

# SAMPLE REPORTING REQUIREMENTS (OFFICE OF ELECTRICITY AWARDS)

DOE F 4600.2  
(NETL 08/2023)  
All Other Editions Are Obsolete

## U.S. Department of Energy FEDERAL ASSISTANCE REPORTING CHECKLIST AND INSTRUCTIONS

ATTACHMENT 3

1. Award Number:  <div style="text-align: center; border: 1px solid black; padding: 5px; margin: 5px 0;">DE-</div>	2. Program/Project Title:  	
3. Recipient:  		
4. Reporting Requirements (see attached "Federal Assistance Reporting Instructions" for additional guidance) <i>Detailed instructions included after the Table of Contents</i>	Frequency	Addresses  <i>*See attached "Federal Assistance Reporting Instructions" for complete submission instructions.</i>
<b>I. PROJECT MANAGEMENT REPORTING</b> <input checked="" type="checkbox"/> A. Research Performance Progress Report (RPPR) <input checked="" type="checkbox"/> B. Financial Report (SF-425) <input checked="" type="checkbox"/> C. Scientific and Technical Reporting <input checked="" type="checkbox"/> 1. Accepted Manuscript of Journal Article(s) <input checked="" type="checkbox"/> 2. Conference Product(s) <input type="checkbox"/> 3. Technical Report(s) <input type="checkbox"/> 4. Software & Manual(s) <input type="checkbox"/> 5. Dataset(s) <input type="checkbox"/> 6. Other STI (Dissertation / Thesis, etc.) <input checked="" type="checkbox"/> D. Intellectual Property Reporting <input checked="" type="checkbox"/> 1. Intellectual Property Reporting <input checked="" type="checkbox"/> 2. Invention Utilization Report <input checked="" type="checkbox"/> E. Project Management Plan (PMP) <input checked="" type="checkbox"/> F. Special Status Report <input type="checkbox"/> G. Continuation Application <input type="checkbox"/> H. Community Benefits Plan <input checked="" type="checkbox"/> I. Other (see Special Instructions)	Q  F, Q   A5, P A5, P A5, P A5, P A5, P A5, P  A5, P A5, P  A5 A5 A5 A5 A5	A. <a href="#">EERE PMC</a> B. <a href="#">EERE PMC</a>  C.1. <a href="#">OSTI E-Link</a> C.2. <a href="#">OSTI E-Link</a> C.3. <a href="#">OSTI E-Link</a> C.4. <a href="#">DOE CODE</a> C.5. <a href="#">OSTI E-Link Datasets</a> C.6. <a href="#">OSTI E-Link</a>  D.1. <a href="#">iEdison</a> D.2. <a href="#">iEdison</a> E. <a href="#">EERE PMC</a> F. <a href="#">EERE PMC</a> G. <a href="#">EERE PMC</a> H. <a href="#">EERE PMC</a> I. See Special Instructions
<b>II. AWARD MANAGEMENT REPORTING</b> <input checked="" type="checkbox"/> A. Participants and Collaborating Organizations <input checked="" type="checkbox"/> B. Current and Pending Support <input checked="" type="checkbox"/> C. Demographic Reporting <input checked="" type="checkbox"/> D. Financial Conflict of Interest <input type="checkbox"/> E. Tangible Personal Property Report - Annual Property Report (SF-428 & SF-428A) <input checked="" type="checkbox"/> F. Tangible Personal Property Report – Disposition Request/Report (SF-428 & SF-428C) <input type="checkbox"/> G. Uniform Commercial Code (UCC) Financing Statements <input checked="" type="checkbox"/> H. Federal Subaward Reporting System (FSRS) <input type="checkbox"/> I. Annual Incurred Cost Proposal <input type="checkbox"/> J. DOE For-Profit Compliance Audit <input type="checkbox"/> K. Single Audit: States, Locals, Tribal Governments, and Non-Profits <input type="checkbox"/> L. Other (see Special Instructions)	Q A5 A5 A5 Y  A5  A5  Y180 O O A	A. <a href="#">EERE PMC</a> B. <a href="#">EERE PMC</a> C. <a href="#">EERE PMC</a> D. <a href="#">EERE PMC</a> E. <a href="#">EERE PMC</a>  F. <a href="#">EERE PMC</a>  G. See Section II. G. for instructions and due dates. H. <a href="#">FSRS</a> I. See Section II. I. for instructions and due dates. J. See Section II. J. for instructions and due dates. K. See section II. K. for instructions and due dates. L. See Federal Assistance Reporting Instructions
<b>III. CLOSEOUT REPORTING</b> <input checked="" type="checkbox"/> A. Final Scientific/Technical Report <input type="checkbox"/> A.1. Final Scientific/Technical Report – Unlimited <input type="checkbox"/> A.2. Final Scientific/Technical Report – Data Protection <input checked="" type="checkbox"/> B. Invention Certification (DOE F 2050.11) <input checked="" type="checkbox"/> C. Tangible Personal Property Report – Final Report (SF-428 & SF-428B) <input checked="" type="checkbox"/> D. Verification of Receipt of Accepted Manuscripts <input checked="" type="checkbox"/> E. Other (see Special Instructions)	F F F F  F F	A.1. <a href="#">OSTI E-Link</a> A.2. <a href="#">OSTI E-Link</a> B. <a href="#">EERE PMC</a> C. <a href="#">EERE PMC</a>  D. See section III.D. for instructions and due dates E. See Special Instructions
<b>IV. POST-PROJECT REPORTING</b> <input checked="" type="checkbox"/> A. Scientific and Technical Reporting <input checked="" type="checkbox"/> B. Intellectual Property Reporting	P P	A. <a href="#">OSTI E-Link</a> B. <a href="#">iEdison</a>

**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: <https://www.osti.gov/eliink/2413-submission.jsp>

OSTI E-Link Datasets: <https://www.osti.gov/eliink/2416-submission.jsp>

DOE CODE: <https://www.osti.gov/doecode/>

iEdison: <https://www.nist.gov/iedison>

EERE PMC: <https://www.eere-pmc.energy.gov/SubmitReports.aspx>

FSRS: <https://www.fsr.gov>

**5. Special Instructions:**

**Recipient’s fiscal year end date:** [CS/GMS to insert date as Month/Day]

☐ No indirect costs proposed

☐ De minimis rate used

**I. Project Management Reporting:****B. Financial Report (SF 425)**

In addition, to the instructions for the SF-425 Federal Financial Report, the recipient is required to annotate block 12 of the Federal Financial Report with a breakdown of costs for the reporting period and cumulative associated with research and development and demonstration in this format (note – if this information does not fit on the form, please attach the breakdown to the report):

	R&D Task Costs				Demonstration Task Costs		
	Federal Share	Cost Share	Total		Federal Share	Cost Share	Total
R&D Costs in Current Reporting Period (\$)				Demonstration Costs in Current Reporting Period (\$)			
% share of Total R&D Costs for Current Reporting Period				% share of Total Demonstration Costs for Current Reporting Period			
Cumulative R&D Costs (\$)				Cumulative Demonstration Costs (\$)			
Cumulative % share of R&D Costs				Cumulative % share of Demonstration Costs			

**I. Other (see Special Instructions):**

All deliverables identified in the Statement of Project Objectives (SOPO) must be uploaded to the [EERE PMC](https://www.eere-pmc.energy.gov/SubmitReports.aspx) website.

