| Attachment 2 |
| --- |

| 1. Award Number: | 2. Program/Project Title: |
| --- | --- |

**3. Recipient:**

| 4. Reporting Requirements (see also the EERE Special Instructions) *Detailed instructions included after the Table of Contents* | Frequency | Addresses |
| --- | --- | --- |
| **I.  PROJECT MANAGEMENT REPORTING** | | |
| ☐ A  Research Performance Progress Report (RPPR) | **Q** | A. EERE PMC |
| ☐ B.  Financial Report (SF-425) | **F, Q** | B. EERE PMC |
| ☐ C.  Scientific and Technical Reporting | | |
| ☐ 1.  Accepted Manuscript of Journal Article(s) | **A5, P** | C.1. OSTI E-Link |
| ☐ 2.  Conference Product(s) | **A5, P** | C.2. OSTI E-Link |
| ☐ 3.  Technical Report(s) | **A5, P** | C.3. OSTI E-Link |
| ☐ 4.  Software & Manual(s) | **A5, P** | C.4. DOE CODE |
| ☐ 5.  Dataset(s) | **A5, P** | C.5. OSTI E-Link Datasets |
| ☐ 6.  Other STI (Dissertation / Thesis, etc.) | **A5, P** | C.6. OSTI E-Link |
| ☐ D.  Intellectual Property Reporting | | |
| ☐ 1.  Intellectual Property Reporting | **A5, P** | D.1. iEdison |
| ☐ 2.  Invention Utilization Report | **A5, P** | D.2. iEdison |
| ☐ E  Project Management Plan (PMP) | **A5** | E. EERE PMC |
| ☐ F.  Special Status Report | **A5** | F. EERE PMC |
| ☐ G.  Continuation Application | **A5** | G. EERE PMC |
| ☐ H.  Other (see Special Instructions) | **A5** | H. See Special Instructions |
| | | |
| **II.  AWARD MANAGEMENT REPORTING** | | |
| ☐ A.  Participants and Collaborating Organizations | **A5** | A. EERE PMC |
| ☐ B.  Current and Pending Support | **A5** | B. EERE PMC |
| ☐ C.  Demographic Reporting | **A5** | C. EERE PMC |
| ☐ D.  Tangible Personal Property Report - Annual Property Report (SF-428 & SF-428A) | **Y** | D. EERE PMC |
| ☐ E.  Tangible Personal Property Report – Disposition Request/Report (SF-428 & SF-428C) | **A5** | E. EERE PMC |
| ☐ F.  Uniform Commercial Code (UCC) Financing Statements | **A5** | F.  See section II. F. for instructions and due dates |
| ☐ G.  Federal Subaward Reporting System (FSRS) | **A5** | G.  FSRS |
| ☐ H.  Annual Incurred Cost Proposal | **Y180** | H.  See section II. H. for instructions and due dates |
| ☐ I.  DOE For-Profit Compliance Audit | **O** | I.  See section II. I. for instructions and due dates |
| ☐ J.  Single Audit: States, Locals, Tribal Governments, and Non-Profits | **O** | J.  See section II. J. for instructions and due dates |
| ☐ K.  Other (see Special Instructions) | **A** | K.  See Special Instructions |
| | | |
| **III.  CLOSEOUT REPORTING** | | |
| ☐ A.  Final Scientific/Technical Report | **F** | A. OSTI E-Link |
| ☐ B.  Invention Certification (DOE F 2050.11) | **F** | B. EERE PMC |
| ☐ C.  Tangible Personal Property Report – Final Report (SF-428 & SF-428B) | **F** | C. EERE PMC |
| ☐ D.  Verification of Receipt of Accepted Manuscripts | **F** | D.  See section III.D. for instructions and due dates |
| ☐ E.  Other (see Special Instructions) | **F** | E. See Special Instructions |
| | | |
| **IV.  POST-PROJECT REPORTING** | | |
| ☐ A.  Scientific and Technical Reporting | **P** | A. OSTI E-Link |
| ☐ B.  Intellectual Property Reporting | **P** | B. iEdison |

**FREQUENCY CODES AND DUE DATES:**

**A5 – As Specified or within five (5) calendar days after the event.**

**F – Final; within 120 calendar days after expiration or termination of the award.**

**O – Other: See instructions for further details.**

**P – Post-project (after the period of performance); within five (5) calendar days after the event, or as specified.**

**Q – Quarterly; within 30 calendar days after the end of the federal fiscal year quarter.**

**S – Semiannually; within 30 days after end of the reporting period.**

**Y – Yearly; within 90 calendar days after the end of the federal fiscal year.**

**Y180 – Yearly; within 180 calendar days after the close of the recipient's fiscal year.**


**FULL URLS:**

**OSTI E-Link:** http://www.osti.gov/elink-2413
**OSTI E-Link Datasets:** https://www.osti.gov/elink/2416-submission.jsp
**DOE CODE:** https://www.osti.gov/doecode/
**iEdison:** http://www.iedison.gov
**EERE PMC:** https://www.eere-pmc.energy.gov/SubmitReports.aspx
**FSRS:** https://www.fsrs.gov

1.    EERE Special Instructions:

Table of Contents

# EERE Reporting Instructions

✳✳✳ ***Throughout the performance of the project, it is important that you mark Protected Data/Limited Rights Data as described in Appendix A. It is equally important that you not submit Protected Personally Identifiable Information (Protected PII) to EERE. See Appendix A for guidance on Protected PII.*** ✳✳✳

Report Templates Link: http://energy.gov/eere/funding/eere-funding-application-and-management-forms

## I. Project Management Reporting

### A. Research Performance Progress Report (RPPR)

| | |
|---|---|
| Submit to: | https://www.eere-pmc.energy.gov/SubmitReports.aspx |
| Submission deadline: | Within 30 calendar days after the end of the quarterly reporting period (January 30, April 30, July 30, October 30) |

Every quarter, the prime recipient is required to submit a Research Performance Progress Report (RPPR) for the project – i.e., the entirety of work performed by the prime recipient, subrecipients, and contractors – to EERE. The RPPR must include the following information.

**Standard Cover Page Data Elements and Reporting Categories**

The standard cover page data elements and components shown below comprise the complete RPPR format. Each category in the RPPR is a separate reporting component.

1. **Cover Page**

   a. Federal Agency and Organization Element to Which Report is Submitted
   b. Federal Grant or Other Identifying Number Assigned by Agency
   c. Project Title PD/PI
   d. Business Contact Name, Title and Contact Information (e-mail address and phone number)
   e. Name of Submitting Official, Title, and Contact Information (e-mail address and phone number), if other than PD/PI
   f. Submission Date
   g. UEI Number
   h. Recipient Organization (Name and Address)
   i. Project/Grant Period (Start Date, End Date)
   j. Reporting Period End Date
   k. Current Report Term or Frequency (annual, semi-annual, quarterly, final, other)

l.  Certification by the Submitting Official that includes: Signature of Submitting Official (electronic signatures (i.e., Adobe Acrobat) are acceptable); date of signature; and the following certification statement:

> By signing this report, I certify to the best of my knowledge and belief that the report is true, complete, and accurate. I am aware that any false, fictitious, or fraudulent information, misrepresentations, half-truths, or the omission of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims or otherwise. (U.S. Code Title 18, Section 1001, Section 287 and Title 31, Sections 3729-3730). I further understand and agree that the information contained in this report are material to Federal agency's funding decisions and I have an ongoing responsibility to promptly update the report within the time frames stated in the terms and conditions of the above referenced Award, to ensure that my responses remain accurate and complete.

## 2. Accomplishments

**What was done? What was learned?**
The information provided in this section allows the agency to assess whether satisfactory progress has been made during the reporting period. The PI is reminded that the grantee is required to obtain prior written approval from the Contracting Officer whenever there are significant changes in the project or its direction. Requests for prior written approval must be submitted to the Contracting Officer.

a.  **What are the major goals and objectives of this project?**
List the major goals of the project as stated in the approved application or as approved by the agency. Describe the proposed technical approach to obtain those goals. If the application lists milestones/target dates for important activities or phases of the project, identify these dates and show actual completion dates or the percentage of completion. Generally, the goals will not change from one reporting period to the next. However, if the awarding agency approved changes to the goals during the reporting period, list the revised goals and objectives. Also explain any significant changes in approach or methods from the agency approved application or plan.

b.  **What was accomplished under these goals?**
For this reporting period describe: 1) major activities; 2) specific objectives; 3) significant results or key outcomes, including major findings, developments, or conclusions (both positive and negative); and/or 4) other achievements. Include a discussion of stated goals not met. As the project progresses, the emphasis in

reporting in this section should shift from reporting activities to reporting accomplishments.

c. **What opportunities for training and professional development has the project provided?**

Describe opportunities for training and professional development provided to anyone who worked on the project or anyone who was involved in the activities supported by the project. "Training" activities are those in which individuals with advanced professional skills and experience assist others in attaining greater proficiency. Training activities may include, for example, courses or one-on-one work with a mentor. "Professional development" activities result in increased knowledge or skill in one's area of expertise and may include workshops, conferences, seminars, study groups, and individual study. Include participation in conferences, workshops, and seminars not listed under major activities.

