

Dane County Contract Cover Sheet

Revised 06/2021

RES 147
SIGNIFICANT

Dept./Division	Office of Energy & Climate Change		
Vendor Name	US Department of Energy	MUNIS #	
Brief Contract Title/Description	US DOE providing funding for energy efficiency project replacing windows/upgrading lighting at CCB.		
Contract Term	September 2021 - August 2029		
Contract Amount	\$ 981,998.00		

Contract # Admin will assign	14433
Type of Contract	
<input type="checkbox"/>	Dane County Contract
<input checked="" type="checkbox"/>	Intergovernmental
<input type="checkbox"/>	County Lessee
<input type="checkbox"/>	County Lessor
<input type="checkbox"/>	Purchase of Property
<input type="checkbox"/>	Property Sale
<input checked="" type="checkbox"/>	Grant
<input type="checkbox"/>	Other

Department Contact Information		Vendor Contact Information	
Name	Kathy Kuntz	Name	US Dept of Energy
Phone #	608-283-1477	Phone #	
Email	kuntz.kathy@countyofdane.com	Email	charles.satterfield@ee.doe.gov
Purchasing Officer			

Purchasing Authority	<input type="checkbox"/> \$11,000 or under – Best Judgment (1 quote required)	
	<input type="checkbox"/> Between \$11,000 – \$37,000 (\$0 – \$25,000 Public Works) (3 quotes required)	
	<input type="checkbox"/> Over \$37,000 (\$25,000 Public Works) (Formal RFB/RFP required)	RFB/RFP #
	<input type="checkbox"/> Bid Waiver – \$37,000 or under (\$25,000 or under Public Works)	
	<input type="checkbox"/> Bid Waiver – Over \$37,000 (N/A to Public Works)	
	<input checked="" type="checkbox"/> N/A – Grants, Leases, Intergovernmental, Property Purchase/Sale, Other	

MUNIS Req.	Req #	Org: CPFACMGT	Obj: 58302	Proj:	\$ 981,076.00
	Year	Org: OECC	Obj:	Proj:	\$ 922.00
		Org:	Obj:	Proj:	

Budget Amendment	
<input type="checkbox"/>	A Budget Amendment has been requested via a Funds Transfer or Resolution. Upon addendum approval and budget amendment completion, the department shall update the requisition in MUNIS accordingly.

Resolution Required if contract exceeds \$100,000 (\$40,000 PW)	<input type="checkbox"/> Contract does not exceed \$100,000 (\$40,000 Public Works)	Res #	147
	<input type="checkbox"/> Contract exceeds \$100,000 (\$40,000 Public Works) – resolution required.		Year
	<input checked="" type="checkbox"/> A copy of the Resolution is attached to the contract cover sheet.		

CONTRACT MODIFICATIONS – Standard Terms and Conditions		
<input type="checkbox"/> No modifications.	<input type="checkbox"/> Modifications and reviewed by:	<input type="checkbox"/> Non-standard Contract

APPROVAL	
Dept. Head / Authorized Designee	
Kuntz, Kathryn	Digitally signed by Kuntz, Kathryn Date: 2021.08.24 15:40:21 -05'00'

APPROVAL – Contracts Exceeding \$100,000	
Director of Administration	Corporation Counsel
<i>Greg Brockmeyer</i>	<i>David Gault</i>

APPROVAL – Internal Contract Review – Routed Electronically – Approvals Will Be Attached			
DOA:	Date In: 8/24/21	Date Out: _____	<input checked="" type="checkbox"/> Controller, Purchasing, Corp Counsel, Risk Management

Goldade, Michelle

From: Goldade, Michelle
Sent: Tuesday, August 24, 2021 4:06 PM
To: Hicklin, Charles; Patten (Purchasing), Peter; Gault, David; Lowndes, Daniel
Cc: Stavn, Stephanie; Oby, Joe
Subject: Contract #14433
Attachments: 14433.pdf

Tracking:	Recipient	Read	Response
	Hicklin, Charles		
	Patten (Purchasing), Peter		Approve: 8/26/2021 9:55 AM
	Gault, David		
	Lowndes, Daniel	Read: 8/25/2021 9:53 AM	Approve: 8/26/2021 9:34 AM
	Stavn, Stephanie	Read: 8/25/2021 8:13 AM	
	Oby, Joe	Deleted: 8/25/2021 8:47 AM	

Please review the contract and indicate using the vote button above if you approve or disapprove of this contract.

Contract #14433

Department: Office of Energy & Climate Change

Vendor: US Dept of Energy

Contract Description: Accept grant funding for energy efficiency project replacing windows/upgrading light in the City-County Building (RES 147)

Contract Term: 9/1/21 – 8/31/2029

Contract Amount: \$981,998.00

Michelle Goldade

Administrative Manager

Dane County Department of Administration

Room 425, City-County Building

210 Martin Luther King, Jr. Boulevard

Madison, WI 53703

PH: 608/266-4941

Fax: 608/266-4425

TDD: Call WI Relay 711

Please Note: I currently have a modified work schedule...I am in the office Mondays and Wednesdays and working remotely Tuesdays, Thursdays and Fridays in accordance with COVID 19 response guidelines.

Goldade, Michelle

From: Gault, David
Sent: Tuesday, August 24, 2021 4:48 PM
To: Goldade, Michelle
Subject: Approve: Contract #14433

Goldade, Michelle

From: Hicklin, Charles
Sent: Tuesday, August 24, 2021 4:25 PM
To: Goldade, Michelle
Subject: Approve: Contract #14433

ACCEPTING US DEPARTMENT OF ENERGY FUNDS FOR WINDOWS & LIGHTING CONTROLS UPGRADE AT THE CITY-COUNTY BUILDING

Dane County Office of Energy & Climate Change (OECC) is seeking authority to accept a \$981,998 research grant from the US Department of Energy (DOE) which will fund a joint Dane County-City of Madison-Slipstream energy efficiency effort to upgrade windows and lighting controls in the suites on the Martin Luther King, Jr., Boulevard façade of the City County Building. This is a three-year project that will measure and document the associated energy savings and related benefits as part of the DOE's Building Technologies Office.

In June 2020 Slipstream Group Inc ("Slipstream"), a local nonprofit with deep expertise in energy efficiency, convened Dane County and City of Madison staff to discuss a DOE funding opportunity. The opportunity was seeking projects at local government facilities where entities coupled multiple technologies in innovative ways to demonstrate energy savings and related benefits. The group agreed to pursue funding for a windows replacement project at the CCB that coupled windows with advanced lighting controls. (The lighting controls will make the window upgrades more cost effective by helping to reduce electric usage on sunny days.) OECC submitted a concept paper to DOE in July 2020 on behalf of the group and, some months later, DOE invited us to submit a full proposal. In January 2021 DOE announced the intent to award funding to the CCB project and now, finally, we have the DOE paperwork in hand and we are requesting authorization to accept the funding and implement the project.

Under the project we are proposing to replace windows in the suites on floors one through five on the Martin Luther King, Jr. Boulevard side of the CCB. The same suites will get lighting controls that maximize energy savings associated with the new high efficiency windows. As a requirement of the DOE funding, we will couple the project with a rigorous research methodology where Slipstream will measure energy usage and occupant comfort both before and after the project, creating a detailed technical report for DOE as well as various outreach materials. This project—focused on upgrading windows in an aging public facility—will give Dane County and the City of Madison insights that enable us to address the remaining CCB facades as well as other older facilities. The project will also give us insights that can help us address the remaining CCB windows—and windows in other older buildings—in subsequent budget cycles.

The project does require matching funds. All three partners committed to some matching funds with both Dane County and Madison committing to fund a portion of the window and lighting upgrades as part of the project. All partners are also providing some in-kind labor as match.

In total, DOE is providing \$981,998 in federal dollars, which is then matched by \$238,684 from Dane County, \$298,322 from Madison and \$18,000 from Slipstream. (The City of Madison's cost share is greater than the County's because the City has to do some lighting upgrades before installing the controls; the lighting in County suites has already been upgraded.) Relative to the windows specifically, Dane County will spend less than \$4 for every \$10 of new windows we receive in the various suites.

38 In addition, the research Slipstream is doing will showcase findings from the CCB, providing yet another
39 example of how Dane County is leading on clean energy solutions.

40 This is a three year grant where the first year is spent in design and baseline measurements, the second
41 in implementing the upgrades at the CCB and the third in measuring results and reporting those results
42 to DOE and the broader public. Additionally, we will share energy usage data with DOE for an additional
43 five years after the end of the project.

44 The DOE Cooperative Service Agreement begins June 1, 2021 and ends May 31, 2024. Total project
45 funding is \$981,998 with a total of \$555,006 in matching dollars from Dane County, the City of Madison
46 and Slipstream.

47 NOW, THEREFORE, BE IT RESOLVED that the County Board approves the DOE Cooperative Service
48 Agreement for the Windows Upgrade at the CCB.

49 BE IT FURTHER RESOLVED that the County Executive and the County Clerk are hereby authorized to sign
50 the DOE Cooperative Services Agreement and to accept the DOE funding

51 BE IT FINALLY RESOLVED that the 2021 Budget is amended as follows:

52	OECC (New) DOE Grant Revenue	203,317
53	CPFACMGT (New) DOE Grant Revenue	778,681
54	CPFACMGT (New) City Revenue –DOE Project	202,395
55		
56	OECC (New) Slipstream POS – DOE Grant	162,674
57	OECC (New) City of Madison POS – DOE Grant	39,049
58	OECC (New) Travel – DOE Grant	1,594
59	CPFACMGT 58302 Windows & Lighting	981,076

60

61 These accounts shall carryforward until funds are expended and revenues received.

ASSISTANCE AGREEMENT

1. Award No. DE-EE0009465		2. Modification No.	3. Effective Date 06/01/2021	4. CFDA No. 81.086	
5. Awarded To COUNTY OF DANE Attn: MARGARET KROHN 210 MARTIN LUTHER KING JR BLVD 210 MARTIN LUTHER KING JR BLVDMADISON WI 537033340		6. Sponsoring Office Energy Effic & Renewable EnergyEE-1 U.S. Department of Energy 1000 Independence Avenue, S.W.Washington DC 20585		7. Period of Performance 06/01/2021 through 05/31/2022	
8. Type of Agreement <input type="checkbox"/> Grant <input checked="" type="checkbox"/> Cooperative Agreement <input type="checkbox"/> Other		9. Authority		10. Purchase Request or Funding Document No. 21EE001716	
11. Remittance Address COUNTY OF DANE Attn: MARGARET KROHN 210 MARTIN LUTHER KING JR BLVD 210 MARTIN LUTHER KING JR BLVDMADISON WI 537033340		12. Total Amount Govt. Share: \$981,998.00 Cost Share : \$555,006.00 Total : \$1,537,004.00		13. Funds Obligated This action: \$981,998.00 Total :\$981,998.00	
14. Principal Investigator		15. Program Manager Charles T. Satterfield IPhone: 202-586-2949		16. Administrator Golden Field Office U.S. Department of EnergyGolden Field Office 15013 Denver West ParkwayGolden CO 80401	
17. Submit Payment Requests To VIPERS https://vipers.doe.gov Any questions, please contactby call/email 855-384-7377 or VipersSupport@hq.doe.gov		18. Paying Office VIPERS https://vipers.doe.gov Any questions, please contactby call/email 855-384-7377 or VipersSupport@hq.doe.gov		19. Submit Reports To See Attachment 2	
20. Accounting and Appropriation Data					
21. Research Title and/or Description of Project See the Savings: An Advanced Window-Lighting Controls Field Validation					
For the Recipient			For the United States of America		
22. Signature of Person Authorized to Sign			25. Signature of Grants/Agreements Officer 		
23. Name and Title		24. Date Signed	26. Name of Officer David B. Orens		27. Date Signed 07/08/2021

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
DE-EE0009465

PAGE OF
2 3

NAME OF OFFEROR OR CONTRACTOR
COUNTY OF DANE

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>DUNS Number: 076148766</p> <p>In addition to this Assistance Agreement, this award consists of the items listed on the CoverPage of the Special Terms and Conditions.</p> <p>The Project Period for this award is 06/01/2021through 05/31/2024, consisting of the followingBudget Periods:</p> <p>Budget Period 1: 06/01/2021 to 5/31/2022Budget Period 2: 06/01/2022 to 5/31/2023Budget Period 3: 06/01/2023 to 5/31/2024</p> <p>In Block 7 of the Assistance Agreement, the Period of Performance reflects the beginning of the Project Period through the end of the currentBudget Period.</p> <p>The Special Terms and Conditions for this awardcontain specific funding restrictions. Please review the applicable terms for procedures required to lift the restrictions.</p> <p>DOE Award Administrator: Elizabeth JonesE-mail: Elizabeth.jones@ee.doe.gov Phone: 240-562-1393</p> <p>DOE Project Officer: Charles SatterfieldE-mail: charles.satterfield@ee.doe.gov Phone: 202-586-2949</p> <p>Recipient Business Officer: Kathryn KuntzE-mail: Kuntz.kathryn@countyofdane.com Phone: 608.772.5452</p> <p>Recipient Principal Investigator: Kathryn KuntzE-mail: Kuntz.kathryn@countyofdane.com Phone: 608.772.5452</p> <p>"Electronic signature or signatures as used inthis document means a method of signing an electronic message that--</p> <p>(A) Identifies and authenticates a particular person as the source of the electronic message;</p> <p>(B) Indicates such person's approval of the information contained in the electronic message;and,</p> <p>(C) Submission via FedConnect constituteselectronically signed documents."</p> <p>ASAP: NO: STD IMMEDIATE Extent Competed: COMPETED Davis-Bacon Act: NO PI: Kuntz, Kathryn</p> <p>Continued ...</p>				

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
DE-EE0009465

PAGE OF
3 | 3

NAME OF OFFEROR OR CONTRACTOR
COUNTY OF DANE

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Fund: 05450 Appr Year: 2020 Allottee: 31 Report Entity: 200835 Object Class: 41020 Program: 1004212 Project: 0000000 WFO: 0000000 Local Use: 0000000				

DOE Windows Agreement -
Attachments

Statement of Project Objectives Dane County, Wisconsin

See the Savings: An Advanced Window-Lighting Controls Field Validation

A. Project Objectives

This project seeks field validation of cutting-edge, triple-paned window technology, packaged with more cost-effective lighting and advanced controls, as a cost-effective (at scale) retrofit solution in buildings. Specifically, Dane County and its partners (the Team) aims to achieve 10 percent heating, ventilation, and air-conditioning (HVAC) savings, 60 percent lighting savings, and 20 percent lighting demand response (DR) savings. Scaled to relevant buildings nationally, that could potentially save more than 480 trillion British thermal units (TBtu) in annual savings.