**II. Award Management Reporting:**

**G. Uniform Commercial Code (UCC) Financing Statements:**

If a piece of equipment is planned to be purchased by a for-profit Recipient or a for-profit Subrecipient with either Federal and/or non-Federal funds, and when the DOE share of the award exceeds \$1M, the for-profit Recipient or the for-profit Subrecipient must record Uniform Commercial Code (UCC) financing statement(s) before being reimbursed for the DOE share of the equipment. See "Federal Assistance Reporting Instructions" for specific guidance.

**I. Annual Incurred Cost Proposal:**

NETL is the Cognizant Federal Agency responsible for negotiating and approving the Recipient's indirect costs. See "Federal Assistance Reporting Instructions" for specific guidance.

**J. DOE For-Profit Compliance Audit**

If the Recipient is a for-profit entity and expends \$750,000 or more in DOE awards during their fiscal year, the Recipient must have a compliance audit conducted for that year. See "Federal Assistance Reporting Instructions" for specific guidance.

**III. Closeout Reporting:**

**E. Other:**

All deliverables noted in the Statement of Project Objectives.

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## **Federal Assistance Reporting Instructions (08/2023)**

***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). See Appendix A for guidance on Protected PII.***

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Report Templates Link: <https://netl.doe.gov/business/business-forms/financial-assistance>

### **I. Project Management Reporting**

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

Submit to:	<a href="https://www.eere-pmc.energy.gov/SubmitReports.aspx">https://www.eere-pmc.energy.gov/SubmitReports.aspx</a>
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 DOE. The RPPR must include the information detailed in the RPPR template in Appendix B.

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

Submit to:	<a href="https://www.eere-pmc.energy.gov/SubmitReports.aspx">https://www.eere-pmc.energy.gov/SubmitReports.aspx</a>
Submission deadline:	Within 30 calendar days after the end of the quarterly reporting period (January 30, April 30, July 30, October 30) <b>and</b> 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 DOE, covering the entirety of work performed by the prime recipient, subrecipients, and contractors. A fillable version of the SF-425 is available at <https://www.grants.gov/web/grants/forms/post-award-reporting-forms.html> or <https://www.netl.doe.gov/business/business-forms/financial-assistance>.

#### **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 <a href="https://www.osti.gov/elink/2413-submission.jsp">https://www.osti.gov/elink/2413-submission.jsp</a>
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 contains information/data produced under the award, then the recipient must submit an AN 241.3 for the author's full-text version of the accepted manuscript, as described below, no later than the published online date of the article.

Content. The recipient is to announce to DOE 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 by providing a persistent link to the accepted manuscript on the Recipient's publicly accessible institutional repository or submitting the full text (see Electronic Submission Process below). Do NOT submit the journal's published version of the article, i.e., do NOT submit a copyrighted reprint. The Recipient should not submit the content of peer reviews or a commitment to publish. The Recipient should provide only the accepted manuscript content intended to be the published article.

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 is responsible for ensuring the suitability of the content for public release. The terms and conditions of award provide that PII, proprietary, export control or classified information shall be protected. DOE may choose to defer providing public access until an administrative interval period has passed.

The recipient must self-certify at the time of submission to DOE 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 Special Terms and Conditions.

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..

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

Within the AN 241.3, provide relevant journal information (article title, journal name, volume, issue, and any other pertinent publication information). If a Digital Object Identifier (DOI) has been issued by the publisher, much of this information can be auto-populated by entering the DOI in the AN 241.3. Also provide a persistent link to the repository location of the accepted manuscript. An example of an acceptable persistent link is a URL to the specific location of the Accepted Manuscript of Journal Article hosted on a public, openly accessible university research publications website. If a persistent link is not available or if the website has access restrictions (preventing public access), then the Recipient must upload the full-text of the Accepted Manuscript using the AN 241.3 and E-Link instructions.

Full-text of accepted manuscripts must be in Adobe Portable Document Format (PDF) and be one integrated PDF file that contains all text, tables, diagrams, photographs, schematics, graphs, and charts. Please refer to <https://www.osti.gov/stip/about/faqs/what-type-of-pdf-for-submission> for PDF document creation.

## **2. Conference Product(s)**

Submit to:	DOE Energy Link System (E-Link) available at <a href="https://www.osti.gov/elink/2413-submission.jsp">https://www.osti.gov/elink/2413-submission.jsp</a>
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. Conference products must be submitted in the Adobe PDF format as one integrated PDF file containing all text, tables, diagrams, photographs, schematic, graphs, and charts.

Electronic Submission Process: Scientific/technical conference proceedings, papers/presentations 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-submission.jsp>).

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.

DOE will not review conference papers/presentations or proceedings prior to making the document publicly available via OSTI since the document was already presented in a public setting. The Recipient is responsible for ensuring the suitability of the content for public release. The terms and conditions of award provide that PII, proprietary, export control or classified information shall be protected. The Recipient must self-certify at the time of submission to DOE E-Link that the content is appropriate for and has been publicly released.

### 3. Technical Report(s)

Submit to:	DOE Energy Link System (E-Link) available at <a href="https://www.osti.gov/elink/2413-submission.jsp">https://www.osti.gov/elink/2413-submission.jsp</a>
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.

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-submission.jsp>).

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 available at <a href="https://www.osti.gov/doecode/">https://www.osti.gov/doecode/</a>
Submission deadline:	Within five (5) calendar days after the event, or as specified

The recipient must submit all software deliverables created under the award including source code, the executable object code and the minimum support documentation needed by a competent user to understand and use the software and to be able to modify the software in subsequent development efforts, unless otherwise specified in the award.

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.