If the project was not intended to provide training and professional development opportunities or there is nothing significant to report during this reporting period, state "Nothing to Report."

d. **How have the results been disseminated to communities of interest?**

Describe how the results have been disseminated to communities of interest. Include any outreach activities that have been undertaken to reach members of communities who are not usually aware of these research activities, for the purpose of enhancing public understanding and increasing interest in learning and careers in science, technology, and the humanities.

If there is nothing significant to report during this reporting period, state "Nothing to Report."

e. **What do you plan to do during the next reporting period to accomplish the goals and objectives?**

Describe briefly what you plan to do during the next reporting period to accomplish the goals and objectives.

If there are no changes to the agency-approved application or plan for this project or if this is the final report, state "Nothing to Report."

3. **Products**

**What has the project produced?**

Publications are the characteristic product of research. Agencies evaluate what the publications demonstrate about the excellence and significance of the research and the efficacy with which the results are being communicated to colleagues, potential users, and the public, not just the number of publications. Many projects (though not all)

U.S. DEPARTMENT OF **ENERGY** | Energy Efficiency &
Renewable Energy

develop significant products other than publications. Agencies assess and report both publications and other products to Congress, communities of interest, and the public.

List any products resulting from the project during the reporting period. Examples of products include: publications, conference papers, and presentations; website(s); technologies or techniques; inventions, patent applications, and/or licenses; and other products, such as data or databases, physical collections, audio or video products, software or NetWare, models, educational aids or curricula, instruments or equipment, research material, interventions (e.g., clinical or educational), new business creation or any other public release of information related to the project.

If there is nothing significant to report or if no products were developed during this reporting period, state "Nothing to Report."

a. **Publications, conference papers, and presentations**
Report the publication(s) resulting from the work under this award. There is no restriction on the number. However, agencies are most interested in those publications that most reflect the work under this award in the following categories:

Please note:  Recipients must use the EERE acknowledgement and legal disclaimer language as described in the Special Terms and Conditions (additional information can be found at the EERE Communications Standards website: https://www.energy.gov/eere/communicationstandards/eere-branded-publications-developed-third-parties).

The recipient is reminded that all data produced under the award should comply with the award's data management plan (DMP). The DMP provides a plan for making all research data displayed in publications resulting from the proposed work digitally accessible at the time of publication. At a minimum, the DMP (1) describes how data sharing and preservation will enable validation of the results from the proposed work, how the results could be validated if data are not shared or preserved and (2) has a plan for making all research data displayed in publications resulting from the proposed work digitally accessible at the time of publications. For more information on DMPs, please visit https://www.energy.gov/eere/funding/eere-digital-data-management.

i. **Accepted Manuscript(s) of Journal Article**
List peer-reviewed articles or papers that have been submitted for publication in scientific, technical, or professional journals. Include any paper submitted for peer-reviewed publication in the periodically published proceedings of a scientific society, a conference, or the like. A publication in the proceedings of a one-time conference, not part of a series, should be reported under "Books or other non-periodical, one-time publications."

Identify for each publication: Author(s); title; journal; volume: year; page numbers; status of publication (published; accepted, awaiting publication; submitted, under review; other); acknowledgement of federal support (yes/no); legal disclaimer language (yes/no). Also see instructions under **II. Scientific/Technical Reporting** regarding the submission of accepted manuscripts and other STI as appropriate.

ii.  **Books or other non-periodical, one-time publications**
Report any book, monograph, dissertation, abstract, or the like published as or in a separate publication, rather than a periodical or series. Include any significant publication in the proceedings of a one-time conference or in the report of a one-time study, commission, or the like.

Identify for each one-time publication: author(s); title; editor; title of collection, if applicable; bibliographic information; year; type of publication (book, thesis or dissertation, other); status of publication (published; accepted, awaiting publication; submitted, under review; other); acknowledgement of federal support (yes/no); legal disclaimer language (yes/no).

iii.  **Other publications, conference papers and presentations**
Identify any other publications, conference papers and/or presentations not reported above. Specify the status of the publication as noted above.

b.  **Website(s)**
List the URL for any Internet site(s) that disseminates the results of the research activities. A short description of each site should be provided. It is not necessary to include the publications already specified above in this section.

c.  **Technologies or techniques**
Identify technologies or techniques that have resulted from the research activities. Describe the technologies or techniques and how they are being shared.

d.  **Inventions, patent applications, and/or licenses**
Identify inventions, patent applications with date, and/or licenses that have resulted from the research. Submission of this information as part of an interim report or Final Technical Report is not a substitute for any other invention reporting required under the terms and conditions of an award.

e.  **Other products**
Identify any other significant products that were developed under this project. Describe the product and how it is being shared. Examples of other products are: Data or databases; Physical collections; Audio or video products; Software or NetWare; Models; Educational aids or curricula; Instruments or equipment;

Research material (e.g., germplasm, cell lines, DNA probes, animal models); Interventions (e.g. clinical, educational); new business creation; and Other.

4. **Participants & Other Collaborating Organizations**

This requirement is applicable for all awards issued after 03/01/22. For awards issued prior to 03/01/22, refer to your award Terms and Conditions to determine applicability. Prior to 03/01/22, some awards were required to submit a Table of Personnel; for these awards, please refer to your award Terms and Conditions and the Special Reporting Instructions in the FARC for guidance on reporting requirements.

Have there been any changes to the Participants and Collaborating Organizations information previously submitted to DOE? No ☐; Yes ☐; N/A ☐ If yes, the Recipient must submit updated information. See Section II.A. Participants and Collaborating Organizations.

5. **Current and Pending Support**

This requirement is mandatory for all Principal Investigators and senior/key personnel for awards issued after 10/01/21. For awards issued prior to 10/01/21, please refer to the award Terms and Conditions to determine applicability.

Have there been any changes to the information included in the current and pending support disclosures previously submitted to DOE? No ☐; Yes ☐; N/A ☐. If yes, the Recipient must submit updated information. See Section II.B. Current and Pending Support.

Have there been any changes to the PI or senior/key personnel? No ☐; Yes ☐; N/A ☐. If yes, the Recipient must submit a current and pending support disclosure and CV or Biosketch for any new PIs and senior/key personnel. See Current and Pending Support.

6. **Impact**

**What is the impact of the project? How has it contributed?**
Over the years, this base of knowledge, techniques, people, and infrastructure is drawn upon again and again for application to commercial technology and the economy, to health and safety, to cost-efficient environmental protection, to the solution of social problems, to numerous other aspects of the public welfare, and to other fields of endeavor.

The taxpaying public and its representatives deserve a periodic assessment to show them how the investments they make benefit the nation. Through this reporting format, and especially this section, recipients provide that assessment and make the case for federal funding of research and education.

Agencies use this information to assess how their research programs: increase the body of knowledge and techniques; enlarge the pool of people trained to develop that knowledge and techniques or put it to use; and improve the physical, institutional, and information resources that enable those people to get their training and perform their functions.

This component will be used to describe ways in which the work, findings, and specific products of the project have had an impact during this reporting period. Describe distinctive contributions, major accomplishments, innovations, successes, or any change in practice or behavior that has come about as a result of the project relative to: the development of the principal discipline(s) of the project; other disciplines; the development of human resources; teaching and educational experiences; physical, institutional, and information resources that form infrastructure; technology transfer (include transfer of results to entities in government or industry, adoption of new practices, or instances where research has led to the initiation of a startup company); society beyond science and technology; or foreign countries.

a. **What was the impact on the development of the principal discipline(s) of the project?**
Describe how findings, results, and techniques that were developed or extended, or other products from the project made an impact or are likely to make an impact on the base of knowledge, theory, and research and/or pedagogical methods in the principal disciplinary field(s) of the project. Summarize using language that a lay audience can understand (Scientific American style). How the field or discipline is defined is not as important as covering the impact the work has had on knowledge and technique. Make the best distinction possible, for example, by using a "field" or "discipline", if appropriate, that corresponds with a single academic department (i.e., physics rather than nuclear physics).

If there is nothing significant to report during this reporting period, state "Nothing to Report."

b. **What was the impact on other disciplines?**
Describe how the findings, results, or techniques that were developed or improved, or other products from the project made an impact or are likely to make an impact on other disciplines.

If there is nothing significant to report during this reporting period, state "Nothing to Report."

c. **What was the impact on the development of human resources?**
Describe how the project made an impact or is likely to make an impact on human resource development in science, engineering, and technology. For example, how

has the project: provided opportunities for research and teaching in the relevant fields; improved the performance, skills, or attitudes of members of underrepresented groups that will improve their access to or retention in research, teaching, or other related professions; developed and disseminated new educational materials; provided scholarships; or provided exposure to science and technology for practitioners, teachers, young people, or other members of the public?