The project will:

- Validate using cutting edge triple paned windows, lighting and lighting controls in about 100,000 square feet (SF) of space in public building space.
- Leverage results from other projects to supplement the data collected from the retrofits described above.
- Model the energy savings of six building types across all U.S. climate zones to prove energy and demand savings potential in additional sectors and locations.
- Work with the local utility and Wisconsin's energy efficiency program to ensure that project results inform their ongoing efforts.
- Create a retrofit standard that will be used on future Team retrofit projects across our combined portfolio of more than 7,500,000 SF of space and that the Team will share with others.
- Disseminate the concept nationwide to drive deployment.

B. Technical Scope Summary

Budget Period 1

The Team will research and finalize the window and control technologies to be used and finalize the field data plan. At the same time, the Team will gather baseline data on current energy usage at the project site. Pre-retrofit measurement and verification (M&V) activities will include establishing a baseline for:

- HVAC electricity and natural gas consumption and demand spanning portions of the cooling and heating seasons
- HVAC building automation system (BAS) points such as space temperature, relative humidity and carbon dioxide levels
- Lighting electricity consumption and demand
- Window and adjacent wall temperatures
- Light level in retrofit spaces
- Occupant satisfaction surveys (thermal and visual comfort, controllability)

Budget Period 1 Go/No-Go Decision Point: At the end of the Budget Period (BP) all pre-retrofit data for both heating and cooling seasons will be collected and submitted for third party review.

Budget Period 2

The Team will oversee the installation of the retrofit package of windows, lighting and lighting controls in the City County Building in Madison, WI. The Team will continue monitoring the post-retrofit system performance.

Budget Period 2 Go/No-Go Decision Point: At the end of the BP window, lighting, and controls retrofit installation will be completed and commissioned. Additionally, all post-retrofit data for both heating and cooling seasons will be collected and submitted for third party review.

Budget Period 3

The team will perform measurement and verification (M&V) on the new installation in order to collect and compare post-installation data to the baseline data.

M&V activities will include:

- HVAC electricity and natural gas consumption and demand spanning portions of the cooling and heating seasons
- HVAC BAS points such as space temperature, relative humidity and carbon dioxide levels
- Lighting electricity consumption and demand
- Window and adjacent wall temperatures, as well as solar radiation
- Light level in retrofit spaces
- Occupant satisfaction surveys (thermal and visual comfort, controllability)
- Documentation of installation challenges and tenant disruption

Following the M&V activities, the Team will:

- Incorporate the technology package into Dane County and the City of Madison's retrofit standards.
- Share the retrofit standards with other entities.
- Model the retrofit package's energy savings and grid flexibility potential for six different building types at various climate zones using Department of Energy's (DOE's) prototype building models.
- Work with the local utility and Wisconsin's energy efficiency program to ensure that project results inform their ongoing efforts.
- Write a comprehensive technical report on the project.
- Host a webinar that showcases the project results.

C. Tasks To Be Performed

The following outlines how project milestones and goals will be accomplished.

Budget Period 1

Task 1. Retrofit Design

Subtask 1.1: Research Window Retrofit Options. The Team will research cutting edge window retrofits, focusing on thin triple pane varieties. The Team has already developed quotes for thin triple pane windows from Alpen.

Milestone 1.1: Define window specifications to be used in bid documents.

Subtask 1.2: Research Lighting Retrofit Options. The Team will research cutting edge lighting retrofits, focusing on light emitting diode (LED) products with advanced lighting controls. The Team already has experience with many LED light fixture manufacturers and product lines.

Milestone 1.2: Define lighting specifications to be used in bid documents.

Subtask 1.3. Design. The Team will work with designers to finalize the retrofit design, including windows, lighting (where applicable) and lighting controls. The Team will develop control and window specifications to be included in the bid documents.

Milestone 1.3: Complete window and lighting retrofit design. Submit key design documents to DOE.

Subtask 1.4. Bid. Use a competitive procurement process to solicit bids for equipment. Select contractor(s) and define project timeline.

Milestone 1.4: Selected contractor(s) and define retrofit timeline. Notify DOE of selected contractor(s).

Task 2. Pre-Retrofit Measurement and Verification

Subtask 2.1. Plan M&V and install M&V equipment. Based on the retrofit design, M&V Project Partner will prepare an M&V plan for the test site. Once finalized, the Team will procure necessary additional M&V instruments or recalibrate existing instruments. This will occur before M&V equipment setup and installation at the field test site. The Team will additionally confirm or set up trending of relevant BAS points. The measurements will cover the lighting power and HVAC equipment energy as well as comfort-related variables such as space temperature, carbon dioxide, relative humidity and light levels in the spaces.

Milestone 2.1: Create comprehensive M&V plan that is consistent with project goals. Submit to DOE National Lab partner for review.

Subtask 2.2. Pre-Retrofit Monitoring. The M&V Project Partner will monitor the site for six to nine months to determine energy performance, impact on the indoor environment and any other non-energy factors. This six to nine-month span will include portions of the cooling and heating seasons before the retrofit. The Team will administer pre-retrofit occupant and owner satisfaction surveys, for both continuous improvement and dissemination testimonials. The Team will target a minimum of 50% response rate of occupant surveys.

Milestone 2.2.1: Ensure that adequate cooling season pre-retrofit data is being collected. Data will be submitted to DOE National Lab partner for third party review.

Milestone 2.2.2: Ensure that adequate heating season pre-retrofit data is being collected. Data will be submitted to DOE National Lab partner for third party review.

Milestone 2.2.3: Administer pre-retrofit surveys. Data will be submitted to DOE National Lab partner for third party review

Budget Period 1 Go/No-Go Decision Point: At the end of the BP all pre-retrofit data for both heating and cooling seasons will be collected and submitted for third party review.

Budget Period 2

Task 3. Installation and Commissioning

Subtask 3.1. Installation. The Team will oversee installation in their spaces, managing contractors for installation and coordinating with occupants.

Milestone 3.1: Installation complete. Submit installation documentation to DOE National Lab partner for review.

Subtask 3.2. Commissioning. The Team will oversee commissioning to ensure systems are maximizing energy savings, to ensure satisfied occupants and to enhance performance persistence.

Milestone 3.2: Commissioning complete. Submit commissioning report to DOE National Lab partner. DOE invited to tour project site.

Task 4. Post-Retrofit Measurement and Verification

Subtask 4.1. Post-Retrofit Monitoring. The M&V Project Partner will adjust any monitoring to capture the updated system's post-retrofit configuration. The Team will continue monitoring for a similar six-to-nine-month period as was monitored pre-retrofit, including portions of the cooling and heating seasons after the retrofit. The Team will re-administer occupant and owner satisfaction surveys. The Team will target a minimum of 50% response rate of occupant surveys.

Milestone 4.1.1: Ensure that adequate heating season post-retrofit data is being collected. Data will be submitted to National Lab partner for third party review.

Milestone 4.1.2: Administer post-retrofit surveys. Data will be submitted to National Lab partner for third party review

Milestone 4.1.3: Ensure that adequate cooling season post-retrofit data is being collected. Data will be submitted to National Lab partner for third party review.

Subtask 4.2. Demand Response Testing. The Team will prepare field test plans. The test plan will focus on instigating different levels and durations of DR events to the lighting system and measuring power impacts during and after the events to see if any "rebounding effect" will occur. The demand profile during the DR events will be compared to demand profiles during periods without DR events. The Team will also conduct occupant surveys for visual comfort and tolerance levels during DR events. The Team will target a minimum of 50% response rate of occupant surveys.

Milestone 4.2.1: Demand response data collection complete. Data will be submitted to National Lab partner for third party review.

Milestone 4.2.2: Administer DR surveys. Data will be submitted to DOE National Lab partner for third party review

Subtask 4.3. Data Analysis. The Team will condition the gathered data, filtering for outliers and data gaps. The Team will use weather normalization to map both the pre- and post-retrofit data onto a Typical Meteorological Year. The Team will compare pre- and post-retrofit estimates to calculate energy and demand impacts. The Team will quantify DR demand impacts and also analyze annual energy savings on a time dependent basis, including marginal costs and emissions to understand the retrofit's grid-interactive efficient buildings (GEB) impact. The Team will calculate the project's cost effectiveness using the actual project costs. At the end of the post-retrofit monitoring period, the M&V equipment will be uninstalled from the field test sites. We will additionally pull in results from other research projects that have established components of the technology package. These projects will include, among others:

- LED retrofits with Advanced Lighting Controls
 - Department of Defense Environmental Security Technology Certification Program (DoD ESTCP)
 - Lighting Retrofit: LED Fixtures and Controls for Advanced Holistic Lighting Solutions
 - Validating the Digital Lumens LED Lighting Control Retrofit
 - Intelligent Building Management with Holistic Digital Lighting
 - DOE
 - Lighting Technology Energy Solutions Program,
 - General Service Administration
 - Evaluation of Advanced Lighting Control Systems in a Working Office Environment
- Integrating Lighting and HVAC Controls
 - DoD ESTCP
 - Integrated Controls Package for High Performance Interior Retrofit,
 - ESTCP
 - Intelligent Building Management with Holistic Digital Lighting
 - National Grid
 - Comprehensive Networked Lighting Controls
- Lighting Demand Response
 - DOE
 - Technology analysis and validation of integrating connected lighting, automated shades, and intelligent energy storage to provide grid-interactive flexible building loads,

Milestone 4.3: Quality control data from M&V equipment, BAS trends, and occupant comfort surveys. DOE reviews data set.

Budget Period 2 Go/No-Go Decision Point: At the end of the BP, window, lighting, and controls retrofit installation will be completed and commissioned. Additionally, all post-retrofit data for both heating and cooling seasons will be collected and submitted for third party review.

Budget Period 3

Subtask 4.4. Building Energy Modeling. The Team will expand our analysis beyond the project site using the U.S DOE's prototype building models. The Team will adjust the prototype building models to incorporate the retrofit package (Window U-Value and Solar Heat Gain Coefficient, Lighting Power Density, and Controls). This analysis will include the most applicable building types (Education, Healthcare, Lodging, Office, Public Assembly, and Multifamily) for this technology package. It additionally will include all major U.S. climate zones. Through this expanded analysis, the Team will quantify the technology package's impact on energy and demand impact in a wide range of applications.

Milestone 4.4: Develop building energy models. DOE reviews energy model files.

Task 5. Reporting and Dissemination

Subtask 5.1. Final technical report. The Team will prepare a comprehensive final technical report describing the project, field test site, field test results, and technical analysis results.

Milestone 5.1: Finalize project technical report. DOE reviews technical report.

- **Subtask 5.2. Dissemination.** In order to reach as wide an audience as possible, the Team will prepare a webinar and case study. The Team will market the webinar and distribute the final report and case study using our comprehensive contact database of energy efficiency industry stakeholders. The Team will leverage strategic partnerships with more than 100 organizations including United States Green Building Council, American Society of Heating, Refrigeration, and Air-Conditioning Engineers and American Institute of Architects who have agreed to share reports, messages and training opportunities with their membership lists and other contact databases. The Team will have focused follow-up conversations with at least three public building owners that are interested in the package, meeting with them to describe and promote the technology package. In addition, the Team will pursue opportunities for the project to be used as a case study, public tour or other educational opportunities and in these cases key sustainability features can also be highlighted. The team will work with the local utility and Wisconsin's energy efficiency program to ensure that project results inform their ongoing efforts.

Milestone 5.2.1: Develop webinar slide deck. DOE reviews.

Milestone 5.2.2: Complete a case study document, including quantified cost and performance effects. DOE reviews case study.

Milestone 5.2.3: Direct outreach to 3 public building owners, broad communication to utility audience. DOE invited to meetings.

Subtask 5.3. Standard Development. The Team will update existing Project Partner design standard to include these advanced strategies for future projects. Design standards are provided to project teams at the start of new projects - they include contractual requirements and deliverables in one document and a separate document broken down by division of work that outlines our basis of design/starting point. This document includes window and lighting requirements. Successful strategies from this research project will be incorporated into these documents. The Team will share the design standard with other local governments in Wisconsin through our network; the Team will also share the standard with the University of Wisconsin and with State of Wisconsin officials.

Milestone 5.3: Update design standard. Submit to DOE for review.

Task 6. Project Management

Subtask 6.1. Project management. See "Project Management" section below.

Subtask 6.2. Provide long term data. Provide DOE with project data for up to 5 years beyond the project period of performance. This data includes utility bills, BAS trended data and whole building interval power data.

Milestone 6.2: Provide utility and energy usage data. Data will be submitted to National Lab partner for third party review.

End of Project Goal

The end of project SMART goal is that field validation of the technology package is complete. The retrofit will reduce HVAC energy consumption by 10% and lighting energy consumption by 60%. It will show a peak load reduction of 20% and demand response reduction of 20% of

lighting power. Occupant satisfaction, as measured on a Likert scale, will increase. The simple payback for the project will be less than 10 years.

D. Project Management and Reporting

Reports and other deliverables will be provided in accordance with the Federal Assistance Reporting Checklist following the instructions included therein.