Electronic 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 <a href="https://www.osti.gov/elink/2416-submission.jsp">https://www.osti.gov/elink/2416-submission.jsp</a>
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/2416-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:	DOE Energy Link System (E-Link) available at <a href="https://www.osti.gov/elink/2413-submission.jsp">https://www.osti.gov/elink/2413-submission.jsp</a>
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 manuscript of journal articles, conference products, software, datasets, or other STI.

Other types of STI 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 (<https://www.osti.gov/elink/2413-submission.jsp>).

## D. Intellectual Property Reporting

### 1. Intellectual Property Reporting

Submit to:	<a href="https://www.nist.gov/iedison">https://www.nist.gov/iedison</a>
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.

## **2. Invention Utilization Report**

Submit to:	<a href="https://www.nist.gov/iedison">https://www.nist.gov/iedison</a>
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), if any, must provide Invention Utilization Reports in iEdison for any subject inventions made under the award. Reports are due one year after the disclosure date of each subject invention and must continue to be provided for 10 years after the date of disclosure. 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:	<a href="https://www.eere-pmc.energy.gov/SubmitReports.aspx">https://www.eere-pmc.energy.gov/SubmitReports.aspx</a>
Submission deadline:	Within thirty days of the effective date of the DOE 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

All interim and draft PMP revisions can be exchanged via email with the NETL project officer. However, all final versions of the PMP need to be uploaded to the EERE PMC website. The revised PMP must stay consistent with the PMP template outlined in Appendix C.

## F. Special Status Reports

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

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 DOE:

1. 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.
2. Any notices or claims of patent or copyright infringement arising out of or relating to the performance of the DOE award;
3. Refusal of a subrecipient to accept flow down requirements in the Special Terms and Conditions and/or any Attachment to the DOE award;
4. Potential or actual violations of federal, state, and municipal laws arising out of or relating to work under the award;
5. Any improper claims or excess payments arising out of or relating to work under the award;
6. Potential or actual violations of the cost share requirements under the award;
7. Potential or actual noncompliance with DOE reporting requirements under the award;
8. Potential or actual violations of the lobbying restrictions in the award;
9. Potential or actual bankruptcy/insolvency of the prime recipient or subrecipient;
10. Potential or actual violation of U.S. export control laws and regulations arising out of or relating to the work under the award;
11. Any fatality or injuries requiring hospitalization arising out of or relating to work under the award;
12. 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;
13. Any event which is anticipated to cause a significant schedule slippage or cost increase;
14. Any damage to Government-owned equipment in excess of \$50,000;
15. Developments that have a significant favorable impact on the project; and,
16. 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:	<a href="https://www.eere-pmc.energy.gov/SubmitReports.aspx">https://www.eere-pmc.energy.gov/SubmitReports.aspx</a>
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. Community Benefits Plan/Equity Plan**

Submit to:	<a href="https://www.eere-pmc.energy.gov/SubmitReports.aspx">https://www.eere-pmc.energy.gov/SubmitReports.aspx</a>
Submission deadline:	As Specified or within five (5) calendar days after the event and Final; within 120 calendar days after expiration or termination of the award.

The Recipient must meet the stated objectives and milestones set forth in its Community Benefits Plan, which is incorporated into the Award as Attachment 5. A report on the Recipient's progress towards meeting the objectives and milestones set forth in the Community Benefits Plan must be included in the continuation application.

## **I. Other (see Special Instructions)**

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

# **II. Award Management Reporting**

## **A. Participants and Collaborating Organizations**

Submit to:	<a href="https://www.eere-pmc.energy.gov/SubmitReports.aspx">https://www.eere-pmc.energy.gov/SubmitReports.aspx</a>
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.

### **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, at the Recipient and subrecipient level, 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) all senior and key personnel, including 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).

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

**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.

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

**B. Current and Pending Support**

Submit to:	<a href="https://www.eere-pmc.energy.gov/SubmitReports.aspx">https://www.eere-pmc.energy.gov/SubmitReports.aspx</a>
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)

Prior to award, the Recipient was required to provide current and pending support disclosure statements and a Curriculum Vitae (CV) or Biosketch 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 of performance (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:	<a href="https://www.eere-pmc.energy.gov/SubmitReports.aspx">https://www.eere-pmc.energy.gov/SubmitReports.aspx</a>
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. Demographic Reporting is submitted via a web-based form in the PMC and includes the questions outlined below.

Gender:

- ☐ Male
- ☐ Female
- ☐ Do not wish to provide

**Ethnicity:**

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

**Race (select one or more):**

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

**Disability Status:**

- ☐ 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.
- ☐ No
- ☐ 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. Financial Conflict of Interest Report**

Submit to:	<a href="https://www.eere-pmc.energy.gov/SubmitReports.aspx">https://www.eere-pmc.energy.gov/SubmitReports.aspx</a>
Submission deadline:	Within 180 days of the date of the award and within thirty (30) calendar days only when there is a change

Prior to award, the Recipient was required to: 1) ensure all Investigators on this Award completed their significant financial disclosures; 2) review the disclosures; 3) determine whether a FCOI exists; 4) develop and implement a management plan for FCOIs; and 5)

provide DOE with an initial FCOI report that includes all FCOIs (i.e., managed and unmanaged/unmanageable). Within 180 days of the date of the Award, the Recipient must be in full compliance with the other requirements set forth in DOE's interim COI Policy <https://www.energy.gov/management/department-energy-interim-conflict-interest-policy-requirements-financial-assistance>. Further, the recipient must submit updated reports within 30 days of a change.

The DOE interim Conflict of Interest Policy for Financial Assistance (COI Policy) is applicable to all non-Federal entities applying for, or that receive, DOE funding by means of a financial assistance award (e.g., a grant, cooperative agreement, or technology investment agreement) and, through the implementation of this policy by the entity, to each Investigator who is planning to participate in, or is participating in, the project funded wholly or in part under this Award. The term "Investigator" means the PI and any other person, regardless of title or position, who is responsible for the purpose, design, conduct, or reporting of a project funded by DOE or proposed for funding by DOE. The Recipient must flow down the requirements of the interim COI Policy to any subrecipient non-Federal entities, with the exception of DOE National Laboratories. Further, the Recipient must identify all financial conflicts of interests (FCOI), i.e., managed and unmanaged/unmanageable, in its initial and ongoing FCOI reports.

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

Submit to:	<a href="https://www.eere-pmc.energy.gov/SubmitReports.aspx">https://www.eere-pmc.energy.gov/SubmitReports.aspx</a>
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.netl.doe.gov/business/business-forms/financial-assistance>.

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

Submit to:	<a href="https://www.eere-pmc.energy.gov/SubmitReports.aspx">https://www.eere-pmc.energy.gov/SubmitReports.aspx</a>
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://netl.doe.gov/business/business-forms/financial-assistance>.