If there is nothing significant to report during this reporting period, state "Nothing to Report."

d. **What was the impact on teaching and educational experiences?**
Describe how the project made an impact or is likely to make an impact on teaching and educational experiences. For example, has the project: developed and disseminated new educational materials; led to ideas for new approaches to course design or pedagogical methods; or developed online resources that will be useful for teachers and students and other school staff?

If there is nothing significant to report during this reporting period, state "Nothing to Report."

e. **What was the impact on physical, institutional, and information resources that form infrastructure?**
Describe ways, if any, in which the project made an impact, or is likely to make an impact, on physical, institutional, and information resources that form infrastructure, including: physical resources such as facilities, laboratories, or instruments; institutional resources (such as establishment or sustenance of societies or organizations); or information resources, electronic means for accessing such resources or for scientific communication, or the like.

If there is nothing significant to report during this reporting period, state "Nothing to Report."

f. **What was the impact on technology transfer?**
Describe ways in which the project made an impact, or is likely to make an impact, on commercial technology or public use, including: transfer of results to entities in government or industry; instances where the research has led to the initiation of a start-up company; or adoption of new practices.

If there is nothing significant to report during this reporting period, state "Nothing to Report."

g. **What was the impact on society beyond science and technology?**
Describe how results from the project made an impact, or are likely to make an impact, beyond the bounds of science, engineering, and the academic world on

areas such as: improving public knowledge, attitudes, skills, and abilities; changing behavior, practices, decision making, policies (including regulatory policies), or social actions; or improving social, economic, civic, or environmental conditions.

If there is nothing significant to report during this reporting period, state "Nothing to Report."

h. **What percentage of the award's budget was spent in foreign country(ies)?**
Describe what percentage of the award's budget was spent in foreign country(ies). If more than one foreign country is involved, identify the distribution between the foreign countries.

U.S.-based recipients should provide the percentage of the budget spent in the foreign country(ies) and/or, if applicable, the percentage of the budget obligated to foreign entities as first-tier subawards.

Recipients that are not U.S.-based should provide the percentage of the direct award received, excluding all first-tier subawards to U.S. entities. If applicable, provide separately the percentage of the budget obligated to non-U.S. entities as first-tier subawards.

7. **Changes/Problems**

The PD/PI is reminded that the grantee is required to obtain prior written approval from the Contracting Officer whenever there are significant changes in the project or its direction. Requests for prior written approval must be submitted to the Contracting Officer.  If not previously reported in writing, provide the following additional information, if applicable: Changes in approach and reasons for change; Actual or anticipated problems or delays and actions or plans to resolve them; Changes that have a significant impact on expenditures; Significant changes in use or care of animals, human subjects, and/or biohazards.

If there is nothing significant to report during this reporting period, state "Nothing to Report."

a. **Changes in approach and reasons for change**
Describe any changes in approach during the reporting period and reasons for these changes. Remember that significant changes in objectives and scope require prior approval of the Contracting Officer.

If there is nothing significant to report during this reporting period, state "Nothing to Report."

b. **Actual or anticipated problems or delays and actions or plans to resolve them**

Describe problems or delays encountered during the reporting period and actions or plans to resolve them.

If there is nothing significant to report during this reporting period, state "Nothing to Report."

c. **Changes that have a significant impact on expenditures**
Describe changes during the reporting period that may have a significant impact on expenditures, for example, delays in hiring staff or favorable developments that enable meeting objectives at less cost than anticipated.

If there is nothing significant to report during this reporting period, state "Nothing to Report."

d. **Significant changes in use or care of human subjects, vertebrate animals, biohazards, and/or select agents**
Describe significant deviations, unexpected outcomes, or changes in approved protocols for the use or care of human subjects, vertebrate animals, biohazards and/or select agents during the reporting period. If required, were these changes approved by the applicable institution committee and reported to the agency? Also specify the applicable Institutional Review Board/Institutional Animal Care and Use Committee approval dates.

If there is nothing significant to report during this reporting period, state "Nothing to Report."

e. **Change of primary performance site location from that originally proposed**
Identify any change to the primary performance site location identified in the proposal, as originally submitted.

If there is nothing significant to report during this reporting period, state "Nothing to Report."

8. **Special Reporting Requirements**

Respond to any special reporting requirements specified in the award terms and conditions, as well as any award specific reporting requirements.

9. **Budgetary Information**

This component will be used to collect budgetary data from the recipient organization. The information will be used in conducting periodic administrative/budgetary reviews. Budgetary data identified and required by the Contracting Officer should be submitted in an Excel spreadsheet format.

**B. Financial Report SF-425 Federal Financial Report**

| Submit to: | https://www.eere-pmc.energy.gov/SubmitReports.aspx |
|---|---|
| Submission deadline: | Within 30 calendar days after the end of the quarterly reporting period (January 30, April 30, July 30, October 30) **and** within 120 calendar days after expiration or termination of the award |

Every quarter, the prime recipient is required to submit a completed SF-425 for the project to EERE, covering the entirety of work performed by the prime recipient, subrecipients, and contractors – to EERE. A fillable version of the SF-425 is available at https://www.energy.gov/eere/funding/eere-funding-application-and-management-forms.

**C. Scientific and Technical Reporting**

The dissemination of scientific and technical information (STI) ensures public access to the results of federally funded research. STI refers to information products in any medium or format used to convey results, findings, or technical innovations from research and development or other scientific and technological work that are prepared with the intention of being preserved and disseminated in the broadest sense applicable (i.e., to the public or, in the case of controlled unclassified information or classified information, disseminated among authorized individuals). By properly submitting STI to DOE Energy Link System (E-Link), the information will be made available to the public through OSTI.GOV.

**NOTE: SCIENTIFIC/TECHNICAL PRODUCTS INTENDED FOR PUBLIC RELEASE MUST NOT CONTAIN PROTECTED PERSONALLY IDENTIFIABLE INFORMATION (PII). Please refer to Appendix A for more information.**

**1. Accepted Manuscript of Journal Article**

| Submit to: | DOE Energy Link System (E-Link) available at http://www.osti.gov/elink-2413 |
|---|---|
| Submission deadline: | No later than the published online date of the article |

Public access to scholarly publications is enabled by providing the Accepted Manuscript (AM) of the Journal Article to DOE OSTI and is consistent with the U.S. Government's retained license to published results of federally-funded research. If the recipient has a journal article accepted for publication which includes information/data produced under the award, then the recipient must submit an AN 241.3, as described below, no later than the published online date of the article.

Content. The recipient is to provide the final peer-reviewed AM, i.e., the version of a journal article that has been peer reviewed and accepted for publication in a journal. Do NOT submit the journal's published version of the article, i.e., do NOT submit a

copyrighted reprint. Please see the Accepted Manuscript FAQ
https://www.energy.gov/eere/funding/downloads/quarterly-and-annual-reports for
more information.

DOE will make no additional review of the content of the AM because the AM is the
version of the journal article with the content to be published (i.e., publicly released) by
the journal publisher.

The recipient must self-certify at the time of submission to EERE via E-Link that the
content is appropriate and that it is not a copyrighted reprint, i.e., the final version of
the published article. Recipients are reminded that the article is to include an
acknowledgement of federal support and a legal disclaimer as required in the
"Publications" Term in the award Special Terms and Conditions (additional information
can be found at the EERE Communications Standards website:
https://www.energy.gov/eere/communicationstandards/eere-branded-publications-
developed-third-parties).

The recipient is also reminded that all data produced under the award should comply
with the award's data management plan (DMP). The DMP provides a plan for making all
research data displayed in publications resulting from the proposed work digitally
accessible at the time of publication. At a minimum, the DMP (1) describes how data
sharing and preservation will enable validation of the results from the proposed work,
how the results could be validated if data are not shared or preserved and (2) has a
plan for making all research data displayed in publications resulting from the proposed
work digitally accessible at the time of publications. For more information on DMPs,
please visit https://www.energy.gov/eere/funding/eere-digital-data-management.

Electronic Submission Process. The AM of the Journal Article must be provided
electronically via the DOE Energy Link System (E-Link) and must be accompanied by a
completed DOE Announcement Notice (AN) 241.3 (http://www.osti.gov/elink-2413).

2. **Conference Product(s)**

| Submit to: | DOE Energy Link System (E-Link) available at http://www.osti.gov/elink-2413 |
|---|---|
| Submission deadline: | Within five (5) calendar days after the event, or as specified |

The recipient must submit a copy of any scientific/technical conference papers,
proceedings, or presentations.

Content: The content should include a copy of the paper, presentation, or proceeding
and: (1) name of conference; (2) location of conference; (3) date of conference; and (4)
conference sponsor. Also include an acknowledgement of federal support and a legal
disclaimer as described in the Special Terms and Conditions (additional information can

be found at the EERE Communications Standards website:
https://www.energy.gov/eere/communicationstandards/eere-branded-publications-developed-third-parties).