Additional deliverables as indicated in the task/subtask descriptions include the following:

1. *Subtask 1.3 – Key design drawings*
2. *Subtask 2.1 – M&V plan*
3. *Subtask 2.2 – Pre-retrofit data*
4. *Subtask 3.1 – Installation documentation*
5. *Subtask 3.2 – Commissioning report*
6. *Subtask 4.1 – Post-retrofit data*
7. *Subtask 4.2 – Demand response data*
8. *Subtask 4.4 – Energy models*
9. *Subtask 5.1 – Final report*
10. *Subtask 5.2 – Webinar slide deck and case study document*
11. *Subtask 5.3 – Design standard*
12. *Subtask 6.1 - Quarterly project reports, financial reports, and participation and reporting at the annual Building Technologies Office peer-review conference*

Milestone Summary Table							
Recipient Name:		Dane County					
Project Title:		See the Savings: An Advanced Window-Lighting Controls Field Validation					
Task Num	Task or Subtask Title	Milestone Type	Milestone Number*	Milestone Description	Milestone Verification Process	Anticipated Date	Anticipated Quarter
1.1	Research Window Options	Milestone	1.1	Define window specifications to be used in bid documents.	Submit window specification to DOE.	7/2021	1
1.2	Research Lighting Options	Milestone	1.2	Define lighting specifications to be used in bid documents.	Submit lighting specification to DOE.	7/2021	1
1.3	Design	Milestone	1.3	Complete window and lighting retrofit design.	Submit key design drawings to DOE.	10/2021	2
1.4	Bid	Milestone	1.4	Select contractor and define retrofit timeline.	Notify DOE of contractor selection.	1/2022	3
2.1	Plan M&V and Install M&V Equipment	Milestone	2.1	Create comprehensive M&V plan that is consistent with our project plans.	Submit to DOE for review.	7/2021	1
2.2	Pre-Retrofit Monitoring	Milestone	2.2.1	Ensure that adequate cooling season pre-retrofit data is being collected.	Data will be submitted to National Lab partner for third party review	10/2021	2
2.2	Pre-Retrofit Monitoring	Milestone	2.2.2	Ensure that adequate heating season pre-retrofit data is being collected.	Data will be submitted to National Lab partner for third party review	1/2023	3
2.2	Pre-Retrofit Monitoring	Milestone	2.2.3	Administer pre-retrofit surveys.	Data will be submitted to National Lab partner for third party review	4/2022	4
		Go/No-Go	BP1	All pre-retrofit data for both heating and cooling seasons will be collected and submitted for third party review	Data will be submitted to National Lab partner for third party review	4/2022	4
3.1	Installation	Milestone	3.1	Installation complete.	Submit installation documentation to DOE.	7/2022	5

Milestone Summary Table

Recipient Name:		Dane County					
Project Title:		See the Savings: An Advanced Window-Lighting Controls Field Validation					
Task Num	Task or Subtask Title	Milestone Type	Milestone Number*	Milestone Description	Milestone Verification Process	Anticipated Date	Anticipated Quarter
3.2	Commissioning	Milestone	3.2	Commissioning complete.	Submit commissioning report to DOE. DOE invited to tour site.	10/2022	6
4.1	Post-Retrofit Monitoring	Milestone	4.1.1	Ensure that adequate heating season post-retrofit data is being collected.	Data will be submitted to National Lab partner for third party review.	1/2023	7
4.1	Post-Retrofit Monitoring	Milestone	4.1.2	Administer post-retrofit surveys.	Data will be submitted to National Lab partner for third party review	4/2023	8
4.1	Post-Retrofit Monitoring	Milestone	4.1.3	Ensure that adequate cooling season post-retrofit data is being collected.	Data will be submitted to National Lab partner for third party review	7/2023	9
4.2	Demand Response Testing	Milestone	4.2.1	Demand response data collection complete.	Data will be submitted to National Lab partner for third party review	7/2023	9
4.2	Demand Response Testing	Milestone	4.2.2	Administer DR surveys	Data will be submitted to National Lab partner for third party review	7/2023	9
4.3	Data Analysis	Milestone	4.3	Quality control data from M&V equipment, BAS trends, and occupant comfort surveys.	DOE reviews data set.	10/2023	10
		Go/No-Go	BP2	Retrofit installation will be completed and commissioned. Additionally, all post-retrofit data for both heating and cooling seasons will be collected	Data will be submitted to National Lab partner for third party review	10/2023	10

Milestone Summary Table

Recipient Name:		Dane County					
Project Title:		See the Savings: An Advanced Window-Lighting Controls Field Validation					
Task Num	Task or Subtask Title	Milestone Type	Milestone Number*	Milestone Description	Milestone Verification Process	Anticipated Date	Anticipated Quarter
4.4	Building Energy Modeling	Milestone	4.4	Develop buildingenergy models and submitted for third party review.	DOE reviews energy model files.	12/2023	11
5.1	Final Technical Report	Milestone	5.1	Finalize project technical report.	DOE reviews technical report.	3/2024	12
5.2	Dissemination	Milestone	5.2.1	Webinar slide deck.	DOE reviews slide deck.	4/2024	12
5.2	Dissemination	Milestone	5.2.2	Complete a case study document, including quantified cost and performance effects.	DOE reviews case study.	4/2024	12
5.2	Dissemination	Milestone	5.2.3	Direct outreach to 3 public building owners, broad communication to utility audience.	DOE invited to meetings.	4/2024	12
5.3	Standard Development	Milestone	5.3	Update design standard	DOE reviews.	4/2024	12
6.2	Project Management	Milestone	6.2	Provide longterm data.	Data will be submitted to National Lab partner for third party review.	When requested	When requested

1. Award Number: DE-EE0009465.0000	2. Program/Project Title: See the Savings: An Advanced Window-Lighting Controls Field Validation																																																														
3. Recipient: Dane County, Wisconsin																																																															
4. Reporting Requirements (see attached "EERE Reporting Instructions"):	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Frequency</th> <th style="width: 70%;">Addressees*</th> </tr> </thead> <tbody> <tr> <td colspan="2" style="text-align: center; font-size: small;">*See attached "EERE Reporting Instructions" for complete submission instructions</td> </tr> <tr> <td colspan="2">I. PROJECT MANAGEMENT REPORTING</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> A. Research Performance Progress Report (RPPR) (RD&D Projects)</td> <td style="vertical-align: top; padding: 2px;">A. https://www.eere-pmc.energy.gov/SubmitReports.aspx</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input checked="" type="checkbox"/> B. Progress Report (Non-RD&D Projects)</td> <td style="vertical-align: top; padding: 2px;">B. www.page.energy.gov</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input checked="" type="checkbox"/> C. Financial Report (SF-425)</td> <td style="vertical-align: top; padding: 2px;">C. www.page.energy.gov</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input checked="" type="checkbox"/> D. Special Status Report</td> <td style="vertical-align: top; padding: 2px;">D. Submit to DOE Project Officer</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> E. Continuation Application</td> <td style="vertical-align: top; padding: 2px;">E. Submit to DOE Project Officer</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;">F. Other (see Special Instructions)</td> <td style="vertical-align: top; padding: 2px;">F. https://www.eere-pmc.energy.gov/SubmitReports.aspx</td> </tr> <tr> <td colspan="2">II. SCIENTIFIC / TECHNICAL REPORTING</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input checked="" type="checkbox"/> A. Final Scientific/Technical Report</td> <td style="vertical-align: top; padding: 2px;">F. A. https://www.osti.gov/elink-2413</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input checked="" type="checkbox"/> B. Accepted Manuscript of Journal Article</td> <td style="vertical-align: top; padding: 2px;">A. B. https://www.osti.gov/elink-2413</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input checked="" type="checkbox"/> C. Scientific/Technical Conference Paper/Presentation/Proceeding</td> <td style="vertical-align: top; padding: 2px;">A. C. https://www.osti.gov/elink-2413</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input checked="" type="checkbox"/> D. Scientific/ Technical Software & Manual</td> <td style="vertical-align: top; padding: 2px;">A. D. https://www.osti.gov/elinkestsc/241-4.jsp</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input checked="" type="checkbox"/> E. Scientific/ Technical Dataset</td> <td style="vertical-align: top; padding: 2px;">A. E. https://www.osti.gov/elink/2416-submission.jsp</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input checked="" type="checkbox"/> F. Other STI (Dissertation / Thesis, see Special Instructions)</td> <td style="vertical-align: top; padding: 2px;">A. F. https://www.osti.gov/elink-2413</td> </tr> <tr> <td colspan="2">III. CLOSEOUT REPORTING</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> A. Invention Certification (or Patent Certification DOE F 2050.11)</td> <td style="vertical-align: top; padding: 2px;">F. A. https://www.eere-pmc.energy.gov/SubmitReports.aspx</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input checked="" type="checkbox"/> B. Final Property Report (SF-428 & SF-428B)</td> <td style="vertical-align: top; padding: 2px;">F. B. Submit to DOE Project Officer</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;">C. Other (see Special Instructions)</td> <td style="vertical-align: top; padding: 2px;">C. https://www.eere-pmc.energy.gov/SubmitReports.aspx</td> </tr> <tr> <td colspan="2">IV. OTHER REPORTING</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> A. Intellectual Property Reporting</td> <td style="vertical-align: top; padding: 2px;">A. http://www.iEdison.gov</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> B. Invention Utilization Report (EERE 356)</td> <td style="vertical-align: top; padding: 2px;">B. https://www.eere-pmc.energy.gov/SubmitReports.aspx</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;">C. Project Management Plan (PMP)</td> <td style="vertical-align: top; padding: 2px;">C. https://www.eere-pmc.energy.gov/SubmitReports.aspx</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input checked="" type="checkbox"/> D. Annual Incurred Cost Proposal</td> <td style="vertical-align: top; padding: 2px;">D. See section IV. D. for instructions and due dates</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> E. DOE For Profit Compliance Audit</td> <td style="vertical-align: top; padding: 2px;">F. See section IV. F. for instructions and due dates</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input checked="" type="checkbox"/> F. Single Audit: States, Locals, Tribal Governments, and Non-Profits</td> <td style="vertical-align: top; padding: 2px;">F. See section IV. F. for instructions and due dates</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;">G. Annual Property Inventory (SF-428 & SF-428A)</td> <td style="vertical-align: top; padding: 2px;">G. https://www.eere-pmc.energy.gov/SubmitReports.aspx</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input checked="" type="checkbox"/> H. Property Disposition Request/Report (SF-428 & SF-428C)</td> <td style="vertical-align: top; padding: 2px;">H. Submit to DOE Project Officer</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;">I. Uniform Commercial Code (UCC) Financing Statements</td> <td style="vertical-align: top; padding: 2px;">I. See section IV. I. for instructions and due dates</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input checked="" type="checkbox"/> J. Federal Subaward Reporting System (FSRS)</td> <td style="vertical-align: top; padding: 2px;">J. See section IV. J. for instructions and due dates https://www.fsrs.gov/</td> </tr> </tbody> </table>	Frequency	Addressees*	*See attached "EERE Reporting Instructions" for complete submission instructions		I. PROJECT MANAGEMENT REPORTING		<input type="checkbox"/> A. Research Performance Progress Report (RPPR) (RD&D Projects)	A. https://www.eere-pmc.energy.gov/SubmitReports.aspx	<input checked="" type="checkbox"/> B. Progress Report (Non-RD&D Projects)	B. www.page.energy.gov	<input checked="" type="checkbox"/> C. Financial Report (SF-425)	C. www.page.energy.gov	<input checked="" type="checkbox"/> D. Special Status Report	D. Submit to DOE Project Officer	<input type="checkbox"/> E. Continuation Application	E. Submit to DOE Project Officer	F. Other (see Special Instructions)	F. https://www.eere-pmc.energy.gov/SubmitReports.aspx	II. SCIENTIFIC / TECHNICAL REPORTING		<input checked="" type="checkbox"/> A. Final Scientific/Technical Report	F. A. https://www.osti.gov/elink-2413	<input checked="" type="checkbox"/> B. Accepted Manuscript of Journal Article	A. B. https://www.osti.gov/elink-2413	<input checked="" type="checkbox"/> C. Scientific/Technical Conference Paper/Presentation/Proceeding	A. C. https://www.osti.gov/elink-2413	<input checked="" type="checkbox"/> D. Scientific/ Technical Software & Manual	A. D. https://www.osti.gov/elinkestsc/241-4.jsp	<input checked="" type="checkbox"/> E. Scientific/ Technical Dataset	A. E. https://www.osti.gov/elink/2416-submission.jsp	<input checked="" type="checkbox"/> F. Other STI (Dissertation / Thesis, see Special Instructions)	A. F. https://www.osti.gov/elink-2413	III. CLOSEOUT REPORTING		<input type="checkbox"/> A. Invention Certification (or Patent Certification DOE F 2050.11)	F. A. https://www.eere-pmc.energy.gov/SubmitReports.aspx	<input checked="" type="checkbox"/> B. Final Property Report (SF-428 & SF-428B)	F. B. Submit to DOE Project Officer	C. Other (see Special Instructions)	C. https://www.eere-pmc.energy.gov/SubmitReports.aspx	IV. OTHER REPORTING		<input type="checkbox"/> A. Intellectual Property Reporting	A. http://www.iEdison.gov	<input type="checkbox"/> B. Invention Utilization Report (EERE 356)	B. https://www.eere-pmc.energy.gov/SubmitReports.aspx	C. Project Management Plan (PMP)	C. https://www.eere-pmc.energy.gov/SubmitReports.aspx	<input checked="" type="checkbox"/> D. Annual Incurred Cost Proposal	D. See section IV. D. for instructions and due dates	<input type="checkbox"/> E. DOE For Profit Compliance Audit	F. See section IV. F. for instructions and due dates	<input checked="" type="checkbox"/> F. Single Audit: States, Locals, Tribal Governments, and Non-Profits	F. See section IV. F. for instructions and due dates	G. Annual Property Inventory (SF-428 & SF-428A)	G. https://www.eere-pmc.energy.gov/SubmitReports.aspx	<input checked="" type="checkbox"/> H. Property Disposition Request/Report (SF-428 & SF-428C)	H. Submit to DOE Project Officer	I. Uniform Commercial Code (UCC) Financing Statements	I. See section IV. I. for instructions and due dates	<input checked="" type="checkbox"/> J. Federal Subaward Reporting System (FSRS)	J. See section IV. J. for instructions and due dates https://www.fsrs.gov/
Frequency	Addressees*																																																														
*See attached "EERE Reporting Instructions" for complete submission instructions																																																															
I. PROJECT MANAGEMENT REPORTING																																																															
<input type="checkbox"/> A. Research Performance Progress Report (RPPR) (RD&D Projects)	A. https://www.eere-pmc.energy.gov/SubmitReports.aspx																																																														
<input checked="" type="checkbox"/> B. Progress Report (Non-RD&D Projects)	B. www.page.energy.gov																																																														
<input checked="" type="checkbox"/> C. Financial Report (SF-425)	C. www.page.energy.gov																																																														
<input checked="" type="checkbox"/> D. Special Status Report	D. Submit to DOE Project Officer																																																														
<input type="checkbox"/> E. Continuation Application	E. Submit to DOE Project Officer																																																														
F. Other (see Special Instructions)	F. https://www.eere-pmc.energy.gov/SubmitReports.aspx																																																														
II. SCIENTIFIC / TECHNICAL REPORTING																																																															
<input checked="" type="checkbox"/> A. Final Scientific/Technical Report	F. A. https://www.osti.gov/elink-2413																																																														
<input checked="" type="checkbox"/> B. Accepted Manuscript of Journal Article	A. B. https://www.osti.gov/elink-2413																																																														
<input checked="" type="checkbox"/> C. Scientific/Technical Conference Paper/Presentation/Proceeding	A. C. https://www.osti.gov/elink-2413																																																														
<input checked="" type="checkbox"/> D. Scientific/ Technical Software & Manual	A. D. https://www.osti.gov/elinkestsc/241-4.jsp																																																														
<input checked="" type="checkbox"/> E. Scientific/ Technical Dataset	A. E. https://www.osti.gov/elink/2416-submission.jsp																																																														
<input checked="" type="checkbox"/> F. Other STI (Dissertation / Thesis, see Special Instructions)	A. F. https://www.osti.gov/elink-2413																																																														
III. CLOSEOUT REPORTING																																																															
<input type="checkbox"/> A. Invention Certification (or Patent Certification DOE F 2050.11)	F. A. https://www.eere-pmc.energy.gov/SubmitReports.aspx																																																														
<input checked="" type="checkbox"/> B. Final Property Report (SF-428 & SF-428B)	F. B. Submit to DOE Project Officer																																																														
C. Other (see Special Instructions)	C. https://www.eere-pmc.energy.gov/SubmitReports.aspx																																																														
IV. OTHER REPORTING																																																															
<input type="checkbox"/> A. Intellectual Property Reporting	A. http://www.iEdison.gov																																																														
<input type="checkbox"/> B. Invention Utilization Report (EERE 356)	B. https://www.eere-pmc.energy.gov/SubmitReports.aspx																																																														
C. Project Management Plan (PMP)	C. https://www.eere-pmc.energy.gov/SubmitReports.aspx																																																														
<input checked="" type="checkbox"/> D. Annual Incurred Cost Proposal	D. See section IV. D. for instructions and due dates																																																														
<input type="checkbox"/> E. DOE For Profit Compliance Audit	F. See section IV. F. for instructions and due dates																																																														
<input checked="" type="checkbox"/> F. Single Audit: States, Locals, Tribal Governments, and Non-Profits	F. See section IV. F. for instructions and due dates																																																														
G. Annual Property Inventory (SF-428 & SF-428A)	G. https://www.eere-pmc.energy.gov/SubmitReports.aspx																																																														
<input checked="" type="checkbox"/> H. Property Disposition Request/Report (SF-428 & SF-428C)	H. Submit to DOE Project Officer																																																														
I. Uniform Commercial Code (UCC) Financing Statements	I. See section IV. I. for instructions and due dates																																																														
<input checked="" type="checkbox"/> J. Federal Subaward Reporting System (FSRS)	J. See section IV. J. for instructions and due dates https://www.fsrs.gov/																																																														