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 DOE Contracting Officer has authority to approve disposition requests and issue disposition instructions.

#### **G. Uniform Commercial Code (UCC) Financing Statements**

Submit to:	<a href="https://www.eere-pmc.energy.gov/SubmitReports.aspx">https://www.eere-pmc.energy.gov/SubmitReports.aspx</a>
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. These financing statement(s) must be approved in writing by the Contracting Officer prior to the recording.

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:

- “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.”
- Federal Award Identification Number (e.g., DE- CR000XXXX)

#### H. Federal Subaward Reporting System (FSRS)

Submit to:	<a href="https://www.fsrc.gov/">https://www.fsrc.gov/</a>
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 Federal Funding Accountability and Transparency Act (FFATA) reporting requirements. Prime recipients will report against subrecipients’ awards. The subrecipient information entered in FSRS will then be displayed on [USASpending.gov](https://www.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.

#### I. Annual Incurred Cost Proposals

Submit to:	If NETL is the Cognizant Federal Agency, send the Annual Incurred Cost Proposal to one of the following offices: <ul style="list-style-type: none"><li>• <a href="mailto:PricingGroup@netl.doe.gov">PricingGroup@netl.doe.gov</a></li></ul> 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* *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).

Recipients are strongly encouraged to self-assess their ICP using the Defense Contract Audit Agency's (DCAA) ICP Adequacy Checklist to ensure an adequate submission. The ICP must be reconciled to the recipient's financial statements, within 180 calendar days after the close of the recipient's fiscal year. The Contracting Officer for Indirect Cost Rates may grant, in writing, reasonable extensions for exceptional circumstances only. The written request for extension should be sent to the [PricingGroup@netl.doe.gov](mailto:PricingGroup@netl.doe.gov) email address. The format and content of the incurred cost proposal should follow the DCAA ICE (Incurred Cost Electronically) Model in order to be considered an adequate proposal. DCAA's ICE Model and Adequacy Checklist can be found on the DCAA website at:

<https://www.dcaa.mil/Home/ICEmodel> and  
<https://www.dcaa.mil/Home/ICSubmissionAdequacy>.

#### **J. DOE For-Profit Compliance Audit**

Submit to:	Email a copy of the annual DOE For-Profit Compliance Audit to: <ul style="list-style-type: none"><li>• <a href="mailto:DOE-Audit-Submission@hq.doe.gov">DOE-Audit-Submission@hq.doe.gov</a> and</li><li>• The DOE Contracting Officer</li><li>• <a href="mailto:PricingGroup@netl.doe.gov">PricingGroup@netl.doe.gov</a></li></ul>
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 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.

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

Submit to:	Federal Audit Clearinghouse - <a href="https://harvester.census.gov/facweb/Default.aspx">https://harvester.census.gov/facweb/Default.aspx</a>
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.

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

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

### III. Closeout Reporting

#### A. Final Scientific/Technical Report

Submit to:	DOE Energy Link System (E-Link) available at <a href="https://www.osti.gov/elink/2413-submission.jsp">https://www.osti.gov/elink/2413-submission.jsp</a>
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, <https://www.osti.gov/pages/>) are accessible to the public.
3. Provide identifying information: the DOE award number; sponsoring program office; name of recipient; project title; name of project director/principal investigator; and consortium/team members.
4. Include the DOE acknowledgement of Federal support and legal disclaimer language as described in the Special Terms and Conditions.
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 <https://www.osti.gov/stip/about/statutory-authorities> 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 <https://www.osti.gov/stip/about/statutory-authorities>).

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/mlink/2413-submission.jsp>). Specific guidance for the submission process is provided in the Special Notes below.

Text documents must be submitted in Adobe Portable Document Format (PDF) and be one integrated PDF file that contains all text, tables, diagrams, photographs, schematics, graphs, and charts. Please refer to for PDF document creation.

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.

**Company Names and Logos** -- Except as indicated elsewhere, company names, logos, or similar material should not be incorporated into reports.

**Copyrighted Material** -- Copyrighted material should not be submitted as part of a report unless written authorization to use such material is received from the copyright owner and is submitted to DOE with the report.

**1. Final Technical Report – Unlimited:**

If the award does **NOT** authorize the recipient, under the provisions of the Energy Policy Act of 2005, to protect the data produced during the award, where public release of the technical report is protected for a limited period-of-time, the technical report must be submitted to E-Link as a “Final Technical Report” (covering the entire project period of performance) and must not have any data protection markings on the cover page. The “STI Product Type” of “Technical Report” with the “Report Sub Type” of “Final Technical Report” must be selected. When submitting the final technical report to E-Link, the recipient must select “unlimited” from the Intellectual Property/Distribution Limitation selections. The final technical report will be released without any protections and may become publicly available immediately.

**2. Final Technical Report – Protected Data:**

If the award authorizes the recipient, under the provisions of the Energy Policy Act of 2005, to protect the data produced during the course of the award, where public release of the final technical report is protected for a limited period-of-time, and the recipient elects to protect the report, the recipient will be required to 1) submit a final technical report with the protected data (which will be protected during the identified data protection period) and 2) a version of the technical report that can be publicly disseminated immediately.

For the protected data version of the final technical report, the report must cover the entire project period of performance, include the proper data protection marking (included in the terms of the award), and place that marking on the cover page of the final technical report before submitting it to E-Link. The “STI Product Type” of “Technical Report” with the “Report Sub Type” of “Final Technical Report” must be selected. The recipient must also select the block in the Intellectual Property/Distribution Limitation section of the DOE AN 241.3 as “Protected Data” and provide a release date for the technical report when submitting the final technical report.

The release date is the date the technical report will become publicly available. The release date must be based on the data protection period authorized by the award. The data protection period is calculated beginning from the date that the data was produced. The release date must coincide with the data marking on the technical report.

Additionally, the Department’s policy is to ensure timely public access to unrestricted scientific and technical research results. To make these results publicly accessible, even when the award authorizes the recipient to protect the data for a period-of-time, the

recipient must also submit an “unlimited” version of the technical report. This version should not include any data subject to data protections. The “unlimited” version of the technical report must be uploaded to E-Link without any markings. The “STI Product Type” of “Technical Report” with the “Report Sub Type” of “Technical Report Other” must be selected. The recipient must select “unlimited” from the Intellectual Property/Distribution Limitation selections. The “unlimited” version of the technical report is submitted with unlimited data rights, and the Government assumes no liability for the disclosure, use or reproduction of such report.

