessary to ensure negotiation of reasonable award prices,

satisfactory performance, or implementation of socioeconomic policies.

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