FREQUENCY CODES AND DUE DATES:

- A – Within five (5) calendar days after the event, or as specified.
- F – Final; within 120 calendar days after expiration or termination of the award.
- Y – Yearly; within 90 calendar days after the end of the annual reporting period.
- S – Semiannually; within 30 days after end of the reporting period.
- Q – Quarterly; within 30 calendar days after the end of the quarterly reporting period.
- Y180 – Yearly; within 180 calendar days after the close of the recipient’s fiscal year.
- O – Other: See instructions for further details.

Table of Contents

I.	Project Management Reporting.....	3
B.	Progress Report (Non-RD&D Projects).....	3
1.	Cover Page	3
2.	Project Overview.....	4
3.	Accomplishments.....	4
4.	Budgetary Information.....	4
5.	Schedule Status.....	4
7.	Participants & Other Collaborating Organizations.....	4
8.	Products	4
a.	Publications, conference papers, and presentations	4
b.	Website(s).....	5
c.	Networks or collaborations.....	5
d.	Technologies or techniques	5
e.	Other products, such as data or databases, physical collections, audio or video, software or NetWare, models, education aid or curricula, instruments or equipment (Identify and Describe).....	5
C.	Financial Report SF-425 Federal Financial Report.....	5
D.	Special Status Reports	6
E.	Continuation Application	7
II.	Scientific and Technical Reporting	7
A.	Final Scientific/Technical Report.....	8
III.	Closeout Reporting	10
B.	Final Property Reports SF-428 & SF-428B	10
IV.	Other Reporting.....	10

D. Annual Incurred Cost Proposals	10
F. Single Audit: States, Local Government, Tribal Governments, Institution of Higher Education (IHE), or Non-Profit Organization	11
H. Property Disposition Request/Report SF-428 & SF-428C.....	11
I. Uniform Commercial Code (UCC) Financing Statements.....	12
J. Federal Subaward Reporting System (FSRS)	13
Appendix A.....	14
Notice To Recipients (Prime Recipients And Subrecipients) Regarding Protected Data, Limited Rights Data And Protected Personally Identifiable Information.....	14

EERE Reporting Instructions

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

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

I. Project Management Reporting

B. Progress Report (Non-RD&D Projects)

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

The recipient must provide a concise narrative assessment of the status of work and include the following information and any other information identified under Special Instructions on the Federal Assistance Reporting Checklist:

1. Cover Page

- a. The DOE Award Number (as it appears on the award face page)
- b. Recipient Name (as it appears on the award face page)
- c. Project Title
- d. Project Director / Principal Investigator (PD/PI) Name, Title and Contact Information (e-mail address and phone number)
- e. Name of Submitting Official, Title, and Contact Information (e-mail address and phone number), if other than PD/PI
- f. Project Period (Start Date, End Date)
- g. Report Submission Date
- h. Reporting Period Start and End Date

2. Project Overview

A written comparison of the actual project accomplishments with the project goals and objectives established for the reporting period; if goals and/or objectives for the reporting period were not met, a detailed description of the variance shall be provided.

3. Accomplishments

A discussion of what was accomplished under these goals and objectives established

for this reporting period, including major activities, significant results, major findings or conclusions, key outcomes, or other achievements. This section should not contain any proprietary data or other information not subject to public release. If such information is important to reporting progress, do not include the information, but include a note in the report advising the reader to contact the Principal Investigator or the Project Director for further information.

4. Budgetary Information

A comparison of the approved budget by budget period and the actual costs incurred during the reporting period shall be provided. If cost sharing is required, the cost breakdown shall show the DOE share, recipient share, and total costs.

5. Schedule Status

List milestones, anticipated completion dates and actual completion dates. If you submitted a project management plan with your application, you must use this plan to report schedule and budget variances. You may use your own project management system to provide this information.

6. Changes/Problems

Describe any changes during the reporting period in project approach and the reasons for these changes. Remember, significant changes to the project objectives and scope require prior approval by the Contracting Officer. Describe any actual or anticipated problems or delays and any actions taken or planned to resolve them.

7. Participants & Other Collaborating Organizations

Describe any absence or changes of key personnel or changes in consortium/teaming arrangement during the reporting period.

8. Products

List and describe any product produced or technology transfer activities accomplished during this reporting period, such as:

- a. Publications, conference papers, and presentations.** List peer-reviewed articles or papers that have been submitted for publication in scientific, technical, or professional journals. Include any papers submitted for peer-reviewed publication in the periodically published proceedings of a scientific society, a conference, or

the like. A publication in the proceedings of a one-time conference, not part of a series, should be reported under “Books or other non-periodical, one-time publications.”

Identify for each publication: Author(s); title; journal; volume: year; page numbers; status of publication (published; accepted, awaiting publication; submitted, under review; other); acknowledgement of federal support (yes/no); legal disclaimer language (yes/no). Also see instructions under **II**.

Scientific/Technical Reporting regarding the submission of AM and other STI as appropriate.

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

The recipient is 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. This includes data that are displayed in charts, figures, images, etc. In addition, the underlying digital research data used to generate the displayed data should be made as accessible as possible in accordance with the principles stated above. This requirement could be met by including the data as supplementary information to the published article, or through other means. The published article should indicate how these data can be accessed.

- b. **Website(s)** (list the URL) that reflect the results of this project.
- c. **Networks or collaborations** fostered.
- d. **Technologies or techniques** (Identify and Describe).
- e. **Other products**, such as data or databases, physical collections, audio or video, software or NetWare, models, education aid or curricula, instruments or equipment (Identify and Describe).

C. Financial Report SF-425 Federal Financial Report

Submit to:	https://page.energy.gov
Submission deadline:	Within 30 calendar days after the end of the quarterly reporting period (January 30, April 30, July 30, October 30) and within 90 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 – i.e., the entirety of work performed by the prime recipient, subrecipients, and

contractors – to EERE. A fillable version of the SF-425 is available at <https://www.energy.gov/eere/funding/eere-funding-application-and-management-forms>.

D. Special Status Reports

Submit to:	Submit to DOE Project Officer
Submission deadline:	Within five (5) calendar days after the event, or as specified

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

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

1. Any notices or claims of patent or copyright infringement arising out of or relating to the performance of the EERE award;
2. Refusal of a subrecipient to accept flow down requirements in the Special Terms and Conditions and/or any Attachment to the EERE award;
3. Potential or actual violations of federal, state, and municipal laws arising out of or relating to work under the award;
4. Any improper claims or excess payments arising out of or relating to work under the award;
5. Potential or actual violations of the cost share requirements under the award;
6. Potential or actual noncompliance with EERE or DOE reporting requirements under the award;
7. Potential or actual violations of the lobbying restrictions in the award;
8. Potential or actual bankruptcy/insolvency of the prime recipient or subrecipient;
9. Potential or actual violation of U.S. export control laws and regulations arising out of or relating to the work under the award;
10. Any fatality or injuries requiring hospitalization arising out of or relating to work under the award;
11. Potential or actual violations of environmental, health, or safety laws and regulations, any significant environmental permit violation, and any incident which causes a significant process or hazard control system failure;

12. Any event which is anticipated to cause a significant schedule slippage or cost increase;
13. Any damage to Government-owned equipment in excess of \$50,000;
14. Developments that have a significant favorable impact on the project; and,
15. Any incident arising out of or relating to work under the award that has the potential for high visibility in the media.

E. Continuation Application

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

A continuation application is a non-competitive application for an additional budget period within a previously approved project period. 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.

II. 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). Access to and archival of DOE-funded STI are managed by the DOE Office of Scientific and Technical Information (OSTI). For information about OSTI see <http://www.osti.gov>.

For more information on STI submittals, see <http://www.osti.gov/stip/submittal>.

By properly notifying DOE OSTI about the published results, the information will be made publicly accessible and discoverable through DOE web-based products.

NOTE: SCIENTIFIC/TECHNICAL PRODUCTS INTENDED FOR PUBLIC RELEASE MUST NOT CONTAIN PROTECTED PERSONALLY IDENTIFIABLE INFORMATION (PII).

PII is defined as any information about an individual which can be used to distinguish or trace an individual’s identity. Some information that is considered to be PII is available in public sources such as telephone books, public websites, university listings, etc. This type of information is considered to be Public PII and includes, for example, first and last name, address, work telephone number, e-mail address, home telephone number, and

general educational credentials. In contrast, Protected PII is defined as an individual’s first name or first initial and last name in combination with any one or more of the following types of information: social security number, passport number, credit card numbers, clearances, bank numbers, biometrics, date and place of birth, mother’s maiden name, criminal, medical and financial records, educational transcripts, etc., which could be mis-used if made publicly available.

A. Final Scientific/Technical Report

Submit to:	DOE Energy Link System (E-Link) available at http://www.osti.gov/elink-2413
Submission deadline:	Within 90 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 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 project period. For Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) awards, a final scientific/technical report must be submitted after the completion of each phase, e.g., Phase I, Phase II, and sequential Phase II, as described in the Special Instructions.
2. STI that is publicly accessible need not be duplicated in the report if a citation with a link to where the information may be found is included in the report. For example, articles found in PAGES (i.e., DOE’s Public Access Gateway for Energy and Science, <http://www.osti.gov/pages/>) are accessible to the public.
3. Provide identifying information: the EERE award number; sponsoring program office; name of recipient; project title; name of project director/principal investigator; and consortium/team members.
4. Include the EERE acknowledgement and legal disclaimer language as described in the Special Terms and Conditions (additional information can be found at the EERE Communications Standards website: <https://www.energy.gov/eere/communicationstandards/eere-branded-publications-developed-third-parties>).
5. Include any limitations on public release of the report, if authorized by the award agreement. If the document being submitted contains patentable material or protected data (i.e., data first produced in the performance of the award that is protected from

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

6. Provide an abstract or executive summary, which should be a minimum of one paragraph and written in terms understandable by an educated layperson. (Refer to <http://www.osti.gov/stip/standards> for ANSI/NISO guidance as needed.) The abstract included in an application may serve as a model for this.
7. Summarize project activities for the entire period of funding, including original hypotheses, approaches used, and findings. Include, if applicable, facts, figures, analyses, and assumptions used during the life of the project to support the results in a manner that conveys to the scientific community the STI created during the project. To minimize duplication, the report may reference STI, including journal articles, that is publicly accessible. See also #2.
8. For guidance offered by the National Information Standards Organization on typical attributes and content of a technical report, if needed, refer to ANSI/NISO Z39.18-2005 (R2010), Scientific and Technical Reports – Preparation, Presentation, and Preservation (see <http://www.osti.gov/stip/standards>).