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

Submit to:	<a href="https://www.eere-pmc.energy.gov/SubmitReports.aspx">https://www.eere-pmc.energy.gov/SubmitReports.aspx</a>
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 <https://www.netl.doe.gov/business/business-forms/financial-assistance> under Closeout 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).

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

Submit to:	<a href="https://www.eere-pmc.energy.gov/SubmitReports.aspx">https://www.eere-pmc.energy.gov/SubmitReports.aspx</a>
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 <https://www.netl.doe.gov/business/business-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 DOE 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 a DOE-funded project to E-Link (See section 1.C.1. Accepted Manuscript of Journal Article).

As part of the closeout process, DOE 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:	<a href="https://www.eere-pmc.energy.gov/SubmitReports.aspx">https://www.eere-pmc.energy.gov/SubmitReports.aspx</a>
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/mlink/forms.jsp>. Recipients must continue to include proper DOE Acknowledgement and Legal Disclaimer language in all STI. 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 DOE.

#### 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://www.nist.gov/iedison>.

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



## **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 DOE awards, the recipient may mark certain categories of data produced under the award as protected from public disclosure ("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 DOE, the recipient should review the award agreement. In most DOE awards, the recipient should not deliver any limited rights data to DOE if the recipient wants to protect the Limited Rights Data. If the DOE 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 DOE. 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).

## VI. Appendix B: Research Performance Progress Report (RPPR) Template

### Research Performance Progress Report (RPPR) Template

*{Title of Project}*

#### WORK PERFORMED UNDER AGREEMENT

*{Agreement Number}*

*{Recipient Organization Name}*

*{Address}*

*{City, State, Zip Code}*

*{Unique Entity Identifier}*

**Period of Performance:** *{start date}* to *{end date}*

**Reporting Period:** *{start date}* to *{end date}*

**Current Report Term or Frequency:** *{i.e., Annual, Semi-Annual, Quarterly}*

**Submitted:** *{date}*

#### PROGRAM DIRECTOR/PRINCIPAL INVESTIGATOR

*{Name and Title}*

*{Phone Number}*

*{E-Mail}*

#### BUSINESS CONTACT

*{Name and Title}*

*{Phone Number}*

*{E-Mail}*

#### SUBMITTING OFFICIAL

*{Name and Title}*

*{Phone Number}*

*{E-Mail}*

*{Signature of Submitting Official}*

(Electronic Signatures are Acceptable)

{Include the following 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.”

**SUBMITTED TO**

U. S. Department of Energy

National Energy Technology Laboratory

DOE Project Officer: {Name}

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**RECIPIENT SHOULD REMOVE ALL ITALICIZED INSTRUCTIONS AND EXAMPLES FROM EACH SECTION PRIOR TO SUBMITTAL TO DOE.**

## PROGRESS AND ACCOMPLISHMENTS

### A. Major Accomplishments

#### 1. Current Reporting Period

*Provide a brief narrative, listed by task and subtask, that describes: 1) major activities completed; 2) specific goals/objectives reached; 3) significant results, including major findings, developments, or conclusions (both positive and negative); and 4) key outcomes or other achievements for this reporting period.*

#### 2. Overall Project Status

*Provide a concise summary that describes the cumulative progress made to support the goals and objectives of the project.*

### B. Metrics

*Complete the following table for each metric identified in the PMP. Provide a narrative in the Accomplishments section if the goal of a metric was achieved during this reporting period. Provide a narrative below the table that explains any actual or anticipated obstacles to achieve the goals.*

PROJECT METRICS					
SOPO Task/ Subtask Number	Metric	Units (%, \$, #, etc.)	Goal [OR] Goal for Budget Period	Progress	
				Reporting Period	Cumulative [OR] Cumulative for Budget Period

### C. Milestones

*Complete the following table for each milestone (or decision point if applicable) identified in the PMP. Provide a narrative in the Accomplishments section if a milestone was completed during this reporting period. For each milestone, also list the corresponding task/subtask number(s) and indicate how achievement was verified. Provide a narrative below the table that explains any actual or anticipated variance.*

MILESTONE LOG					
Milestone (or Decision Point)	SOPO Task/ Subtask Number(s)	Completion Date		Verification Method (or Decision Criteria)	Status (Completed, Ahead of Schedule, On Schedule, Delayed)
		Planned	Actual		

## **D. Product or Technology Production**

- 1. Identify and discuss technology or techniques resulting from the research activities. Also describe technology transfer activities and information dissemination/sharing that occurred during the reporting period, including at a minimum, but not limited to:**

***Publications, conference papers, presentations, or other public releases.*** List and briefly discuss the major publication(s) resulting from work under this award, and confirm that acknowledgement of federal support was included in the published material as required in the Terms and Conditions of the Financial Assistance Agreement.

***Journal articles.*** List author(s); title; journal name, volume, year, page numbers, and status (published; accepted, awaiting publication; submitted, under review; other).

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

***Books or other non-periodical, one-time publications.*** Report any book, monograph, thesis, dissertation, abstract, or the like published as (or in) a separate publication, rather than a periodical or series. Also list any significant publication included in the proceedings of a conference/symposium, or in the report of a one-time study, or similar advisory/investigative committee. For each one-time publication, identify: author(s); title; editor; title of collection, if applicable; bibliographic information; year; type of publication (book, white paper, thesis or dissertation, other); status of publication (published; accepted, awaiting publication; submitted, under review; other).

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

- 2. Inventions, Patent Applications, Licenses**

*Identify inventions, patent applications with date, and/or licenses that have resulted from the research. Submission of this information as part of Quarterly Progress Report is not a substitute for any other invention reporting process specified in the Terms and Conditions of the Financial Assistance Agreement.*

- 3. Other products**

*Identify any other significant products that were developed under this project such as data or databases, physical collections, audio and/or video recording, software or NetWare, models, educational aid or curricula, instruments or equipment.*



## **E. 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.”*

## **F. Plans for Future Work**

### **1. Work for Next Quarter**

*Briefly describe planned work that will be performed during the next reporting period.*

### **2. Upcoming Events**

*List any planned work that could result in opportunities for external visibility such as major meetings, publications, demonstrations, presentations and any other outreach activities. In addition, list any internal project meetings that may be of interest to the DOE Project Officer. **Information about such events should be provided for at least two quarters beyond the current reporting period.***

## **PARTICIPANTS AND OTHER COLLABORATING ORGANIZATIONS**

### **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 during this reporting period must be provided:

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

Provide the following information for: (1) all senior and key personnel, including principal investigator(s)/project director(s) (PDs/PIs); and (2) each person who has worked, and was funded by the project, at least one person month per year on the project during the reporting period, 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 the project.**