Electronic Submission Process: Scientific/technical conference proceedings, papers/presentations or must be submitted via the DOE Energy Link System (E-Link) with a completed DOE Announcement Notice (AN) 241.3 (https://www.osti.gov/elink-2413).

The recipient is responsible for ensuring the suitability of the content for public release. The terms and conditions of award provide that submissions must not contain any Protected Personally Identifiable Information (PII), limited rights data (proprietary data), classified information, information subject to export control classification, or other information not subject to release.

For more information, please review the Conference Products FAQ at https://www.energy.gov/eere/funding/downloads/quarterly-and-annual-reports.

3. **Technical Report(s)**

| Submit to: | DOE Energy Link System (E-Link) available at http://www.osti.gov/elink-2413 |
|---|---|
| Submission deadline: | Within five (5) calendar days after the event, or as specified |

The recipient must submit a copy of any scientific/technical reports.

Content: The content should include a copy of the report as well as an acknowledgement of federal support and a legal disclaimer as described in the Special Terms and Conditions (additional information can be found at the EERE Communications Standards website: https://www.energy.gov/eere/communicationstandards/eere-branded-publications-developed-third-parties).

Electronic Submission Process: Scientific/technical reports must be submitted via the DOE Energy Link System (E-Link) with a completed DOE Announcement Notice (AN) 241.3 (https://www.osti.gov/elink-2413).

The recipient is responsible for ensuring the suitability of the content for public release. The terms and conditions of award provide that submissions must not contain any Protected Personally Identifiable Information (PII), limited rights data (proprietary data), classified information, information subject to export control classification, or other information not subject to release.

4. **Software & Manual(s)**

| Submit to: | DOE CODE: https://www.osti.gov/doecode/ |
|---|---|
| Submission deadline: | Within five (5) calendar days after the event, or as specified |

The recipient must submit all software deliverables created under the award, as well as any accompanying documentation or manuals.

DOE CODE is DOE's software services platform for submitting and searching for software resulting from DOE-funded research. Through submission to DOE CODE, users have the option to obtain a Digital Object Identifier (DOI) for the code, making it more easily discoverable, citable, and shared.

Content. When a recipient submits software to OSTI through DOE CODE, a set of required metadata elements and a link to the software repository must be provided.

Submission Process. Recipients will submit software by going to https://www.osti.gov/doecode/. Before submissions can be made, the recipient will be required to create an account. The recipient may create an account by visiting the top right of the DOE CODE homepage. Once the account is created, submissions may be made through the submit software/code link on the homepage. For more information about DOE CODE please visit https://www.osti.gov/doecode/faq.

5. **Dataset(s)**

| Submit to: | DOE Energy Link System (E-Link) available at https://www.osti.gov/elink/241-6-submission.jsp |
|---|---|
| Submission deadline: | Within five (5) calendar days after the event, or as specified |

Scientific/technical datasets (data-streams, data files, etc.) support the technical reports and published literature resulting from DOE-funded research. They are also recognized as valuable information entities in their own right that, now and in the future, need to be available for citation, discovery, retrieval, and reuse. The assignment and registration of a Digital Object Identifier (DOI) is a free service for DOE-funded researchers which is provided by OSTI to enhance access to this important resource. In order to obtain a DOI, provide to OSTI the specific data elements relevant to the dataset, as specified in DOE AN 241.6.

Content. If the recipient generates publicly available datasets resulting from work funded by DOE, they may announce these datasets to OSTI and have them registered with DataCite to obtain a DOI, which ensures long-term linkage between the DOI and the dataset's location. To register and publicly announce a dataset, the recipient must provide an AN 241.6, including the required data elements needed for describing the

dataset. Note: Do NOT submit the dataset itself, only the metadata for registering the dataset, obtaining a DOI, and announcing its availability.

Electronic Submission Process. Notification of scientific datasets must be submitted electronically via the DOE Energy Link System (E-Link) and must be accompanied by a completed DOE Announcement Notice (AN) 241.6 (https://www.osti.gov/elink/241-6-submission.jsp). Within the AN 241.6, provide relevant information about the dataset as well as the URL where the dataset can be accessed.

## 6. Other STI (Dissertation / Thesis, etc.)

| Submit to: | http://www.osti.gov/elink-2413 |
|---|---|
| Submission deadline: | Within five (5) calendar days after the event, or as specified |

Recipients are encouraged to announce other forms of STI especially if they are the primary means by which certain research results are disseminated or if they contain research results not already announced to DOE by the recipient in technical reports, accepted journal articles, conference products, software, and datasets.

Other types of scientific and technical information produced which may be used for public dissemination of project results include: dissertation/thesis, patent, book, or other similar products. These types of STI may also be announced using DOE AN 241.3 by following instructions on the E-Link website (http://www.osti.gov/elink-2413).

## D. Intellectual Property Reporting

### 1. Intellectual Property Reporting

| Submit to: | http://www.iEdison.gov |
|---|---|
| Submission deadline: | Within five (5) calendar days after the event, or as specified |

iEdison requires a login and password. If the recipient's organization does not already have an iEdison administrator account, the recipient may register for one at: iEdison Registration.

In accordance with the patent rights clause of the award, the recipient and subrecipient(s), if any, must complete the following intellectual property reports in iEdison when applicable:

Disclosing a subject invention, including anticipated uses and sales (use iEdison's Invention Report);

Reporting publications, manuscript submissions, or other public disclosures concerning a subject invention (add documents to the Invention Report);

If authorized by the award agreement, electing (or declining) to retain title to a subject invention (modify the Invention Report and input "Title Election Date" or "Not Elect Title Reason");

Disclosing the filing or termination of patent applications on a subject invention (i.e., patent applications disclosing or claiming a subject invention). Patent disclosures must be made (using iEdison's Patent Report) for filing the following patent applications:
- An initial domestic patent application (including provisional or non-provisional);
- A domestic divisional or continuation patent application;
- A domestic continuation-in-part application; and
- A foreign patent application.

Discontinuing prosecution of a patent application, maintenance of a patent, or defense in a patent reexamination or opposition proceeding, regardless of jurisdiction (modify the Patent Report); and,

Requesting an extension of time to:
- Elect (or decline) to retain title to a subject invention (modify the Invention Report); and
- File an initial domestic or foreign patent application (modify the Invention Report).

Failure to submit Intellectual Property Reporting Forms in a timely manner may result in forfeiture of the recipient's or subrecipient's rights in the subject inventions and related patent applications.

Please review the Invention Reporting FAQs https://www.energy.gov/eere/funding/downloads/quarterly-and-annual-reports for more information.

## 2. Invention Utilization Report

| Submit to: | http://www.iEdison.gov |
|---|---|
| Submission deadline: | For each subject invention, reports are due annually once the recipient or subrecipient elects to retain title to the subject invention and must continue to be provided for 10 years thereafter |

The recipient and subrecipient(s) must provide Invention Utilization Reports for each subject invention that the recipient or subrecipient retains ownership. Reports are due annually starting one year after the recipient or subrecipient elects to take title and must continue to be provided for 10 years thereafter or until the recipient or subrecipient informs DOE in writing that it no longer wants to retain title in the subject invention. Failure to submit Invention Utilization Reports in a timely manner may result in forfeiture of the recipient's or subrecipient's rights in the subject inventions.

### E. Project Management Plan (PMP)

| Submit to: | https://www.eere-pmc.energy.gov/SubmitReports.aspx |
|---|---|
| Submission deadline: | Within six (6) weeks of the effective date of the EERE award |

**Iterations and Maintenance**

The recipient is required to develop, update, and adhere to a project management plan. The purpose of the plan is to establish cost, schedule, and technical performance baselines, and to formalize the processes by which the project will be managed. These processes include considerations such as risk management, change management, and communications management. While it is primarily the project recipient's responsibility to maintain the plan, federal staff may request changes. The plan is intended to be a living document, modified as necessary, and comprising the following iterations:

**Application Draft**

The recipient must submit a draft of the project management plan with the initial application for financial assistance.

**Negotiation Draft**

The selected recipient may be called upon by the selecting Office to revise its project management plan during the negotiation phase.

**Active Plan**

Following formal award of the financial assistance agreement, the recipient must submit an updated project management plan, to include any changes requested during negotiation and a timeline based upon the actual award date.

### 1. Revised Plan(s)

During the life of the project the recipient must submit a revised project management plan based on the following circumstances:

**a.** Developments that have a significant favorable impact on the project.

    **b.** Problems, delays, or adverse conditions which materially impair the recipient's ability to meet the objectives of the award or which may require the program office to respond to questions relating to such events from the public. Specifically, the recipient must update the plan when any of the following incidents occur:

    i. Any event which is anticipated to cause significant schedule or cost changes, such as changes to the funding and costing profile or changes to the project timeline.

    ii. Any change to Technology Readiness Level.

    iii. Any significant change to risk events (including both potential and realized events) or to risk management strategies.

    iv. Failure to meet a milestone or milestones; any dependencies should be adjusted.

    v. Any changes to partnerships.

    vi. Any significant change to facilities or other project resources.

    vii. Any other incident that has the potential for high visibility in the media.