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

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

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 <http://www.osti.gov/stip/best-practices-portable-document-format-pdf-creation> for PDF document creation.

III. Closeout Reporting

B. Final Property Reports SF-428 & SF-428B

Submit to:	Submit to DOE Project Officer
Submission deadline:	Within 90 calendar days after expiration or termination of the award

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

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

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

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

State Energy Program recipients may refer to the October 16, 2012 property clarification letter for guidance on continued use, requesting disposition instructions and reporting. The letter waived the requirement for submittal of final property reports under certain circumstances. A copy of the letter can be found in the guidance section of the SEP website.

IV. Other Reporting

D. Annual Incurred Cost Proposals

Submit to:	If DOE is the Cognizant Federal Agency, send the Annual Incurred Cost Proposal to: <ul style="list-style-type: none"> • CostPrice@ee.doe.gov (for awards administered by the Golden Field Office); or • PricingGroup@netl.doe.gov (for awards administered by NETL) Otherwise, submit the proposal to the Cognizant Federal Agency
Submission deadline:	Within 180 calendar days after the close of the recipient's fiscal year

The prime recipient must submit an Annual Incurred Cost Proposal, reconciled to its financial statements unless the award is based on negotiated fixed indirect cost rate(s) or a fixed amount for indirect or facilities and administration (F&A) costs. The prime recipient must submit an annual incurred cost proposal directly to the Cognizant Federal

Agency for negotiating and approving indirect costs.

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

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

As required by 2 CFR 200 Subpart F, non-federal entities that expend \$750,000 or more during the recipient 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(s) must be submitted to DOE within the earlier of thirty days after receipt of the auditor's report(s) or nine months after the end of the audit period (recipient's fiscal year-end). The single audit report (including audited financial statements) must be submitted, along with the data collection form to the Federal Audit Clearinghouse website.

H. Property Disposition Request/Report SF-428 & SF-428C

Submit to:	<u>Submit to DOE Project Officer</u>
Submission deadline:	Within 5 calendar days of the event or as specified

The prime recipient must request disposition instructions for or report disposition of

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

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

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

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

I. Uniform Commercial Code (UCC) Financing Statements

Submit to:	<u>Submit to DOE Project Officer</u>
Submission deadline:	Within five (5) calendar days after the event, or as specified.

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

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

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

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

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

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

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

- 1) “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.”
- 2) Federal Award Identification Number (e.g., DE-EE000XXXX)

J. Federal Subaward Reporting System (FSRS)

Submit to:	https://www.fsrs.gov/
Submission deadline:	The prime recipient is required to file a FFATA sub-award report by the end of the month following the month in which the prime recipient awards any sub-grant greater than or equal to \$25,000.

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

The prime recipient is required to file a FFATA sub-award report by the end of the month following the month in which the prime recipient awards any sub-award greater than or equal to \$25,000.

Appendix A

Notice To Recipients (Prime Recipients And Subrecipients) Regarding Protected Data, Limited Rights Data And Protected Personally Identifiable Information

I. PROTECTED DATA AND LIMITED RIGHTS DATA

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

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

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

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

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

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

II. PROTECTED PERSONALLY IDENTIFIABLE INFORMATION

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

- Social Security Numbers in any form;
- Place of Birth associated with an individual;

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

Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary		Estimated Unobligated Funds			New or Revised Budget		
		Catalog of Federal Domestic Assistance Number (b)	Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Budget Period 1	81.086				\$73,335	\$31,818	\$105,153
2. Budget Period 2	81.086				\$868,271	\$502,789	\$1,371,060
3. Budget Period 3	81.086				\$40,392	\$20,399	\$60,791
4.							
5. Totals					\$981,998	\$555,006	\$1,537,004
Section B - Budget Categories							
6. Object Class Categories		Grant Program, Function or Activity					Total (5)
		Budget Period 1	Budget Period 2	Budget Period 3			
a. Personnel		\$5,440	\$11,760	\$5,840			\$23,040
b. Fringe Benefits		\$2,440	\$5,000	\$2,630			\$10,070
c. Travel		\$1,594	\$0	\$1,594			\$3,188
d. Equipment		\$0	\$0	\$0			\$0
e. Supplies		\$0	\$0	\$0			\$0
f. Contractual		\$95,679	\$1,354,300	\$50,727			\$1,500,706
g. Construction		\$0	\$0	\$0			\$0
h. Other		\$0	\$0	\$0			\$0
i. Total Direct Charges (sum of 6a-6h)		\$105,153	\$1,371,060	\$60,791			\$1,537,004
j. Indirect Charges		\$0	\$0	\$0			\$0
k. Totals (sum of 6i-6j)		\$105,153	\$1,371,060	\$60,791			\$1,537,004
7. Program Income		\$0	\$0	\$0			\$0

**Grant and Cooperative Agreement Research,
Development, or Demonstration Non-Federal
Entity**

(State Government, Local Government or Indian Tribe)

A Non-Federal Entity is subject to the intellectual property requirements at 2 CFR 200.315.

2 CFR 200.315 Intangible Property

(a) Title to intangible property (see §200.59 Intangible property) acquired under a Federal award vests upon acquisition in the non-Federal entity. The non-Federal entity must use that property for the originally-authorized purpose, and must not encumber the property without approval of the Federal awarding agency. When no longer needed for the originally authorized purpose, disposition of the intangible property must occur in accordance with the provisions in §200.313 Equipment paragraph (e).

(b) The non-Federal entity may copyright any work that is subject to copyright and was developed, or for which ownership was acquired, under a Federal award. The Federal awarding agency reserves a royalty-free, nonexclusive and irrevocable right to reproduce, publish, or otherwise use the work for Federal purposes, and to authorize others to do so.

(c) The non-Federal entity is subject to applicable regulations governing patents and inventions, including governmentwide regulations issued by the Department of Commerce at 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Awards, Contracts and Cooperative Agreements."

(d) The Federal government has the right to:

(1) Obtain, reproduce, publish, or otherwise use the data produced under a Federal award;
and

(2) Authorize others to receive, reproduce, publish, or otherwise use such data for Federal purposes.

(e) Freedom of Information Act (FOIA).

(1) In response to a Freedom of Information Act (FOIA) request for research data relating to published research findings produced under a Federal award that were used by the Federal government in developing an agency action that has the force and effect of law, the Federal awarding agency must request, and the non-Federal entity must provide, within a reasonable time, the research data so that they can be made available to the public through the

procedures established under the FOIA. If the Federal awarding agency obtains the research data solely in response to a FOIA request, the Federal awarding agency may charge the requester a reasonable fee equaling the full incremental cost of obtaining the research data. This fee should reflect costs incurred by the Federal agency and the non-Federal entity. This fee is in addition to any fees the Federal awarding agency may assess under the FOIA (5 U.S.C. 552(a)(4)(A)).

(2) Published research findings means when:

(i) Research findings are published in a peer-reviewed scientific or technical journal; or

(ii) A Federal agency publicly and officially cites the research findings in support of an agency action that has the force and effect of law. “Used by the Federal government in developing an agency action that has the force and effect of law” is defined as when an agency publicly and officially cites the research findings in support of an agency action that has the force and effect of law.

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

(i) Trade secrets, commercial information, materials necessary to be held confidential by a researcher until they are published, or similar information which is protected under law; and

(ii) Personnel and medical information and similar information the disclosure of which would constitute a clearly unwarranted invasion of personal privacy, such as information that could be used to identify a particular person in a research study.

Project Title: See the Savings: An Advanced Window-Lighting Controls Field Validation

Lead Organization: Dane County, Wisconsin

Principal Investigator: Kathryn Kuntz

Data Management Plan

In this project, we will conduct field tests of thin triple windows, LEDs with advanced lighting controls, and connected lighting with HVAC controls. We will quantify the energy savings and demand response potential. This DMP addresses which data should be shared and/or preserved in accordance with the [requirements](#) of the DOE EERE Policy on Digital Data Management.

Data Types and Sources

Field test data will be the subject to this data management plan (DMP.) Field test data generated include field measurement data for lighting and HVAC system powers, space light levels, temperature, humidity, and other HVAC power, natural gas, and operation-related monitoring and control points. Field test data will also include occupant and operator/owner surveys for comfort during the field-testing period. These field test data are considered digital research data necessary to [validate](#) the research findings.

Content and Format

For the field measurement data, the raw data format will depend on the data collection hardware and software – data loggers, building automation systems, and energy meters. We plan to convert all these raw data to commonly-used comma-separated value (.csv) format for data processing and analysis. We will provide a Microsoft Word document describing each set of these data files and formats.

For the occupant surveys, we will use both the online survey method and paper-based survey method. Survey results collected will be converted or manually typed into Microsoft Excel spreadsheets for data analysis and visualization.

Sharing and Preservation

- We plan to share all original raw data within the research team members and DOE project managers through Microsoft SharePoint - Slipstream's standard way of sharing data with external research partners. We plan to also share with public primary research results, conclusions, and applicable contact information. The rationale for some restrictions of public access of all raw/original data is that some data may contain personal information (occupant names in survey results, for example.)
- We also plan to share the research data and results with the public for three years after research findings are published. There is no anticipated delay in data access.
- There are no special requirements for data sharing. With a web link, anybody can get access to the research data and results online.
- No resource is requested in the research proposal for data sharing and preservation. We will use

Slipstream's existing Microsoft SharePoint infrastructure.

- We will discuss with DOE after direct project funding ends about the plan for the transfer of responsibilities for project data sharing and preservation.
- We will discuss with DOE after direct project funding ends about the management responsibility for the project research data, and if the responsibility will be transferred to a third party (e.g., institutional or community repository)
- We will discuss with DOE after direct project funding ends regarding the management of the research data, including plans to re-evaluate the costs and benefits of data sharing and preservation.

DE-EE0009465.0000

Attachment 5

Protection

We will strive to protect the confidentiality, personal privacy, and personally identifiable information from unrestricted, public access. Microsoft Sharepoint security features allow us to control access to project raw data. If necessary, we will erase the sensitive customer or personally identifiable information from the public-accessible research data and results. We will recognize U.S. national, homeland, and economic security; proprietary interests, confidential business information, and intellectual property rights; and avoid significant negative impact on innovation and U.S. competitiveness.

Rationale

Our proposed data management plan follows the requirements of the DOE EERE Policy on Digital Data Management. Our research data and results will contribute to the state-of-art in the field of building energy efficiency and grid-interactive efficient buildings.

Special Terms and Conditions

Dane County, Wisconsin (“Recipient”), which is identified in Block 5 of the Assistance Agreement, and the Office of Energy Efficiency and Renewable Energy (“EERE”), an office within the United States Department of Energy (“DOE”), enter into this Award, referenced above, to achieve the project objectives and the technical milestones and deliverables stated in Attachment 1 to this Award.

This Award consists of the following documents, including all terms and conditions therein:

	Assistance Agreement
	Special Terms and Conditions
Attachment 1	Statement of Project Objectives and Milestone Summary Table
Attachment 2	Federal Assistance Reporting Checklist and Instructions
Attachment 3	Budget Information SF-424A
Attachment 4	Intellectual Property Provisions
Attachment 5	Data Management Plan

The following are incorporated into this Award by reference:

- DOE Assistance Regulations, 2 CFR part 200 as amended by 2 CFR part 910 at <http://www.eCFR.gov>.
- Research Terms & Conditions and the DOE Agency Specific Requirements at <http://www.nsf.gov/bfa/dias/policy/rtc/index.jsp> (if the Award is for research and the Award is to a university or non-profit).
- National Policy Assurances, to be incorporated as Award Terms in effect on date of award at <http://www.nsf.gov/awards/managing/rtc.jsp>.
- The Recipient’s application/proposal as approved by EERE.

Table of Contents

Subpart A. General Provisions	1
Term 1. Legal Authority and Effect	1
Term 2. Flow Down Requirement	1
Term 3. Compliance with Federal, State, and Municipal Law	1
Term 4. Inconsistency with Federal Law	1
Term 5. Federal Stewardship	1
Term 6. Substantial Involvement	1
Term 7. Federal Involvement	2
Term 8. NEPA Requirements	3
Term 9. Performance of Work in United States	5
Term 10. Foreign National Access Under DOE Order 142.3A, “Unclassified Foreign Visits and Assignments Program”	5
Term 11. Notice Regarding the Purchase of American-Made Equipment and Products – Sense of Congress	6
Term 12. Domestic Preference – Infrastructure Projects	6
Term 13. Reporting Requirements	6
Term 14. Lobbying	6
Term 15. Publications	7
Term 16. No-Cost Extension	7
Term 17. Property Standards	8
Term 18. Insurance Coverage	8
Term 19. Real Property	8
Term 20. Equipment	8
Term 21. Supplies	9
Term 22. Property Trust Relationship	9
Term 23. Record Retention	9
Term 24. Audits	9
Subpart B. Financial Provisions	10
Term 25. Maximum Obligation	10
Term 26. Funding of Budget Periods	11
Term 27. Continuation Application and Funding	11
Term 28. Cost Sharing	12
Term 29. Refund Obligation	13
Term 30. Allowable Costs	13
Term 31. Indirect Costs	14

Term 32. Decontamination and/or Decommissioning (D&D) Costs.....	14
Term 33. Use of Program Income	14
Term 34. Payment Procedures	14
Term 35. Budget Changes.....	16
Subpart C.	
Miscellaneous Provisions.....	17
Term 36. Insolvency, Bankruptcy or Receivership	17
Term 37. Reporting Subawards and Executive Compensation	17
Term 38. System for Award Management and Universal Identifier Requirements.....	21
Term 39. Nondisclosure and Confidentiality Agreements Assurances	23
Term 40. Subrecipient Change Notification.....	24
Term 41. Conference Spending.....	25
Term 42. Recipient Integrity and Performance Matters.....	25
Term 43. Export Control.....	27

Subpart A. General Provisions

Term 1. Legal Authority and Effect

A DOE financial assistance award is valid only if it is in writing and is signed, either in writing or electronically, by a DOE Contracting Officer.