Indicate the total number of months, including partial months, (Calendar, Academic, Summer) that the individual worked on the 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, enter graduate school, and continues 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 how this person contributed to the 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 collaborating 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:*

1. **Name:** Mary Smith
2. **Total Number of Months:** 5.5
3. **Project Role:** Graduate Student
4. **Researcher Identifier:** 1234567
5. **Contribution to Project:** Ms. Smith has performed work in the area of combined error-control and constrained coding.
6. **State, U.S. territory, and/or country of residence:** Michigan, U.S.A.
7. **Funding Support:** The Ford Foundation (Complete only if the funding provided from other than this award.)
8. **Collaborated with individual in foreign country:** Yes
9. **Country(ies) of foreign collaborator:** China
10. **Travelled to foreign country:** Yes
11. **If traveled to foreign country(ies), duration of stay:** 5 months

**b. Has there been a change in the active other support of the PD/PI(s) or senior/key personnel since the last reporting period?**

Describe active other support for the PD/PI(s) or senior/key personnel whose support has changed and what the change has been (e.g., a previously active grant that has closed, a previously pending grant that is now active). Active other support includes all financial resources, whether Federal, non-Federal, commercial or organizational, available in direct support of an individual’s research endeavors, including, but not limited to, research grants, cooperative agreements, contracts, or organizational awards, (e.g., Federal, State, local or foreign government agencies, public or private foundations, industrial or other commercial organizations). Annotate this information so it is clear what has changed from the previous submission. Other support does not include prizes or gifts.

Submission of active other support information is not necessary for pending changes or for changes in the level of effort for active support reported previously. DOE requires prior written approval if a change in active other support significantly impacts the effort on this award.

If there is nothing significant to report during this reporting period or no change from the previous reporting period, state “Nothing to Report.”

**c. 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:

1. Organization Name;
2. Location of Organization (if foreign location list country);
3. Partner's contribution to the project (identify one or more);
  - i. Financial support;
  - ii. In-kind support (e.g., partner makes software, computers, equipment, etc., available to project staff);
  - iii. Facilities (e.g., project staff use the partner's facilities for project activities);
  - iv. Collaborative research (e.g., partner's staff work with project staff on the project);
  - v. Personnel exchanges (e.g., project staff and/or partner's staff use each other's facilities, work at each other's site);
  - vi. Other
4. More detail on partner and contribution (foreign or domestic).

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

**d. 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:

1. collaborations with others within the recipient's organization, especially interdepartmental or interdisciplinary collaborations;
2. collaborations or contact with others outside the organization; and
3. collaborations or contacts with others outside the United States or with an international organization. country(ies) of collaborations or contacts.

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

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

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

## 5. 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 is 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 an intelligent 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 is 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 is 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 or 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 is 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 is 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 is 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 is being 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.

## SCHEDULE STATUS

Complete the following table for each task and subtask, baselined against the schedule contained in the current PMP.

SCHEDULE & COST SUMMARY								
SOPO Task/ Subtask Number	SOPO Title or Description	Start Date		Completion Date		% Complete	Total Planned Cost	Total Cost to Date
		Planned	Actual	Planned	Actual			
1.0	Project Management							

Complete the following table for each deliverable identified in the PMP. Provide a narrative below the table that explains any actual or anticipated variance.

DELIVERABLE LOG				
SOPO Task/ Subtask Number	Deliverable	Completion Date		Status (Completed, On Schedule, Delayed)
		Planned	Actual	
1.1	Project Management Plan	MM/DD/YY		
1.3	Data Management Plan	MM/DD/YY		
1.4	Commercialization Plan	MM/DD/YY		



## COST STATUS

*Baseline Budget and Incurred Cost Complete the following table and ensure that entries in the Total Approved Project Budget column are consistent with the SF-424A and the accepted PMP. Provide a narrative below the table that explains any actual or anticipated variance within one Budget Category that is  $\geq 10\%$  of the total approved budget.*

BASELINE BUDGET AND INCURRED COST								
Budget Category	Total Approved Project Budget		Prior Cumulative Incurred Cost		Incurred Cost During Reporting Period		Total Cumulative Incurred Cost	
	Fed.	Non-Fed.	Fed.	Non-Fed.	Fed.	Non-Fed.	Fed.	Non-Fed.
<b>Personnel</b>								
<b>Fringe Benefits</b>								
<b>Travel</b>								
<b>Equipment</b>								
<b>Supplies</b>								
<b>Contractual</b> (List each contract valued at \$25,000 or more. Add rows as necessary.)								
<b>Remaining Contractual</b> (Sum of all contracts that are individually valued at under \$25,000)								
<b>Construction</b>								
<b>Other</b>								
<b>Sub-Total Direct Charges</b>								
<b>Indirect Charges</b>								
<b>Total</b>								

## Spend Plan

Complete the following tables for the current budget period. The list should correspond to the Federal Fiscal Year (FY). For example, "FY21, Q1" would refer to the quarter that began October 1, 2020.

<b>QUARTERLY SPEND PLAN</b> (based on <u>Current Budget Period</u> )				
Quarter	Federal Share		Non-Federal Share	
	Planned	Actual	Planned	Actual
FY##, Q1				
FY##, Q2				
FY##, Q3				
FY##, Q4				
FY##, Q1				
*Add/Remove rows as needed.				
<b>TOTAL</b>				

TOTAL PROGRAM OBLIGATIONS FOR CURRENT BUDGET PERIOD			
Approved Budget (Federal Share)	Total Federal Obligations (Including Carry-over from Prior Budget Period)	Total Cumulative Incurred Costs (Federal Share)	Unfunded Balance of Budget (Federal Share)

## RISK AND CHANGE MANAGEMENT

### A. Technical Changes

*Briefly explain any recent or planned changes to the technical approach, and discuss reasons for the change. Address how these changes may impact planned milestones, tasks, activities, or deliverables. Note that some changes (e.g., scope, objectives, primary site/location) may require prior DOE approval.*

### B. Personnel and Team Member Changes

*Briefly explain any recent or planned changes to the roles, responsibilities, and involvement of personnel or team members listed in the PMP, and describe how these changes could impact the project (e.g., scope, risk). Note that changes to key personnel require prior DOE approval. Key personnel are identified in the Financial Assistance Agreement, and at a minimum include the Principal Investigator and Business Point of Contact.*

### C. Risk Management Log

*Use the table to indicate the status of each risk identified in the PMP. Also list any new risks discovered during the reporting period. Provide a narrative below the table that describes any new, emergent, realized, or mitigated risks.*