**2. Content of revised PMP**

**Project Title:** The DOE award number and project title
**Recipient Organization:** Official name of the recipient organization
**Principal Investigator:** The name and title of the project director/ principal investigator
**Date of Plan:** The date the plan or plan revision was completed

The revised PMP must describe changes to any of the following sections of the PMP as well as provide updated versions of any logs, tables, charts, or timelines.

**a. Executive Summary:**
Provide a description of the project that includes the objective, project goals, and expected results. The description should include a high-level description of the technology, potential use or benefit of the technology, location of work sites and a brief discussion of work performed at each site, along with a description of project phases (if the project includes phases).

**b. Technology Readiness Levels (TRLs):**
Identify the readiness level of the technology associated with the project as well as the planned progression during project execution. A detailed explanation of the rationale for the estimated technology readiness level should be provided. Specific entry criteria for the next higher technology readiness level should be identified. Guidance on TRL levels can be found here:
https://www.energy.gov/eere/funding/downloads/guidance-documents.

**c. Risk Management:**
Provide a summary description of the proposed approach to identify, analyze, and respond to potential risks associated with the proposed project. Project risk events

are uncertain future events that, if realized, impact the success of the project. At a minimum, include the initial identification of significant technical, resource, and management issues that have the potential to impede project progress and strategies to minimize impacts from those issues. The risk management approach should be tailored to the TRL. If a project or task is expected to progress to a higher TRL, then the risk plan should address the retirement of any risks associated with the first TRL and identify new risks related to moving to the next TRL. Additionally, the risk management approach should include risk opportunities that if realized, could benefit the project.

d. **Milestone Log:**
Provide milestones for each budget period (or phase) of the project. Each milestone should include a title and planned completion date. Milestones should be quantitative (e.g., a date, a decision to be made, a key event) and show progress toward budget period and/or project goals. Milestones should also be important and few.  Higher TRL projects (Demonstration and Deployment) typically have the most detailed milestone logs compared to lower TRL level projects (Research and Development). If applicable, milestones chosen should clearly reflect progress through various TRL stages.

Note: The Milestone Status must present actual performance in comparison with the Milestone Log, and include:
* The actual status and progress of the project,
* Specific progress made toward achieving the project's milestones, and
* Any proposed changes in the project's schedule required to complete milestones.

e. **Funding and Costing Profile:**
Provide a table (the Project Funding Profile) that shows, by budget period, the amount of government funding going to each project team member. Also, a table (the Project Costing Profile) which projects, by month, the expenditure of both government and recipient funds for the first budget period, at a minimum. The Funding and Costing Profile should show the relationships with the Milestone Log (Item 4 above) and Project Timeline (Item 6 below); for example, Funding and Costing information could be shown as an overlay on milestone or timeline charts.

f. **Project Timeline:**
Provide a timeline of the project (similar to a Gantt chart) broken down by each task and subtask, as described in the Statement of Project Objectives. The timeline should include a start date and end date for each task, as well as interim milestones. The timeline should also show interdependencies between tasks and include the milestones that are identified in the Milestone Log (Item 4 above). The timeline should also show the relationship to the Project Costing Profile (Item 5 above). If

applicable, the timeline should include activities and milestones related to achieving succeeding TRLs.

g. **Success Criteria at Decision Points:**
Provide well-defined success criteria for each decision point in the project, including go/no-go decision points and the conclusions of budget periods and the entire project. The success criteria should be objective and stated in terms of specific, measurable, and repeatable data. Usually, the success criteria pertain to desirable outcomes, results, and observations from the project. Key milestones can be associated with success criteria. If applicable, the success criteria should include exit criteria for progressing from one TRL to the next.

h. **Key Partnerships, Teaming Arrangements and Team Members:**
Provide a list of key team members in the project as well as the role and contact information of each.  A hierarchical project organization and structure chart should be provided along with a description of the role and responsibilities of each team member in terms of contribution to project scope. The section should also include key team members who fulfill single or multiple roles within a project as well as the contact information for each.

i. **Facilities and Resources:**
Provide a list of project locations along with a discussion of capabilities and activities performed at each site in terms of contribution to project scope. The address of each work site should be provided.

j. **Communications Management:**
Describe the communications needs and expectations for the project team members.  The communications plan may be simple or detailed, depending on the complexity of the project. At a minimum, the plan should include contact information, methods of communicating and anticipated frequency.

k. **Change Management:**
Provide a description of the process for managing change on the project. Describe how change will be monitored, controlled and documented within the project. This includes, but is not limited to, changes to the Scope, Schedule, and Budget. If applicable, Change Management should include assessing how changes impact TRLs.

**F. Special Status Reports**

| Submit to: | https://www.eere-pmc.energy.gov/SubmitReports.aspx |
|---|---|
| Submission deadline: | Within five (5) calendar days after the event, or as specified |

Problems, delays, or adverse conditions which materially impair the recipient's ability to meet the objectives of the award or which may require DOE to respond to questions relating to such events from the public. The recipient must report any of the following incidents and include the anticipated impact and remedial action to be taken to correct or resolve the problem/condition.

The prime recipient is required to report the following events to EERE:

1. Any notices or claims of patent or copyright infringement arising out of or relating to the performance of the EERE award;

2. Refusal of a subrecipient to accept flow down requirements in the Special Terms and Conditions and/or any Attachment to the EERE award;

3. Potential or actual violations of federal, state, and municipal laws arising out of or relating to work under the award;

4. Any improper claims or excess payments arising out of or relating to work under the award;

5. Potential or actual violations of the cost share requirements under the award;

6. Potential or actual noncompliance with EERE or DOE reporting requirements under the award;

7. Potential or actual violations of the lobbying restrictions in the award;

8. Potential or actual bankruptcy/insolvency of the prime recipient or subrecipient;

9. Potential or actual violation of U.S. export control laws and regulations arising out of or relating to the work under the award;

10. Any fatality or injuries requiring hospitalization arising out of or relating to work under the award;

11. Potential or actual violations of environmental, health, or safety laws and regulations, any significant environmental permit violation, and any incident which causes a significant process or hazard control system failure;

12. Any event which is anticipated to cause a significant schedule slippage or cost increase;

13. Any damage to Government-owned equipment in excess of $50,000;

14. Developments that have a significant favorable impact on the project; and,

15. Any incident arising out of or relating to work under the award that has the potential for high visibility in the media.

## G. Continuation Application

| Submit to: | https://www.eere-pmc.energy.gov/SubmitReports.aspx |
|---|---|
| Submission deadline: | Within five (5) calendar days after the event, or as specified |

A continuation application is a non-competitive application for an additional budget period within a previously approved period of performance. The continuation application should be submitted at least ninety (90) calendar days before the end of each budget period, or as specified in the Special Terms and Conditions of the award.

## H. Other (see Special Instructions)

| Submit to: | https://www.eere-pmc.energy.gov/SubmitReports.aspx |
|---|---|
| Submission deadline: | Within five (5) calendar days after the event, or as specified |

# II. Award Management Reporting

## A. Participants and Collaborating Organizations
(Research Performance Progress Report, Section 4)

| Submit to: | https://www.eere-pmc.energy.gov/SubmitReports.aspx |
|---|---|
| Submission deadline: | Within 30 calendar days after the end of the quarterly reporting period (January 30, April 30, July 30, October 30) only when there has been a change to Participants and Collaborating Organizations. |

The information requested in this report was previously included in Section 4, Participants and Collaborating Organizations, in the Research Performance Progress Report (RPPR).

### 1. Who has been involved?
Agencies need to know who has worked on the project to gauge and report performance in promoting partnerships and collaborations. The following information on participants and other collaborating organizations was provided during award negotiations. If there are any changes to Participants and Collaborating Organizations information previously submitted to DOE, the Recipient must submit updated information within 30 calendar days after the end of the quarterly reporting period in which the change occurred.