The Recipient may accept or reject the Award. A request to draw down DOE funds or acknowledgement of award documents by the Recipient's authorized representative through electronic systems used by DOE, specifically FedConnect, constitutes the Recipient's acceptance of the terms and conditions of this Award. Acknowledgement via FedConnect by the Recipient's authorized representative constitutes the Recipient's electronic signature.

Term 2. Flow Down Requirement

The Recipient agrees to apply the terms and conditions of this Award, as applicable, including the Intellectual Property Provisions, to all subrecipients (and subcontractors, as appropriate), as required by 2 CFR 200.101, and to require their strict compliance therewith. Further, the Recipient must apply the Award terms as required by 2 CFR 200.326 to all subrecipients (and subcontractors, as appropriate), and to require their strict compliance therewith.

Term 3. Compliance with Federal, State, and Municipal Law

The Recipient is required to comply with applicable Federal, state, and local laws and regulations for all work performed under this Award. The Recipient is required to obtain all necessary Federal, state, and local permits, authorizations, and approvals for all work performed under this Award.

Term 4. Inconsistency with Federal Law

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

Term 5. Federal Stewardship

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

Term 6. Substantial Involvement

EERE has substantial involvement in work performed under this Award. EERE does not limit its involvement to the administrative requirements of this Award. Instead, EERE has substantial involvement in the direction and redirection of the technical aspects of the project as a whole.

Substantial involvement includes the following:

- EERE shares responsibility with the Recipient for the management, control, direction, and performance of the Project.
- EERE may intervene in the conduct or performance of work under this Award for programmatic reasons. Intervention includes the interruption or modification of the conduct or performance of project activities.
- EERE may redirect or discontinue funding the Project based on the outcome of EERE's evaluation of the Project at the Go/No Go decision point.
- EERE participates in major project decision-making processes.

Term 7. Federal Involvement

A. Review Meetings

The Recipient, including but not limited to, the principal investigator (or, if applicable, co-principal investigators), is required to participate in periodic review meetings with EERE. Review meetings enable EERE to assess the work performed under this Award and determine whether the Recipient has timely achieved the technical milestones and deliverables stated in Attachment 1 to this Award.

EERE shall determine the frequency of review meetings and select the day, time, and location of each review meeting and shall do so in a reasonable and good faith manner. EERE will provide the Recipient with reasonable notice of the review meetings.

For each review meeting, the Recipient is required to provide a comprehensive overview of the project, including:

- The Recipient's technical progress compared to the Milestone Summary Table stated in Attachment 1 to this Award;
- The Recipient's actual expenditures compared to the approved budget in Attachment 3 to this Award; and
- Other subject matter specified by the DOE Technology Manager/Project Officer.

B. Project Meetings

The Recipient is required to notify EERE in advance of scheduled tests and internal project meetings that would entail discussion of topics that could result in major changes to the baseline project technical scope/approach, cost, or schedule. Upon request by EERE, the Recipient is required to provide EERE with reasonable access (by telephone, webinar, or otherwise) to the tests and project meetings. The Recipient is not expected to delay any work under this Award for the purpose of government insight.

C. Site Visits

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

D. Go/No Go Decisions

Attachment 1 to this Award establishes Go/No Go decision points. For each Go/No Go decision point, EERE must determine whether the Recipient has fully and satisfactorily completed the work described in Attachment 1 to this Award. As a result of a Go/No Go review, in its discretion, EERE may take one of the following actions:

- Authorize Federal funding for the next budget period for the Project;
- Recommend redirection of work under the Project;
- Place a hold on the Federal funding for the Project, pending further supporting data; or
- Discontinue providing Federal funding for the Project beyond the current budget period as the result of insufficient progress, change in strategic direction, or lack of available funding.

E. Technical Milestones and Deliverables

Attachment 1 to this Award establishes technical milestones and deliverables. If the Recipient fails to achieve two or more technical milestones and deliverables, EERE may renegotiate the Statement of Project Objectives and/or Milestone Summary Table in Attachment 1 to this Award. In the alternative, EERE may deem the Recipient's failure to achieve these technical milestones and deliverables to be material noncompliance with the terms and conditions of this Award and take action to suspend or terminate the Award.

F. EERE Access

The Recipient must provide any information, documents, site access, or other assistance requested by EERE for the purpose of its Federal stewardship or substantial involvement.

Term 8. NEPA Requirements

DOE must comply with the National Environmental Policy Act (NEPA) prior to authorizing the use of Federal funds.

DOE has made a conditional NEPA determination for this Award, and Federal funding for certain tasks under this Award is contingent upon the final NEPA determination.

The Recipient is authorized to proceed with the following phases and/or tasks as referenced in the SOPO approved by the Contracting Officer, except where such activity is subject to a restriction set forth elsewhere in this Award:

- Budget Period 1

This authorization is specific to the project activities and locations as described in the SOPO approved by the Contracting Officer and the DOE NEPA Determination.

DOE has not authorized the following phases and/or tasks as referenced in the SOPO:

- Budget Period 2
- Budget Period 3

Should the Recipient elect to undertake activities or change locations prior to written authorization from the Contracting Officer, the Recipient does so at risk of not receiving Federal funding and such costs may not be recognized as allowable cost share.

Questions about the permissibility of Federal cost sharing on activities prior to DOE's issuance of a final NEPA determination shall be directed to the Contracting Officer. The Recipient must receive written approval from the Contracting Officer before incurring costs for Federal cost sharing. After receiving approval from the Contracting Officer, if the Recipient chooses to incur costs eligible for Federal cost sharing for the approved activities, the Recipient agrees to abide by the conditions, limitations, mitigation measures, monitoring requirements, and reporting responsibilities specified in writing from the Contracting Officer and to undertake these activities in accordance with necessary landowner approvals, required permits, and any additional approvals and mitigation requirements of other Federal, state and local governmental agencies with jurisdiction by law.

If the Recipient later intends to add to or modify the activities or locations as described in the approved SOPO and the DOE NEPA Determination, those new activities/locations or modified activities/locations are subject to additional NEPA review and are not authorized for Federal funding until the Contracting Officer provides written authorization on those additions or modifications. Should the Recipient elect to undertake activities or change locations prior to authorization from the Contracting Officer, the Recipient does so at risk of not receiving Federal funding for those activities, and such costs may not be recognized as allowable cost share.

Term 9. Performance of Work in United States**A. Requirement**

All work performed under this Award must be performed in the United States unless the Contracting Officer provides a waiver. This requirement does not apply to the purchase of supplies and equipment; however, the Recipient should make every effort to purchase supplies and equipment within the United States. The Recipient must flow down this requirement to its subrecipients.

B. Failure to Comply

If the Recipient fails to comply with the Performance of Work in the United States requirement, the Contracting Officer may deny reimbursement for the work conducted outside the United States and such costs may not be recognized as allowable Recipient cost share regardless if the work is performed by the Recipient, subrecipients, vendors or other project partners.

C. Waiver for Work Outside the U.S.

All work performed under this Award must be performed in the United States. However, the Contracting Officer may approve the Recipient to perform a portion of the work outside the United States under limited circumstances. Recipient must obtain a waiver from the Contracting Officer prior to conducting any work outside the U.S. To request a waiver, the Recipient must submit a written waiver request to the Contracting Officer, which includes the information as required in the FOA that the Award was selected under.

For the rationale, the Recipient must demonstrate to the satisfaction of the Contracting Officer that the performance of work outside the United States would further the purposes of the FOA that the Award was selected under and is in the economic interests of the United States. The Contracting Officer may require additional information before considering such request.

Term 10. Foreign National Access Under DOE Order 142.3A, “Unclassified Foreign Visits and Assignments Program”

The Recipient may be required to provide information to DOE in order to satisfy requirements for foreign nationals’ access to DOE sites, information, technologies, equipment, programs or personnel. A foreign national is defined as any person who is not a U.S. citizen by birth or naturalization. If the Recipient (including any of its subrecipients, contractors or vendors) anticipates involving foreign nationals in the performance of its award, the Recipient may be required to provide DOE with specific information about each foreign national to ensure compliance with the requirements for access approval. National laboratory personnel already cleared for site access may be excluded. Access approval for foreign nationals from countries identified on the U.S. Department of State’s list of State Sponsors of Terrorism must receive final approval authority from the Secretary of Energy or the Secretary’s assignee before they commence any work under the award.

Term 11. Notice Regarding the Purchase of American-Made Equipment and Products – Sense of Congress

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

Term 12. Domestic Preference – Infrastructure Projects

As appropriate and to the extent consistent with law, the Recipients must ensure and document that, to the greatest extent practicable, iron and aluminum as well as steel, cement, and other manufactured products (items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber) used in the project under this Award must be produced in the United States. This Recipient must flow this requirement to all sub-awards, contracts, subcontracts and purchase orders for work performed under the Award.

Term 13. Reporting Requirements**A. Requirements**

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

B. Dissemination of Scientific and Technical Information

Scientific and Technical Information (STI) generated under this Award will be submitted to DOE via the Office of Scientific and Technical Information's Energy Link ([E-Link](#)) system. STI submitted under this Award will be disseminated via DOE's [OSTI.gov](#) website subject to approved access limitations. Citations for journal articles produced under the Award will appear on the [DOE PAGES](#) website.

C. Restrictions

Scientific and Technical Information submitted to E-Link must not contain any Protected Personal Identifiable Information (PII), limited rights data (proprietary data), classified information, information subject to export control classification, or other information not subject to release.

Term 14. Lobbying

By accepting funds under this Award, the Recipient agrees that none of the funds obligated on the Award shall be expended, directly or indirectly, to influence congressional action on any

legislation or appropriation matters pending before Congress, other than to communicate to Members of Congress as described in 18 U.S.C. § 1913. This restriction is in addition to those prescribed elsewhere in statute and regulation.

Term 15. Publications

The Recipient is required to include the following acknowledgement in publications arising out of, or relating to, work performed under this Award, whether copyrighted or not:

- *Acknowledgment*: “This material is based upon work supported by the U.S. Department of Energy’s Office of Energy Efficiency and Renewable Energy (EERE) under the Buildings Technology Office Award Number DE _____.”
- *Full Legal Disclaimer*: “This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.”
- *Abridged Legal Disclaimer*: “The views expressed herein do not necessarily represent the views of the U.S. Department of Energy or the United States Government”

Recipients should make every effort to include the full Legal Disclaimer. However, in the event that recipients are constrained by formatting and/or page limitations set by the publisher, the abridged Legal Disclaimer is an acceptable alternative.

The Award may include a Data Management Plan, Attachment 5, submitted by the Recipient that explains how data generated in the course of the work performed under this Award will be shared or preserved or, when justified, explains why data sharing or preservation is not possible or scientifically appropriate. In the event of a conflict between the Data Rights outlined in the Intellectual Property Provisions, Attachment 4, and the Data Management Plan, the Data Rights outlined in the Intellectual Property Provisions take precedence.

Term 16. No-Cost Extension

As provided in 2 CFR 200.308, the Recipient must provide the Contracting Officer with notice in advance if it intends to utilize a one-time, no-cost extension of this Award. The notification must include the supporting reasons and the revised period of performance. The Recipient must submit this notification in writing to the Contracting Officer and DOE Technology

Manager/ Project Officer at least 30 days before the end of the current budget period.

Any no-cost extension will not alter the project scope, milestones, deliverables, or budget of this Award.

Term 17. Property Standards

The complete text of the Property Standards can be found at 2 CFR 200.310 through 200.316. Also see 2 CFR 910.360 for additional requirements for real property and equipment for For-Profit recipients.

Term 18. Insurance Coverage

See 2 CFR 200.310 for insurance requirements for real property and equipment acquired or improved with Federal funds. Also see 2 CFR 910.360(d) for additional requirements for real property and equipment for For-Profit recipients.

Term 19. Real Property

Subject to the conditions set forth in 2 CFR 200.311, title to real property acquired or improved under a Federal award will conditionally vest upon acquisition in the non-Federal entity. The non-Federal entity cannot encumber this property and must follow the requirements of 2 CFR 200.311 before disposing of the property.

Except as otherwise provided by Federal statutes or by the Federal awarding agency, real property will be used for the originally authorized purpose as long as needed for that purpose. When real property is no longer needed for the originally authorized purpose, the non-Federal entity must obtain disposition instructions from DOE or pass-through entity. The instructions must provide for one of the following alternatives: (1) retain title after compensating DOE as described in 2 CFR 200.311(c)(1); (2) Sell the property and compensate DOE as specified in 2 CFR 200.311(c)(2); or (3) transfer title to DOE or to a third party designated/approved by DOE as specified in 2 CFR 200.311(c)(3).

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

Term 20. Equipment

Subject to the conditions provided in 2 CFR 200.313, title to equipment (property) acquired under a Federal award will conditionally vest upon acquisition with the non-Federal entity. The non-Federal entity cannot encumber this property and must follow the requirements of 2 CFR 200.313 before disposing of the property.

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

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

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

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

Disposition will be made as follows: (1) items of equipment with a current fair market value of \$5,000 or less may be retained, sold, or otherwise disposed of with no further obligation to DOE; (2) Non-Federal entity may retain title or sell the equipment after compensating DOE as described in 2 CFR 200.313(e)(2); or (3) transfer title to DOE or to an eligible third party as specified in 2 CFR 200.313(e)(3).

See 2 CFR 200.313 for additional requirements pertaining to equipment acquired under a Federal award. Also see 2 CFR 910.360 for additional requirements for equipment for For-Profit recipients. See also 2 CFR 200.439 Equipment and other capital expenditures.

Term 21. Supplies

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

Term 22. Property Trust Relationship

Real property, equipment, and intangible property, that are acquired or improved with a Federal award must be held in trust by the non-Federal entity as trustee for the beneficiaries of the project or program under which the property was acquired or improved. See 2 CFR 200.316 for additional requirements pertaining to real property, equipment, and intangible property acquired or improved under a Federal award.