RISK MANAGEMENT LOG				
Risk	Likelihood (High, Medium, Low) Impact (High, Medium, Low)	Potential Impact to SOPO Tasks/ Subtasks	Mitigation Strategy	Status (New, Emerging, Realized, Mitigated)

### D. Other Issues, Concerns and Challenges

*Unless addressed elsewhere in this Report, discuss actual, anticipated, or resolved issues, concerns, challenges, or any other events/incidents or circumstances adversely impacting project execution. Describe steps taken to resolve these items.*

## APPENDIX FOR RPPR

### DEMOGRAPHIC INFORMATION FOR SIGNIFICANT CONTRIBUTORS

Agencies may require that Recipients provide demographic data about significant contributors for a variety of purposes, including the following:

- to gauge whether our programs and other opportunities are fairly reaching and benefiting everyone regardless of demographic category;
- to ensure that those in under-represented groups have the same knowledge of and access to programs, meetings, vacancies, and other research and educational opportunities as everyone else;
- to gauge and report performance in promoting partnerships and collaborations;
- to assess involvement of international investigators or students in work we support;
- to track the evolution of changing science, technology, engineering and mathematics (STEM) fields at different points in the pipeline (e.g., medicine and law demographics have recently changed dramatically);
- to raise investigator and agency staff awareness of the involvement of under-represented groups in research;
- to encourage the development of creative approaches for tapping into the full spectrum of talent of the STEM workforce;
- to respond to external requests for data of this nature from a variety of sources, including the National Academies, Congress, etc.; and
- to respond to legislatively-required analysis of workforce dynamics. Legislation requires at least one agency to routinely estimate scientific workforce needs. This analysis is accomplished through reviewing demographic data submitted for the existing workforce.

Demographic data (i.e., gender, ethnicity, race, and disability status) should be provided directly by significant contributors, with the understanding that submission of such data is voluntary. There are no adverse consequences if the data are not provided. Confidentiality of demographic data will be in accordance with agency's policy and practices for complying with the requirements of the Privacy Act.

**Gender:** Male  
Female  
Do not wish to provide

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

**Race (select one or more):** American Indian or Alaska Native  
Asian  
Black or African American  
Native Hawaiian or other Pacific Islander  
White  
Do not wish to provide

**Disability Status:**

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.

No

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).

**VII. Appendix C: Project Management Plan Template**

Title Page:

**PROJECT MANAGEMENT PLAN**

*{Title of Project}*

**WORK PERFORMED UNDER AGREEMENT**

*{Agreement Number/TBD}*

*{Recipient Organization Name}*

*{Address}*

*{City, State, Zip Code}*

**Period of Performance:** *{start date}* to *{end date}*

**Current Budget Period:** *{start date}* to *{end date}*

**Submitted:** *{date}*

**Revision:** *{#}*

**PRINCIPAL INVESTIGATOR**

*{Name}*

*{Phone Number}*

*{E-Mail}*

**BUSINESS CONTACT**

{*Name*}

{*Phone Number*}

{*E-Mail*}

**SUBMITTED TO**

U. S. Department of Energy  
National Energy Technology Laboratory  
DOE Project Officer: {*Name/TBD*}

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## **ACRONYM LIST**

<b>DMP:</b>	Data Management Plan
<b>DOE:</b>	Department of Energy
<b>FOA:</b>	Funding Opportunity Announcement
<b>FY:</b>	Fiscal Year (federal)
<b>PMP:</b>	Project Management Plan
<b>Q#:</b>	Quarter #
<b>SOP:</b>	Statement of Project Objectives

*Add project specific acronyms as needed.*



RECIPIENT SHOULD REMOVE ALL ITALICIZED INSTRUCTIONS AND EXAMPLES FROM EACH.

## **EXECUTIVE SUMMARY AND TECHNICAL APPROACH**

*Provide a synopsis of the overall project that briefly describes the technical approach, objective(s), goals, and expected results. Identify and discuss technology or techniques resulting from the project. Discuss technology transfer activities and information dissemination/sharing that will occur during this project.*

## KEY PERSONNEL

*List the project team's key personnel, their role, and contact information. Key personnel are identified in the Financial Assistance Agreement and, at a minimum, include the Principal Investigator and Business Point of Contact. Note that changes to key personnel require prior DOE approval.*

KEY PERSONNEL			
Role	Name	Phone	Email
Principal Investigator			
Business Point of Contact			

## TEAM MEMBERS

Complete the following table to provide a summary of Prime Recipient and Team Member planned activities by SOPO task and/or subtask number(s).

SUMMARY OF TEAM MEMBER PLANNED ACTIVITIES	
Team Member	Planned Activities by SOPO Task/Subtask Number(s)
<i>Prime Recipient</i>	<i>1.0 - Manage and execute the project. Develop required plans. X.Y - Design evaluations.</i>
<i>Utility ABC</i>	<i>X.Y - Providing data. X.Y - Software demonstration host; will install at backup/secondary control center.</i>
<i>Professor Tom Smith, (University Name)</i>	<i>X.Y - Engineering code development.</i>

Complete the following table to provide information about the roles, location, and funding for members of the project team. If a team member has multiple roles and/or multiple locations, include a separate entry for each role and location. Include any team member:

- receiving or providing project funds (government or cost share) equal to or greater than \$25,000;
- providing intellectual property (include value if applicable); and/or
- serving as demonstration host/location regardless of value.

For each team member listed in the table, select the role description from the following:

- Subrecipient,
- Demonstration Host/Location,
- Vendor (e.g., services, equipment, supplies, etc.)
- Intellectual Property Provider (e.g., source code, data, algorithms, etc.),

- *Cost Share Provider, and*
- *Other*

*Use the address that is closest to where the team member's work will be performed.*

SUMMARY OF TEAM MEMBER ROLES AND FUNDING			
Team Member	Role	Location	Value
<i>Utility XYZ</i>	<i>Demo Host/Location</i>	<i>123 Main Street Morgantown, WV 26505</i>	<i>\$0</i>
<i>Utility XYZ</i>	<i>Demo Host/Location</i>	<i>14 Main Street Pittsburgh, PA 15219</i>	<i>\$0</i>
<i>Vendor ABC</i>	<i>Vendor</i>	<i>456 Main Street Pittsburgh, PA 15219</i>	<i>\$100,000</i>
<i>Another Utility</i>	<i>Cost Share Provider</i>	<i>1 Another Utility Drive Morgantown, PA 19543</i>	<i>\$250,000</i>

## PROJECT BUDGET AND SPEND PLAN

Complete the following tables and ensure that each budget category is consistent with the SF-424A form included with the Financial Assistance Agreement.