### a. What individuals have worked on the project?

Provide the following information for: (1) Project director(s)/Principal investigator(s) (PDs/PIs); and (2) each person who has worked or is expected to work at least one person month per year on the project regardless of the source of compensation (a person month equals approximately 160 hours of effort). Please note that such reporting does not constitute a formal institutional report of effort on the project, but rather is used by agency program staff to evaluate the progress of the project during a given reporting period.

i. **Provide the name and identify the role the person played in this project.**
Indicate the total number of months (including partial months) (Calendar, Academic, Summer) that the individual worked on this project. Using the project roles identified below, select the most senior role in which the person worked on the project for any significant length of time. For example, if an undergraduate student graduated, entered graduate school, and continued to work on the project, show that person as a graduate student, preferably explaining the change in involvement.

ii. **Project Roles:**
PD/PI
Co PD/PI
Faculty
Community College Faculty
Technical School Faculty
K-12 Teacher
Postdoctoral (scholar, fellow or other postdoctoral position)
Other Professional
Technician
Staff Scientist (doctoral level)
Statistician
Graduate Student (research assistant)
Non-Student Research Assistant
Undergraduate Student
Technical School Student
High School Student
Consultant
Research Experience for Undergraduates (REU) Participant
Other (specify)

iii. **Describe briefly how this person contributed to this project.**
If information is unchanged from a previous progress report, provide the name only and indicate "no change."

iv. **Identify the person's state, U.S. territory, and/or country of residence.**
State whether this person has collaborated internationally.

If the participant was U.S.-based, state whether this person collaborated internationally with an individual located in a foreign country and specify whether the person traveled to the foreign country as part of that collaboration, and, if so, what the duration of stay was. The foreign country(ies) should be identified.

If the participant was not U.S.-based, state whether this person traveled to the U.S. or another country as part of a collaboration, and, if so, what the duration of stay was. The destination country should be identified.

Example:
- Name: Mary Smith
- Total Number of Months: 5.5
- Project Role: Graduate Student
- Researcher Identifier: 1234567
- Contribution to Project: Ms. Smith has performed work in the area of combined error-control and constrained coding.
- State, U.S. territory, and/or country of residence: Michigan, U.S.A.
- Collaborated with individual in foreign country: Yes
- Country(ies) of foreign collaborator: China
- Travelled to foreign country: Yes
- If traveled to foreign country(ies), duration of stay: 5 months

b. **What other organizations have been involved as partners?**
Describe partner organizations – academic institutions, other nonprofits, industrial or commercial firms, state or local governments, schools or school systems, or other organizations (foreign or domestic) – that have been involved with the project. Partner organizations may provide financial or in-kind support, supply facilities or equipment, collaborate in the research, exchange personnel, or otherwise contribute.

Provide the following information for each partnership:
- Organization Name:
- Location of Organization: (if foreign location list country)
- Partner's contribution to the project: (identify one or more)
  - Financial support;
  - In-kind support (e.g., partner makes software, computers, equipment, etc., available to project staff);
  - Facilities (e.g., project staff use the partner's facilities for project activities);
  - Collaborative research (e.g., partner's staff work with project staff on the project);
  - Personnel exchanges (e.g., project staff and/or partner's staff use each other's facilities, work at each other's site); and

- Other.
  - More detail on partner and contribution (foreign or domestic).


c. **Have other collaborators or contacts been involved?**
Some significant collaborators or contacts within the recipient's organization may not be covered by "What people have worked on the project?" Likewise, some significant collaborators or contacts outside the recipient's organization may not be covered under "What other organizations have been involved as partners?"

For example, describe any significant:
- Collaborations with others within the recipient's organization, especially interdepartmental or interdisciplinary collaborations;
- Collaborations or contact with others outside the organization; and
- Collaborations or contacts with others outside the United States or with an international organization.

Identify the state(s), U.S. territory(ies), or country(ies) of collaborations or contacts.

It is likely that many recipients will have no other collaborators or contacts to report.

## B. Current and Pending Support

| Submit to: | https://www.eere-pmc.energy.gov/SubmitReports.aspx |
|---|---|
| Submission deadline: | Within thirty (30) calendar days only when there is a change to Current and Pending Support (i.e., new PI or senior/key personnel join the project or there are changes to previously submitted current and pending disclosures for this Award) |

Applicable for all awards issued after 10/01/2021. For awards issued prior to 10/01/21, refer to your award Terms and Conditions for applicability.

Prior to award, the Recipient was required to provide current and pending support disclosure statements for each principal investigator (PI) and senior/key personnel, at the recipient and subrecipient level, regardless of funding source. Throughout the life of the award, the Recipient must submit current and pending support disclosure statements and a CV or Biosketch for any new PI and senior/key personnel at the recipient and subrecipient level, added to the project funded under this Award within thirty (30) days of the individual joining the project. In addition, if there are any changes to current and pending support disclosure statements previously submitted to DOE, the Recipient must submit updated current and pending disclosure statements within thirty (30) days of the change. The Recipient must ensure all PIs and senior/key personnel at the recipient and subrecipient level, are aware of the requirement to submit updated current and pending support disclosure statements to DOE.

If there has been a change that would prompt the submission of a new or updated current and pending support disclosure, the instructions to complete the new or updated disclosure is listed below.

Current and pending support is intended to allow the identification of potential duplication, overcommitment, potential conflicts of interest or commitment, and all other sources of support. All PIs and senior/key personnel at the recipient and subrecipient level must provide a list of all sponsored activities, awards, and appointments, whether paid or unpaid; provided as a gift with terms or conditions or provided as a gift without terms or conditions; full-time, part-time, or voluntary; faculty, visiting, adjunct, or honorary; cash or in-kind; foreign or domestic; governmental or private-sector; directly supporting the individual's research or indirectly supporting the individual by supporting students, research staff, space, equipment, or other research expenses. All foreign government-sponsored talent recruitment programs must be identified in current and pending support.

For every activity, list the following items:
- The sponsor of the activity or the source of funding.
- The award or other identifying number.
- The title of the award or activity. If the title of the award or activity is not descriptive, add a brief description of the research being performed that would identify any overlaps or synergies with the proposed research.
- The total cost or value of the award or activity, including direct and indirect costs and cost share. For pending proposals, provide the total amount of requested funding.
- The award period (start date – end date).
- The person-months of effort per year being dedicated to the award or activity.
- Identify any overlap, duplication of effort, or synergistic efforts, with a description of the other award or activity to the current and pending support.
- Details of any obligations, contractual or otherwise, to any program, entity, or organization sponsored by a foreign government must be provided to DOE.

All PIs and senior/key personnel must provide a separate disclosure statement listing the required information above regarding current and pending support. The individual must sign and date their respective disclosure statement and include the following certification statement:

I, [Full Name and Title], certify to the best of my knowledge and belief that the information contained in this Current and Pending Support Disclosure Statement is true, complete and accurate. I understand that any false, fictitious, or fraudulent information, misrepresentations, half-truths, or omissions of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims or otherwise. (18 U.S.C. §§ 1001 and 287, and 31 U.S.C. 3729-3730 and 3801-3812). I further understand and agree that (1)

the statements and representations made herein are material to DOE's funding decision, and (2) I have a responsibility to update the disclosures during the period of performance of the award should circumstances change which impact the responses provided above.

The information may be provided in the format approved by the National Science Foundation (NSF), which may be generated by the Science Experts Network Curriculum Vita (SciENcv), a cooperative venture maintained at https://www.ncbi.nlm.nih.gov/sciencv/, and is also available at https://www.nsf.gov/bfa/dias/policy/nsfapprovedformats/cps.pdf. The use of a format required by another agency is intended to reduce the administrative burden to researchers by promoting the use of common formats. If the NSF format is used, the individual must still include a signature, date, and a certification statement using the language included in the paragraph above.

## C. Demographic Reporting

| Submit to: | https://www.eere-pmc.energy.gov/SubmitReports.aspx |
|---|---|
| Submission deadline: | Within 30 days after issuance of award |

DEMOGRAPHIC INFORMATION FOR SIGNIFICANT CONTRIBUTORS
(Research Performance Progress Report, Appendix)

Demographic data (i.e., gender, ethnicity, race, and disability status) should be provided directly by the Principal Investigator and Business Contact with the understanding that the submission of this report is mandatory for awards made after 03/01/2022. There are no adverse consequences for responding "Do not wish to provide" in any question. Principal Investigators and Business Contacts of awards made prior to 03/01/2022 are encouraged, but not required, to submit demographic reporting. Confidentiality of demographic data will be in accordance with agency's policy and practices for complying with the requirements of the Privacy Act.

Gender:
- o Male
- o Female
- o Do not wish to provide

Ethnicity:
- o Hispanic or Latina/o
- o Not-Hispanic or not-Latina/o
- o Do not wish to provide

Race (select one or more):
- o American Indian or Alaska Native

- o Asian
- o Black or African American
- o Native Hawaiian or other Pacific Islander
- o White
- o Do not wish to provide

Disability Status:

- o Yes (check yes if any of the following apply to you)
  - Deaf or serious difficulty hearing
  - Blind or serious difficulty seeing even when wearing glasses
  - Serious difficulty walking or climbing stairs
  - Other serious disability related to a physical, mental, or emotional condition.
- o No
- o Do not wish to provide

This measure is designed as a binary measure; it encompasses all self-reported disabilities. Please do not use it to report the number of individuals who have different types of disabilities (e.g., hearing impairments).

Note: This construct is not designed to be used at an individual-level (i.e., it should not be used for determining accommodation needs or disability status for particular individuals associated with the project).