Term 23. Record Retention

Consistent with 2 CFR 200.333 through 200.337, the Recipient is required to retain records relating to this Award.

Term 24. Audits

A. Government-Initiated Audits

The Recipient must provide any information, documents, site access, or other assistance requested by EERE, DOE or Federal auditing agencies (e.g., DOE Inspector General, Government Accountability Office) for the purpose of audits and

investigations. Such assistance may include, but is not limited to, reasonable access to the Recipient's records relating to this Award.

Consistent with 2 CFR part 200 as amended by 2 CFR part 910, DOE may audit the Recipient's financial records or administrative records relating to this Award at any time. Government-initiated audits are generally paid for by DOE.

DOE may conduct a final audit at the end of the project period (or the termination of the Award, if applicable). Upon completion of the audit, the Recipient is required to refund to DOE any payments for costs that were determined to be unallowable. If the audit has not been performed or completed prior to the closeout of the award, DOE retains the right to recover an appropriate amount after fully considering the recommendations on disallowed costs resulting from the final audit.

DOE will provide reasonable advance notice of audits and will minimize interference with ongoing work, to the maximum extent practicable.

B. Annual Independent Audits (Single Audit or Compliance Audit)

The Recipient must to comply with the annual independent audit requirements in 2 CFR 200.500 through .521 for institutions of higher education, nonprofit organizations, and state and local governments (Single audit), and 2 CFR 910.500 through .521 for for-profit entities (Compliance audit).

The annual independent audits are separate from Government-initiated audits discussed in part A. of this Term, and must be paid for by the Recipient. To minimize expense, the Recipient may have a compliance audit in conjunction with its annual audit of financial statements. The financial statement audit is **not** a substitute for the compliance audit. If the audit (Single audit or Compliance audit, depending on Recipient entity type) has not been performed or completed prior to the closeout of the award, DOE may impose one or more of the actions outlined in 2 CFR 200.338, Remedies for Noncompliance.

Subpart B. Financial Provisions

Term 25. Maximum Obligation

The maximum obligation of DOE for this Award is the total "Funds Obligated" as stated in Block 13 of the Assistance Agreement to this Award. Additional Federal funding is contingent upon (1) Recipient's demonstrated substantial progress towards meeting the objectives of the Award;

(2) availability of Federal funds appropriated by Congress for the purpose of this program; and
(3) the availability of future-year budget authority.

Term 26. Funding of Budget Periods

EERE has obligated funding as shown in Block 13 of the Assistance Agreement for completion of the Project. However, only the Federal share of costs associated with the current Period of Performance is available for work performed by the Recipient. The Federal share of costs is shown on Attachment 3. The current Period of Performance is shown in Block 7 of the Assistance Agreement.

The remainder of funding is contingent upon: (1) availability of Federal funds appropriated by Congress for the purpose of this program; (2) the availability of future-year budget authority; (3) Recipient's technical progress compared to the Milestone Summary Table stated in Attachment 1 to this Award; (4) Recipient's submittal of required reports; (5) Recipient's compliance with the terms and conditions of the Award; (6) EERE's Go/No-Go decision; (7) the Recipient's submission of a continuation application; and (8) written approval of the continuation application by the Contracting Officer.

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

Term 27. Continuation Application and Funding**A. Continuation Application**

A continuation application is a non-competitive application for an additional budget period within a previously approved project period. At least ninety days before the end of each budget period, the Recipient must submit to the DOE Technology Manager/Project Officer and the DOE Award Administrator its continuation application, which includes the following information:

- i. A report on the Recipient's progress towards meeting the objectives of the project, including any significant findings, conclusions, or developments, and an estimate of any unobligated balances remaining at the end of the budget period. If the remaining unobligated balance is estimated to exceed 20 percent of the funds available for the budget period, explain why the excess funds have not been obligated and how they will be used in the next budget period.
- ii. A detailed budget and supporting justification if there are changes to the negotiated budget, or a budget for the upcoming budget period was not approved at the time of award.
- iii. A description of any planned changes from the negotiated Statement of Project Objectives and/or Milestone Summary Table.

B. Continuation Funding

Continuation funding is contingent on (1) the availability of funds appropriated by Congress for the purpose of this program; (2) the availability of future-year budget authority; (3) Recipient’s technical progress compared to the Milestone Summary Table stated in Attachment 1 to this Award; (4) Recipient’s submittal of required reports; (5) Recipient’s compliance with the terms and conditions of the Award; (6) EERE’s Go/No-Go decision; (7) the Recipient’s submission of a continuation application; and (8) written approval of the continuation application by the Contracting Officer.

C. EERE waives prior written approval requirements to carry forward unobligated balances to subsequent periods of performance.

Term 28. Cost Sharing

A. Cost Sharing Obligations

The Recipient must provide the “Cost Share” amount stated in Block 12 of the Assistance Agreement to this Award. EERE and the Recipient’s cost share for the total estimated project costs are listed below.

Table 1

EERE Cost Share \$ / %	Recipient Cost Share \$ / %	Total Estimated Project Costs
\$981,998 / 63.89%	\$555,006 / 36.11%	\$1,537,004

The Recipient must provide its required “Cost Share” amount as a percentage of the total project costs. EERE authorized the Recipient to provide cost share on a budget period basis for the duration of the project period.

Budget Period	EERE Cost Share \$ / %	Recipient Cost Share \$ / %	Total Estimated Project Costs
1	\$73,335 / 69.74%	\$31,818 / 30.26%	\$105,153
2	\$868,271 / 63.33%	\$502,789 / 36.67%	\$1,371,060
3	\$40,392 / 66.44%	\$20,399 / 33.56%	\$60,791
Total	\$981,998 / 63.89%	\$555,006 / 36.11%	\$1,537,004

B. Cost Share Obligation If Award Terminated or Discontinued

If the Award is terminated or is otherwise not funded to completion, the Recipient is not required to provide the entire “Cost Share” amount stated in Block 12 of the Assistance Agreement to this Award; however, the Recipient must provide the greater of: its overall share (i.e., cumulative percentage as shown on the cost share schedule above as of the date of the termination or discontinuation) of the total project cost reimbursed as of the date of the termination or discontinuation, or the minimum cost share percentage required in the Funding Opportunity

Announcement applied to the total project cost reimbursed as of the date of the termination or discontinuation.

C. Source of Cost Share

The Recipient may not use Federal funds to meet its cost sharing obligations, unless otherwise allowed by Federal law.

D. Inability to Comply with Cost Sharing Obligations

If the Recipient determines that it is unable to meet its cost sharing obligations, the Recipient must notify the DOE Award Administrator in writing immediately. The notification must include the following information: (1) whether the Recipient intends to continue or phase out the project, and (2) if the Recipient intends to continue the project, how the Recipient will pay (or secure replacement funding for) the Recipient's share of the total project cost.

If the Recipient fails to meet its cost sharing obligations, EERE may recover some or all of the financial assistance provided under this Award. The amount EERE would seek to recover under this Term would be predicated on EERE's analysis of the Recipient's compliance with their cost sharing obligation under the Award.

Term 29. Refund Obligation

The Recipient must refund any excess payments received from EERE, including any costs determined unallowable by the Contracting Officer. Upon the end of the project period (or the termination of the Award, if applicable), the Recipient must refund to EERE the difference between (1) the total payments received from EERE, and (2) the Federal share of the costs incurred.

Term 30. Allowable Costs

EERE determines the allowability of costs through reference to 2 CFR part 200 as amended by 2 CFR part 910. All project costs must be allowable, allocable, and reasonable. The Recipient must document and maintain records of all project costs, including, but not limited to, the costs paid by Federal funds, costs claimed by its subrecipients and project costs that the Recipient claims as cost sharing, including in-kind contributions. The Recipient is responsible for maintaining records adequate to demonstrate that costs claimed have been incurred, are reasonable, allowable and allocable, and comply with the cost principles. Upon request, the Recipient is required to provide such records to EERE. Such records are subject to audit. Failure to provide EERE adequate supporting documentation may result in a determination by the Contracting Officer that those costs are unallowable.

The Recipient is required to obtain the prior written approval of the Contracting Officer for any foreign travel costs.

Term 31. Indirect Costs**A. Fringe Benefit Costs**

The budget for this Award includes fringe benefits, but does not include indirect charges. Therefore, indirect charges shall not be charged to nor shall reimbursement be requested for this project nor shall any indirect charges for this project be allocated to any other Federally sponsored project. In addition, indirect charges shall not be counted as cost share unless approved by the Contracting Officer. This restriction does not apply to subrecipients' indirect costs.

B. Subrecipient Indirect Costs

Recipient must ensure its subrecipient's indirect costs are appropriately managed, allowable and otherwise comply with the requirements of this Award and 2 CFR part 200 as amended by 2 CFR part 910.

Term 32. Decontamination and/or Decommissioning (D&D) Costs

Notwithstanding any other provisions of this Award, the Government shall not be responsible for or have any obligation to the Recipient for (1) Decontamination and/or Decommissioning (D&D) of any of the Recipient's facilities, or (2) any costs which may be incurred by the Recipient in connection with the D&D of any of its facilities due to the performance of the work under this Award, whether said work was performed prior to or subsequent to the effective date of the Award.

Term 33. Use of Program Income

If the Recipient earns program income during the project period as a result of this Award, the Recipient must use the program income to meet its cost sharing requirement.

Term 34. Payment Procedures**A. Method of Payment**

Payment will be made by reimbursement through ACH.

B. Requesting Reimbursement

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

C. Timing of Submittals

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

- D. Adjusting Payment Requests for Available Cash**
The Recipient must disburse any funds that are available from repayments to and interest earned on a revolving fund, program income, rebates, refunds, contract settlements, audit recoveries, credits, discounts, and interest earned on any of those funds before requesting additional cash payments from EERE.
- E. Payments**
The EERE approving official will approve the invoice as soon as practical, but not later than 30 days after the Recipient's request is received, unless the billing is improper. Upon receipt of an invoice payment authorization from the EERE approving official, the ORFSC will disburse payment to the Recipient. The Recipient may check the status of payments at the VIPERS web site. All payments are made by electronic funds transfer to the bank account specified on the Bank Information Form that the Recipient filed with the U.S. Department of Treasury.
- F. Supporting Documents for Agency Approval of Payments**
For non-construction awards, the Recipient must submit a Standard Form SF-270, "Request for Advance or Reimbursement," at <https://vipers.doe.gov> and attach a file containing appropriate supporting documentation.

The following additional items are required:

- Summary cost data, for the billing period and cumulative cost data, showing all categories listed in the SF-424A and identifying Federal, non-Federal, and total amounts;
- *Applicable to for-profit recipients and subrecipients* UCC filing proof for all equipment acquired with project funds (i.e., Federal share or Recipient share) and equipment offered as cost share;
- Invoices or summary cost data showing all categories listed in the SF-424A for Subrecipients with over \$250,000 total project costs or >25% of total project costs;
- Invoices for Vendors with over \$250,000 total project costs;
- Invoices/receipts for Equipment over \$50,000;
- Explanation of cost share for invoicing period, including cost category and rationale if cost share exceeds or is below award requirements; and
- If there are unauthorized phases and/or tasks for the current budget period in the NEPA Requirements term in these Special Terms and Conditions, a statement affirming that no invoiced costs are related to tasks or activities prohibited by the NEPA Requirements term.
- Timesheets or personnel hours report.

The EERE payment authorizing official may request additional information from the Recipient to support the payment requests prior to release of funds, as deemed necessary. Recipient is required to comply with these requests. Supporting

documents include invoices, copies of contracts, vendor quotes, and other expenditure explanations that justify the reimbursement requests.

G. Unauthorized Drawdown of Federal Funds

For each budget period, the Recipient may not spend more than the Federal share authorized to that particular budget period, without specific written approval from the Contracting Officer. The Recipient must immediately refund EERE any amounts spent or drawn down in excess of the authorized amount for a budget period. The Recipient and subrecipients shall promptly, but at least quarterly, remit to DOE interest earned on advances drawn in excess of disbursement needs, and shall comply with the procedure for remitting interest earned to the Federal government per 2 CFR 200.305, as applicable.

Term 35. Budget Changes

A. Budget Changes Generally

The Contracting Officer has reviewed and approved the SF-424A in Attachment 3 to this Award.

Any increase in the total project cost, whether DOE share or Cost Share, which is stated as “Total” in Block 12 to the Assistance Agreement of this Award, must be approved in advance and in writing by the Contracting Officer.

Any budget change that alters the project scope, milestones or deliverables requires prior written approval of the Contracting Officer. EERE may deny reimbursement for any failure to comply with the requirements in this term.

B. Transfers of Funds Among Direct Cost Categories

The Recipient is required to obtain the prior written approval of the Contracting Officer for any transfer of funds among direct cost categories where the cumulative amount of such transfers exceeds or is expected to exceed 10 percent of the total project cost, which is stated as “Total” in Block 12 to the Assistance Agreement of this Award.

The Recipient is required to notify the DOE Technology Manager/Project Officer of any transfer of funds among direct cost categories where the cumulative amount of such transfers is equal to or below 10 percent of the total project cost, which is stated as “Total” in Block 12 to the Assistance Agreement of this Award.

C. Transfer of Funds Between Direct and Indirect Cost Categories

The Recipient is required to obtain the prior written approval of the Contracting Officer for any transfer of funds between direct and indirect cost categories. If the Recipient’s actual allowable indirect costs are less than those budgeted in

Attachment 3 to this Award, the Recipient may use the difference to pay additional allowable direct costs during the project period so long as the total difference is less than 10% of total project costs and the difference is reflected in actual requests for reimbursement to DOE.