PLANNED BUDGET - PHASE 1			
Budget Category	Federal Share	Non-Federal Share	Total
Personnel			
Fringe Benefits			
Travel			
Equipment			
Supplies			
Contractual (List each contract valued at \$25,000 or more. Add rows as necessary)			
Remaining Contractual (Sum of all contracts that are individually valued at under \$25,000)			
Construction			
Other			
<b>Sub-Total Direct Charges</b>			
Indirect Charges			
<b>Total</b>			

PLANNED BUDGET - PHASE 2			
Budget Category	Federal Share	Non-Federal Share	Total
Personnel			
Fringe Benefits			
Travel			
Equipment			
Supplies			
Contractual (List each contract valued at \$25,000 or more. Add rows as necessary)			
Remaining Contractual (Sum of all contracts that are individually valued at under \$25,000)			
Construction			
Other			
<b>Sub-Total Direct Charges</b>			
Indirect Charges			
<b>Total</b>			

Complete the following table to outline the planned spending for each quarter during the project. The list should correspond to the Federal Fiscal Year (FY). For example, “FY21, Q1” would refer to the quarter that began October 1, 2020.

QUARTERLY SPEND PLAN			
Quarter	Federal Share	Non-Federal Share	Total
FY##, Q1			
FY##, Q2			
FY##, Q3			
FY##, Q4			
FY##, Q1			
Add/Remove rows as needed.			
<b>TOTAL</b>			

## MILESTONE LOG

Complete the following table to identify milestones that demonstrate significant progress toward meeting the overall project goals. If the project contains any go/no-go decision points, include them and their associated decision criteria in the table. A milestone is a time-based marker that indicates that a significant activity, process, or phase of work has been initiated or completed. For each milestone, list the associated SOPO task/subtask and how the achievement of the milestone will be verified. Additional milestone guidance is provided immediately following this PMP template.

MILESTONE LOG			
Milestone (or Decision Point)	SOPO Task/ Subtask Number	Planned Completion Date	Verification Method (or Decision Criteria)
<i>NDAs with industry partners are signed</i>	<i>X.Y</i>	<i>MM/DD/YY</i>	<i>Confirmation email to Federal Project Officer.</i>
<i>Design specification complete.</i>	<i>X.Y</i>	<i>MM/DD/YY</i>	<i>Confirmed in quarterly report.</i>



## PROJECT SCHEDULE AND DELIVERABLES

Complete the following table to provide the schedule and estimated cost for executing each of the tasks and subtasks described in the SOPO.

SCHEDULE & COST SUMMARY				
SOPO Task/ Subtask Number	SOPO Task/ Subtask Title	Planned Start Date	Planned Completion Date	Planned Total Cost
1.0	Project Management and Planning	MM/DD/YY	MM/DD/YY	

Complete the following table to include only the deliverables defined in the SOPO.

DELIVERABLES LOG		
SOPO Task/ Subtask Number	Deliverable	Planned Completion Date
1.1	Project Management Plan	MM/DD/YY
1.3	Data Management Plan	As Needed
1.4	Commercialization Plan	MM/DD/YY

## METRICS

Complete the following table to include all the metrics stipulated in the FOA, and any metrics defined by the Recipient.

PROJECT METRICS			
SOPO Task/ Subtask Number	Tracking Metric	Units (%, \$, #, etc.)	Goal
<i>X.X</i>	<i>Estimated capital cost</i>	<i>\$/unit</i>	<i>\$1,000</i>
<i>X.X</i>	<i>Number of utilities participating in energy emergency exercises</i>	<i>#</i>	<i>15</i>
<i>X.X</i>	<i>System energy efficiencies</i>	<i>%</i>	<i>Improvement by &gt;20%</i>
<i>X.X</i>	<i>Outage time of critical loads</i>	<i>Hours/ Interruption</i>	<i>Reduced by &gt;98%</i>

## RISK MANAGEMENT

Complete the following table to identify both internal and external risks (i.e., technical, resource, management, etc.), that may impact the likelihood of project success. For each identified risk, indicate any relevant task/subtask, likelihood of occurrence and the extent and potential impact on successful project completion. Provide a narrative below the table that describes the project's risk management process, including at a minimum: monitoring frequency, new risk identification, risk retirement, and team member involvement.

RISK MANAGEMENT LOG			
Risk	<b>Likelihood</b> (High, Medium, Low) <b>Impact</b> (High, Medium, Low)	<b>Potential Impact</b> (Identify SOPO Task/Subtask, if applicable)	<b>Mitigation Strategy</b>
<i>Inability to secure required cost share.</i>	<i>Low High</i>	<i>Scope of project will be reduced or project may be terminated.</i>	<i>{Insert appropriate mitigation strategy here}</i>
<i>Loss of utility partner.</i>	<i>Low Medium</i>	<i>Significant delay in starting demonstration phase in Task 5.0.</i>	<i>{Insert appropriate mitigation strategy here}</i>

### **Guidance for Creating Project Management Plan Milestones**

*A milestone is used to gauge overall progress toward achieving the project goals. In order to exhibit project progress/achievement as accurately as possible, a milestone must be specific, measurable, attainable, relevant, and timely. While DOE expects all projects to have at least one high-level milestone per year, a sufficient number of milestones should be included that demonstrate work completed or progress made towards achieving project goals. Fundamentally, a milestone:*

- *Marks the end or the beginning of an event;*
- *Occurs by a specific date;*
- *Has no duration of time, expends no resources, and has no associated costs; and*
- *Can be verified.*

*A milestone is not a process, task, activity, or deliverable. However, as shown in the following examples, the completion of a process, task, activity; or submission of a deliverable can be a milestone.*

- **A process:** *“Oversight of the NEPA program” may be a significant element of the project, however it does not help measure actual progress. On the other hand, “Obtain a NEPA Categorical Exclusion” (as part of the NEPA process) can be a milestone.*
- **A SOPO task/subtask or activity:** *While the task “Development of the Preliminary Design” may be substantial, it is not a milestone. However, “Complete the Preliminary Design” could be a milestone since it would be a measure of progress made towards achieving the project goals.*
- **A deliverable:** *“Submit the Communications Plan” may be considered a milestone since it marks completion of a significant task, activity, phase, etc. As such, the deliverable can provide a measure of project progress. However, unless the deliverable marks the completion of an important work package or phase, it may not possess sufficient significance to warrant being a milestone.*

*It is understood that Recipients will use a variety of internal indicators, benchmarks, etc. to track/gauge the progress made by the team toward completing the planned project. However, many of these may not have the significance to be included as a PMP milestone.*