**D. Tangible Personal Property Report – Annual Property Report (SF-428 & SF-428A)**

| Submit to: | https://www.eere-pmc.energy.gov/SubmitReports.aspx |
|---|---|
| Submission deadline: | Within 90 calendar days after the end of the annual reporting period |

The prime recipient must submit an annual inventory of federally-owned property (government-furnished) where the award specifies that title to the property vests with the federal government, whether it is in the possession of the prime recipient or subrecipient(s). The prime recipient must complete an SF-428 and SF-428A, available at https://www.energy.gov/eere/funding/eere-funding-application-and-management-forms.

**E. Tangible Personal Property Report – Disposition Request/Report (SF-428 & SF-428C)**

| Submit to: | https://www.eere-pmc.energy.gov/SubmitReports.aspx |
|---|---|
| Submission deadline: | Within 5 calendar days of the event or as specified |

The prime recipient must request disposition instructions for or report disposition of federally-owned property or equipment acquired with project funds, whether the property or equipment is/was in the possession of the prime recipient or subrecipient(s).  Recipients may also be required to provide compensation to the awarding agency when acquired equipment is sold or retained for use on activities not sponsored by the federal government. Any equipment with an acquisition cost above $5,000 must be included in the inventory.

If disposition occurs at any time other than award closeout (i.e., at any time throughout the life of the project or after project completion and closeout as long as the federal government retains an interest in the item), the prime recipient must complete an SF-428 and SF-428C, available at https://www.energy.gov/eere/funding/eere-funding-application-and-management-forms.

If disposition instructions are requested at the time of award closeout, the prime recipient must submit the SF-428 and SF-428B (see **III. Closeout Reporting**).

Only the EERE Contracting Officer has authority to approve disposition requests and issue disposition instructions.

F. **Uniform Commercial Code (UCC) Financing Statements**

| Submit to: | https://www.eere-pmc.energy.gov/SubmitReports.aspx |
|---|---|
| Submission deadline: | Within five (5) calendar days after the event, or as specified. |

If a for-profit recipient or subrecipient desires to purchase a piece of equipment for their project, and the per-unit dollar value of said equipment is $5,000 or more, and the federal share of the financial assistance agreement is more than $1M, the recipient or subrecipient must file a UCC financing statement.

A UCC financing statement provides public notice that the federal government has an undivided reversionary interest in the equipment, and as such the equipment cannot be sold or used as collateral for a loan (encumbered).

The for-profit recipient or subrecipient must file the UCC financing statement(s) with the Secretary of State where the equipment will be physically located and must pay any associated costs for such filings.

The initial UCC financing statement may also be referred to as a UCC1. For additional pieces of equipment not specified in the award budget, TBD equipment, or equipment needed in future budget periods, the recipient can file an amendment to the original UCC1 financing statement, by submitting the UCC3 financing statement amendment.

Each UCC financing statement or amendment is to be filed with the appropriate Secretary of State office, where the equipment will be physically located.

Note: All costs associated with filing UCC financing statements, UCC financing statement amendments, and UCC financing statement terminations, are allowable and allocable costs which can be charged to the federal award.

At a minimum, the recipient must have stated in their UCC financing statement in block 4. (collateral) the following:

o "Title to all equipment (not real property) purchased with federal funds under this financial assistance agreement is conditional pursuant to the terms of 2 CFR 910.360, and the federal government retains an undivided reversionary interest in the equipment at the federal cost-share proportion specified in the award terms and conditions."

o Federal Award Identification Number (e.g., DE-EE000XXXX)

## G. Federal Subaward Reporting System (FSRS)

| Submit to: | https://www.fsrs.gov/ |
|---|---|
| Submission deadline: | The prime recipient is required to file a FFATA sub-award report by the end of the month following the month in which the prime recipient awards any sub-grant greater than or equal to $30,000. |

The Federal Subaward Reporting System (FSRS) is the reporting tool prime recipients use to capture and report subaward and executive compensation data regarding their first-tier subrecipients to meet the FFATA reporting requirements. Prime recipients will report against subrecipients' awards. The subrecipient information entered in FSRS will then be displayed on USASpending.gov associated with the prime recipient's award furthering federal spending transparency.

The prime recipient is required to file a FFATA sub-award report by the end of the month following the month in which the prime recipient awards any sub-award greater than or equal to $30,000.

## H. Annual Incurred Cost Proposals

| Submit to: | If DOE is the Cognizant Federal Agency, send the Annual Incurred Cost Proposal to one of the following offices: <br>• CostPrice@ee.doe.gov (if the Golden Field Office is Cognizant); OR <br>• PricingGroup@netl.doe.gov (if NETL is Cognizant) <br><br>Otherwise, submit the proposal to the Recipient's appropriate Cognizant Federal Agency office. |
|---|---|

| Submission deadline: | Within 180 calendar days after the close of the recipient's fiscal year*<br>*The end of the period of the performance, or closure of an award, does not dismiss this reporting requirement. |
|---|---|

Prime recipients must submit a certified annual Incurred Cost Proposal (ICP), reconciled to its financial records, in order to finalize and reconcile billing rates incurred and billed to the Government.

An ICP submission is required unless one of the following conditions apply to the DOE award:
- Recipient elected to apply the 10% de minimis rate as allowed under 2 CFR 200.414(f); or
- Recipient has a pre-determined Negotiated Indirect Cost Rate Agreement (NICRA).

## I. DOE For-Profit Compliance Audit

| Submit to: | Email a copy of the annual DOE For-Profit Compliance Audit to:<br>• DOE-Audit-Submission@hq.doe.gov and<br>• The DOE Contracting Officer<br>• For awards administered by the DOE NETL Office, also email a copy to PricingGroup@netl.doe.gov |
|---|---|
| Submission deadline: | Within the earlier of 30 days after receipt of the auditor's report(s) or 9 months after the end of the audit period (recipient's fiscal year-end)*<br>*The end of the period of the performance, or closure of an award, does not dismiss this reporting requirement. |

As required by 2 CFR 910, Subpart F, a For-Profit entity which expends $750,000 or more during the non-federal entity's fiscal year in DOE awards must have a compliance audit conducted for that year.

The DOE For-Profit Compliance Audit must be conducted in accordance with the regulations at 2 CFR 910.500-521 and must refer to the appropriate regulations used by the auditor in their examination.

The compliance audit report must be submitted, along with audited financial statements, if required and available.

## J. Single Audit: States, Local Government, Tribal Governments, Institution of Higher Education (IHE), or Non-Profit Organization

| Submit to: | Federal Audit Clearinghouse - https://harvester.census.gov/facweb/Default.aspx |
|---|---|
| Submission deadline: | Within the earlier of 30 days after receipt of the auditor's report(s) or 9 months after the end of the audit period (recipient's fiscal year-end)* |

| | |
|---|---|
| | *The end of the period of the performance, or closure of an award, does not dismiss this reporting requirement. |

As required by 2 CFR 200 Subpart F, non-federal entities that expend $750,000 or more during the non-federal entity's fiscal year in federal awards must have a single or program-specific audit conducted. The single audit must be conducted in accordance with §200.514 Scope of audit, except when it elects to have a program-specific audit conducted.

For most single audits, the requirement is for annual single audits.  However, there are occasions where a single audit is not required annually. Per 2 CFR 200.504 - Frequency of audits, a state, local government, or Indian tribe that is required by constitution or statute to undergo its audits less frequently than annually, is permitted to undergo its audits biennially. Also, any nonprofit organization that had biennial audits for all biennial periods ending between July 1, 1992, and January 1, 1995, is permitted to undergo its single audits biennially.

For a program-specific audit, when a recipient expends federal award funds under only one federal program (excluding R&D) and the federal program's statutes, regulations, or the terms and conditions of the federal award do not require a financial statement audit of the auditee, the auditee may elect to have a program-specific audit conducted.  A program-specific audit may not be elected for R&D unless all of the federal awards expended were received from the same federal agency, or the same federal agency and the same pass-through entity, and that federal agency, or pass-through entity in the case of a subrecipient, approves in advance a program-specific audit.

The single audit report shall include audited financial statements.

## III. Closeout Reporting

### A. Final Scientific/Technical Report

| Submit to: | DOE Energy Link System (E-Link) available at http://www.osti.gov/elink-2413 |
|---|---|
| Submission deadline: | Within 120 calendar days after expiration or termination of the award |

The prime recipient must submit a Final Scientific/Technical Report to DOE for all projects.

The scientific/technical report is intended to increase the diffusion of knowledge gained by DOE-funded research, and all requirements shall be interpreted in that light.

Content: Research findings and other significant scientific and technical information (STI) resulting from the DOE-sponsored projects shall be included in the final scientific/technical report, subject to the following provisions:

1. The scientific/technical report is to cover the entire period of performance. For Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) awards, a final scientific/technical report must be submitted after the completion of each phase, e.g., Phase I, Phase II, and sequential Phase II, as described in the Special Instructions.