Subpart C. Miscellaneous Provisions

Term 36. Insolvency, Bankruptcy or Receivership

- A. The Recipient shall immediately, but no later than five days, notify EERE of the occurrence of any of the following events: (1) the Recipient or the Recipient's parent's filing of a voluntary case seeking liquidation or reorganization under the Bankruptcy Act; (2) the Recipient's consent to the institution of an involuntary case under the Bankruptcy Act against the Recipient or the Recipient's parent; (3) the filing of any similar proceeding for or against the Recipient or the Recipient's parent, or the Recipient's consent to the dissolution, winding-up or readjustment of its debts, appointment of a receiver, conservator, trustee, or other officer with similar powers over the Recipient, under any other applicable state or Federal law; or (4) the Recipient's insolvency due to its inability to pay debts generally as they become due.
- B. Such notification shall be in writing and shall: (1) specifically set out the details of the occurrence of an event referenced in paragraph A; (2) provide the facts surrounding that event; and (3) provide the impact such event will have on the project being funded by this Award.
- C. Upon the occurrence of any of the four events described in paragraph A. of this term, EERE reserves the right to conduct a review of the Recipient's Award to determine the Recipient's compliance with the required elements of the Award (including such items as cost share, progress towards technical project objectives, and submission of required reports). If the EERE review determines that there are significant deficiencies or concerns with the Recipient's performance under the Award, EERE reserves the right to impose additional requirements, as needed, including (1) change of payment method; or (2) institute payment controls.
- D. Failure of the Recipient to comply with this term may be considered a material noncompliance of this Award by the Contracting Officer.

Term 37. Reporting Subawards and Executive Compensation

- A. Reporting of first-tier subawards
 - i. *Applicability.* Unless the Recipient is exempt as provided in paragraph D. of this award term, the Recipient must report each action that obligates \$25,000 or more in Federal funds that does not include Recovery funds (as

defined in section 1512(a)(2) of the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5) for a subaward to an entity (see definitions in paragraph E. of this award term).

ii. *Where and when to report.*

1. The Recipient must report each obligating action described in paragraph A.i. of this award term to <https://www.fsrs.gov>.
2. For subaward information, report no later than the end of the month following the month in which the obligation was made. (For example, if the obligation was made on November 7, 2010, the obligation must be reported by no later than December 31, 2010.)

iii. *What to report.* The Recipient must report the information about each obligating action that the submission instructions posted at <https://www.fsrs.gov> specify.

B. Reporting Total Compensation of Recipient Executives

i. *Applicability and what to report.* The Recipient must report total compensation for each of its five most highly compensated executives for the preceding completed fiscal year, if

1. The total Federal funding authorized to date under this Award is \$25,000 or more;
2. In the preceding fiscal year, the Recipient received;
 - a. 80 percent or more of the Recipient's annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and
 - b. \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and
3. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total

compensation filings at <http://www.sec.gov/answers/execomp.htm>).

- ii. *Where and when to report.* The Recipient must report executive total compensation described in paragraph B.i. of this award term:
 1. As part of the Recipient's registration profile at <https://www.sam.gov>.
 2. By the end of the month following the month in which this award is made, and annually thereafter.

C. Reporting of Total Compensation of Subrecipient Executives

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

(i.e., between October 1 and 31), the Recipient must report any required compensation information of the subrecipient by November 30 of that year.

D. Exemptions

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

- i. Subawards and;
- ii. The total compensation of the five most highly compensated executives of any subrecipient.

E. Definitions

For purposes of this Award term:

- i. Entity means all of the following, as defined in 2 CFR Part 25:
 1. A Governmental organization, which is a State, local government, or Indian tribe;
 2. A foreign public entity;
 3. A domestic or foreign nonprofit organization;
 4. A domestic or foreign for-profit organization;
 5. A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.
- ii. Executive means officers, managing partners, or any other employees in management positions.
- iii. Subaward:
 1. This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which the Recipient received this award and that the recipient awards to an eligible subrecipient.
 2. The term does not include the Recipient's procurement of property and services needed to carry out the project or program (for further explanation, see 2 CFR 200.501 Audit requirements, (f) *Subrecipients and Contractors* and/or 2 CFR 910.501 Audit requirements, (f) *Subrecipients and Contractors*).
 3. A subaward may be provided through any legal agreement, including an agreement that the Recipient or a subrecipient considers a contract.

- iv. Subrecipient means an entity that:
 - 1. Receives a subaward from the Recipient under this award; and
 - 2. Is accountable to the Recipient for the use of the Federal funds provided by the subaward.

- v. Total compensation means the cash and noncash dollar value earned by the executive during the recipient's or subrecipient's preceding fiscal year and includes the following (for more information see 17 CFR 229.402(c)(2)):
 - 1. Salary and bonus.
 - 2. Awards of stock, stock options, and stock appreciation rights. Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments.
 - 3. Earnings for services under non-equity incentive plans. This does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.
 - 4. Change in pension value. This is the change in present value of defined benefit and actuarial pension plans.
 - 5. Above-market earnings on deferred compensation which is not tax-qualified.
 - 6. Other compensation, if the aggregate value of all such other compensation (*e.g.* severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the executive exceeds \$10,000.

Term 38. System for Award Management and Universal Identifier Requirements

- A. Requirement for Registration in the System for Award Management (SAM)**
Unless the Recipient is exempted from this requirement under 2 CFR 25.110, the Recipient must maintain the currency of its information in SAM until the Recipient submits the final financial report required under this Award or receive the final payment, whichever is later. This requires that the Recipient reviews and updates the information at least annually after the initial registration, and more frequently if required by changes in its information or another award term.

If the Recipient had an active registration in the CCR, it has an active registration in SAM.

B. Requirement for Data Universal Numbering System (DUNS) Numbers

If the Recipient is authorized to make subawards under this Award, the Recipient:

- i. Must notify potential subrecipients that no entity (see definition in paragraph C of this award term) may receive a subaward from the Recipient unless the entity has provided its DUNS number to the Recipient.
- ii. May not make a subaward to an entity unless the entity has provided its DUNS number to the Recipient.

C. Definitions

For purposes of this award term:

- i. System for Award Management (SAM) means the Federal repository into which an entity must provide information required for the conduct of business as a recipient. Additional information about registration procedures may be found at the SAM Internet site (currently at <https://www.sam.gov>).
- ii. Data Universal Numbering System (DUNS) number means the nine-digit number established and assigned by Dun and Bradstreet, Inc. (D&B) to uniquely identify business entities. A DUNS number may be obtained from D&B by telephone (currently 866-705-5711) or the Internet (currently at <http://fedgov.dnb.com/webform>).
- iii. Entity, as it is used in this award term, means all of the following, as defined at 2 CFR Part 25, subpart C:
 1. A Governmental organization, which is a State, local government, or Indian Tribe;
 2. A foreign public entity;
 3. A domestic or foreign nonprofit organization;
 4. A domestic or foreign for-profit organization; and
 5. A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.
- iv. Subaward:
 1. This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which the Recipient received this Award and that the Recipient awards to an eligible subrecipient.
 2. The term does not include the Recipient's procurement of property and services needed to carry out the project or program (for further

- explanation, see 2 CFR 200.501 Audit requirements, (f) *Subrecipients and Contractors* and/or 2 CFR 910.501 Audit requirements, (f) *Subrecipients and Contractors*).
3. A subaward may be provided through any legal agreement, including an agreement that the Recipient considers a contract.
- v. Subrecipient means an entity that:
1. Receives a subaward from the Recipient under this Award; and
 2. Is accountable to the Recipient for the use of the Federal funds provided by the subaward.

Term 39. Nondisclosure and Confidentiality Agreements Assurances

- A. By entering into this agreement, the Recipient attests that it **does not and will not** require its employees or contractors to sign internal nondisclosure or confidentiality agreements or statements prohibiting or otherwise restricting its employees or contractors from lawfully reporting waste, fraud, or abuse to a designated investigative or law enforcement representative of a Federal department or agency authorized to receive such information.
- B. The Recipient further attests that it **does not and will not** use any Federal funds to implement or enforce any nondisclosure and/or confidentiality policy, form, or agreement it uses unless it contains the following provisions:
 - i. *“These provisions are consistent with and do not supersede, conflict with, or otherwise alter the employee obligations, rights, or liabilities created by existing statute or Executive order relating to (1) classified information, (2) communications to Congress, (3) the reporting to an Inspector General of a violation of any law, rule, or regulation, or mismanagement, a gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety, or (4) any other whistleblower protection. The definitions, requirements, obligations, rights, sanctions, and liabilities created by controlling Executive orders and statutory provisions are incorporated into this agreement and are controlling.”*
 - ii. The limitation above shall not contravene requirements applicable to Standard Form 312, Form 4414, or any other form issued by a Federal department or agency governing the nondisclosure of classified information.
 - iii. Notwithstanding provision listed in paragraph (a), a nondisclosure or confidentiality policy form or agreement that is to be executed by a person connected with the conduct of an intelligence or intelligence-related activity,

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

Term 40. Subrecipient Change Notification

Except for subrecipients specifically proposed as part of the Recipient's Application for award, the Recipient must notify the Contracting Officer and Project Manager in writing 30 days prior to the execution of new or modified subrecipient agreements, including naming any To Be Determined subrecipients. This notification does not constitute a waiver of the prior approval requirements outlined in 2 CFR part 200 as amended by 2 CFR part 910, nor does it relieve the Recipient from its obligation to comply with applicable Federal statutes, regulations, and executive orders.

In order to satisfy this notification requirement, the Recipient documentation must, as a minimum, include the following:

- A description of the research to be performed, the service to be provided, or the equipment to be purchased;
- Cost share commitment letter if the subrecipient is providing cost share to the Award;
- An assurance that the process undertaken by the Recipient to solicit the subrecipient complies with their written procurement procedures as outlined in 2 CFR 200.317 through 200.329;
- An assurance that no planned, actual or apparent conflict of interest exists between the Recipient and the selected subrecipient and that the Recipient's written standards of conduct were followed¹;
- A completed Environmental Questionnaire, if applicable;
- An assurance that the subrecipient is not a debarred or suspended entity; and
- An assurance that all required award provisions will be flowed down in the resulting subrecipient agreement.

¹ It is DOE's position that the existence of a "covered relationship" as defined in 5 CFR 2635.502(a)&(b) between a member of the Recipient's owners or senior management and a member of a subrecipient's owners or senior management creates at a minimum an apparent conflict of interest that would require the Recipient to notify the Contracting Officer and provide detailed information and justification (including, for example, mitigation measures) as to why the subrecipient agreement does not create an actual conflict of interest. The Recipient must also notify the Contracting Officer of any new subrecipient agreement with: (1) an entity that is owned or otherwise controlled by the Recipient; or (2) an entity that is owned or otherwise controlled by another entity that also owns or otherwise controls the Recipient, as it is DOE's position that these situations also create at a minimum an apparent conflict of interest.

The Recipient is responsible for making a final determination to award or modify subrecipient agreements under this agreement, but the Recipient may not proceed with the subrecipient agreement until the Contracting Officer determines, and provides the Recipient written notification, that the information provided is adequate.

Should the Recipient not receive a written notification of adequacy from the Contracting Officer within 30 days of the submission of the subrecipient documentation stipulated above, Recipient may proceed to award or modify the proposed subrecipient agreement.

Term 41. Conference Spending

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

Term 42. Recipient Integrity and Performance Matters

A. General Reporting Requirement

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

B. Proceedings About Which You Must Report

Submit the information required about each proceeding that:

- i. Is in connection with the award or performance of a Financial Assistance, cooperative agreement, or procurement contract from the Federal Government;
- ii. Reached its final disposition during the most recent five year period; and
- iii. Is one of the following:

1. A criminal proceeding that resulted in a conviction, as defined in paragraph E of this award term and condition;
2. A civil proceeding that resulted in a finding of fault and liability and payment of a monetary fine, penalty, reimbursement, restitution, or damages of \$5,000 or more;
3. An administrative proceeding, as defined in paragraph E of this term, that resulted in a finding of fault and liability and your payment of either a monetary fine or penalty of \$5,000 or more or reimbursement, restitution, or damages in excess of \$100,000; or
4. Any other criminal, civil, or administrative proceeding if:
 - a. It could have led to an outcome described in paragraph B.iii.1, 2, or 3 of this term;
 - b. It had a different disposition arrived at by consent or compromise with an acknowledgment of fault on your part; and
 - c. The requirement in this term to disclose information about the proceeding does not conflict with applicable laws and regulations.

C. Reporting Procedures

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

D. Reporting Frequency

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

E. Definitions

For purposes of this term:

- i. Administrative proceeding means a non-judicial process that is adjudicatory in nature in order to make a determination of fault or liability (e.g., Securities and Exchange Commission Administrative proceedings, Civilian Board of Contract Appeals proceedings, and Armed Services Board of Contract Appeals proceedings). This includes proceedings at the Federal and State

- level but only in connection with performance of a Federal contract or Financial Assistance awards. It does not include audits, site visits, corrective plans, or inspection of deliverables.
- ii. Conviction means a judgment or conviction of a criminal offense by any court of competent jurisdiction, whether entered upon a verdict or a plea, and includes a conviction entered upon a plea of *nolo contendere*.
 - iii. Total value of currently active Financial Assistance awards, cooperative agreements and procurement contracts includes—
 1. Only the Federal share of the funding under any Federal award with a recipient cost share or match; and
 2. The value of all expected funding increments under a Federal award and options, even if not yet exercised.

Term 43. Export Control

The U.S. government regulates the transfer of information, commodities, technology, and software considered to be strategically important to the U.S. to protect national security, foreign policy, and economic interests without imposing undue regulatory burdens on legitimate international trade. There is a network of federal agencies and regulations that govern exports that are collectively referred to as “Export Controls”. To ensure compliance with Export Controls, it is the Recipient’s responsibility to determine when its project activities trigger Export Controls and to ensure compliance.

Export Controls may apply to individual projects, depending on the nature of the tasks. When Export Controls apply, the Recipient must take the appropriate steps to obtain any required governmental licenses, monitor and control access to restricted information, and safeguard all controlled materials. Under no circumstances may foreign entities (organizations, companies or persons) receive access to export controlled information unless proper export procedures have been satisfied and such access is authorized pursuant to law or regulation.

Recipients are advised that some of the results of the research conducted under this award may be expected to be restricted for proprietary reasons and not published or shared broadly within the scientific community.