2. STI that is publicly accessible need not be duplicated in the report if a citation with a link to where the information may be found is included in the report. For example, articles found in PAGES (i.e., DOE's Public Access Gateway for Energy and Science, http://www.osti.gov/pages/) are accessible to the public.

3. Provide identifying information: the EERE award number; sponsoring program office; name of recipient; project title; name of project director/principal investigator; and consortium/team members.

4. Include the EERE acknowledgement and legal disclaimer language as described in the Special Terms and Conditions (additional information can be found at the EERE Communications Standards website: https://www.energy.gov/eere/communicationstandards/eere-branded-publications-developed-third-parties).

5. Include any limitations on public release of the report, if authorized by the award agreement. If the document being submitted contains patentable material or protected data (i.e., data first produced in the performance of the award that is protected from public release for a period of time by terms of the award agreement) as set forth in the award agreement, then (1) prominently display on the cover of the report any authorized distribution limitation notices, such as patentable material or protected data and (2) clearly identify patentable or protected data on each page of the report. Reports delivered without such notices or with restrictive notices not authorized by the award agreement may be deemed to have been furnished with unlimited rights, and the Government assumes no liability for the disclosure, use or reproduction of such reports. Any restrictive markings must also be noted in the distribution limitation section of the Announcement Notice (AN) 241.3. No protected PII should be included.

6. Provide an abstract or executive summary, which should be a minimum of one paragraph and written in terms understandable by an educated layperson. (Refer to http://www.osti.gov/stip/standards for ANSI/NISO guidance as needed.) The abstract included in an application may serve as a model for this.

7. Summarize project activities for the entire period of funding, including original hypotheses, approaches used, and findings. Include, if applicable, facts, figures, analyses, and assumptions used during the life of the project to support the results

in a manner that conveys to the scientific community the STI created during the project. To minimize duplication, the report may reference STI, including journal articles, that is publicly accessible. See also #2.

8. For guidance offered by the National Information Standards Organization on typical attributes and content of a technical report, if needed, refer to ANSI/NISO Z39.18-2005 (R2010), Scientific and Technical Reports – Preparation, Presentation, and Preservation (see http://www.osti.gov/stip/standards).

Electronic Submission Process: The final scientific/technical report must be submitted via the DOE Energy Link System (E-Link) with a completed electronic version of DOE Announcement Notice (AN) 241.3, "U.S. Department of Energy (DOE), Announcement of Scientific and Technical Information (STI)." The recipient can complete, upload, and submit the DOE AN 241.3 online via E-Link (https://www.osti.gov/elink-2413).

The recipient must mark the appropriate block in the "Intellectual Property/Distribution Limitations" Section of the DOE AN 241.3. Reports that are electronically uploaded must not contain any limited rights data (proprietary data), classified information, protected PII, information subject to export control classification, or other information not subject to release. During the upload process, the recipient must self-certify that no content of this nature is being submitted. For assistance with reports containing such content, contact the Contracting Officer.

For more information, please see the Final Technical Report FAQs https://www.energy.gov/eere/funding/downloads/quarterly-and-annual-reports.

**B.  Invention Certification (DOE F 2050.11)**

| Submit to: | https://www.eere-pmc.energy.gov/SubmitReports.aspx |
|---|---|
| Submission deadline: | Within 120 calendar days after expiration or termination of the award |

The prime recipient is required to submit an Invention Certification DOE F 2050.11. The Invention Certification form is available at http://energy.gov/eere/funding/eere-funding-application-and-management-forms.

The Invention Certification must include a list of all subcontracts at any tier containing a patent rights clause (or state that there were none).

For more information, please see the Intellectual Property Reporting FAQs https://www.energy.gov/eere/funding/downloads/quarterly-and-annual-reports.

**C.  Tangible Personal Property Report – Final Report (SF-428 & SF-428B)**

| Submit to: | https://www.eere-pmc.energy.gov/SubmitReports.aspx |
|---|---|
| Submission deadline: | Within 120 calendar days after expiration or termination of the award |

The prime recipient must submit a final inventory of and request disposition instructions for any federally-owned property and/or property or equipment acquired with project funds with an acquisition cost above $5,000, whether the property is/was in the possession of the prime recipient or subrecipients.

The prime recipient must complete an SF-428 and SF-428B, available at http://energy.gov/eere/funding/eere-funding-application-and-management-forms.

If disposition occurs at any time other than award closeout, the prime recipient must complete an SF-428 and SF-428C (see IV. Other Reporting H. Property Disposition Request/Report).

Only the EERE Contracting Officer has authority to approve disposition requests and issue disposition instructions.

**D. Verification of Receipt of Accepted Manuscripts**

Recipients are required to submit Accepted Manuscripts of Journal Articles resulting in whole or in part from an EERE-funded project to E-Link (See section 1.C.1. Accepted Manuscript of Journal Article).

As part of the closeout process, EERE will verify that all accepted manuscripts have been submitted. Recipients are required to submit all missing accepted manuscript before closeout is finalized.

**E. Other (see Special Instructions)**

| Submit to: | https://www.eere-pmc.energy.gov/SubmitReports.aspx |
|---|---|
| Submission deadline: | Within 120 calendar days after expiration or termination of the award |

# IV. Post-Project Reporting

**A. Scientific and Technical Reporting**

Scientific and Technical Reporting requirements as outlined in **I.C. Scientific and Technical Reporting** remain applicable after the award ends. If the recipient has created Scientific and Technical Information (STI) such as publications, conference products, technical reports, book chapters, etc. which include information/data produced under the award, they are required to submit this document to https://www.osti.gov/elink/forms.jsp. Recipients must continue to include proper EERE Acknowledgement and Legal Disclaimer language in all STI (https://www.energy.gov/eere/communicationstandards/eere-branded-publications-developed-third-parties). Please see section **I.C. Scientific and Technical Reporting** for additional information on submissions.

Note that after the project ends, recipients are no longer required to submit notification of STI directly to EERE.

**B. Intellectual Property Reporting**

Intellectual Property Reporting requirements as outlined in **I.D. Intellectual Property Reporting** remain applicable after the award ends.

Recipients are required to continue submitting intellectual property reports, as applicable, to iEdison https://public.era.nih.gov/iedison.

Note that after the project ends, recipients are no longer required to submit notification of intellectual property directly to EERE.

## V. Appendix A: Notice To Recipients (Prime Recipients And Subrecipients) Regarding Protected Data, Limited Rights Data And Protected Personally Identifiable Information

**I. PROTECTED DATA AND LIMITED RIGHTS DATA**

The recipient is required to mark protected data and limited rights data in accordance with the IP clause set of the award agreement. Failure to properly mark data may result in its public disclosure under the Freedom of Information Act (FOIA, 5 U.S.C. § 552) or otherwise.

**A. Protected Data - Technical Data or Commercial or Financial Data First Produced in the Performance of the Award**

The U.S. Government normally retains unlimited rights in any technical data or commercial or financial data produced in performance of Government financial assistance awards, including the right to distribute to the public.

However, under certain EERE awards, the recipient may mark certain categories of data produced under the award as protected from public disclosure for up to five years after the data is produced ("Protected Data"). If the award agreement provides for protected data and the recipient wants the data to be protected, the recipient must properly mark any documents containing Protected Data as set forth in the IP clause set of the award agreement.

**B. Limited Rights Data - Data Produced Outside of the Award at Private Expense**

Limited Rights Data is data (other than computer software) developed at private expense outside any Government financial assistance award or contract that embody trade secrets or are commercial or financial and confidential or privileged. Prior to including any Limited Rights Data in any documents to EERE, the recipient should review the award agreement. In most EERE awards, the recipient should not deliver any limited rights data to EERE if the recipient wants to protect the Limited Rights Data. If the EERE award does allow and require the delivery of limited rights data, then the recipient must properly mark any documents containing Limited Rights Data as set forth in the IP clause of the award agreement.

## II. PROTECTED PERSONALLY IDENTIFIABLE INFORMATION

The recipient should not include any Protected Personally Identifiable Information (Protected PII) in their submissions to EERE. Protected PII is defined as any data that, if compromised, could cause harm to an individual such as identify theft. Protected PII includes, but is not limited to:

- Social Security Numbers in any form;
- Place of Birth associated with an individual;
- Date of Birth associated with an individual;
- Mother's maiden name associated with an individual;
- Biometric record associated with an individual;
- Fingerprint;
- Iris Scan;
- DNA;
- Medical history information associated with an individual;
- Medical conditions, including history of disease;
- Metric information, e.g., weight, height, blood pressure;
- Criminal history associated with an individual;
- Ratings;
- Disciplinary actions;
- Passport number;
- Educational transcripts;
- Financial information associated with an individual;
- Credit card numbers; and
- Security clearance history or related information (not including actual clearances held).