Instructions and Summary

Award Number: _____ **Date of Submission:** _____

Award Recipient: _____ **Form submitted by:** _____

(May be award recipient or sub-recipient)

Please read the instructions on each worksheet tab before starting. If you have any questions, please ask your DOE contact!

1. If using this form for award application, negotiation, or budget revision, fill out the blank white cells in workbook tabs a. through j. with total project costs. If using this form for invoice submission, fill out tabs a. through j. with total costs for just the proposed invoice and fill out tab k. per the instructions on that tab.
2. Blue colored cells contain instructions, headers, or summary calculations and should not be modified. Only blank white cells should be populated.
3. Enter detailed support for the project costs identified for each Category line item within each worksheet tab to autopopulate the summary tab.
4. The total budget presented on tabs a. through i. must include both Federal (DOE) and Non-Federal (cost share) portions.
5. All costs incurred by the preparer's sub-recipients, vendors, and Federal Research and Development Centers (FFRDCs), should be entered only in section f. Contractual. All other sections are for the costs of the preparer only.
6. Ensure all entered costs are allowable, allocable, and reasonable in accordance with the administrative requirements prescribed in 2 CFR 200, and the applicable cost principles for each entity type: FAR Part 31 for For-Profit entities; and 2 CFR Part 200 Subpart E - Cost Principles for all other non-federal entities.
7. Add rows as needed throughout tabs a. through j. If rows are added, formulas/calculations may need to be adjusted by the preparer. Do not add rows to the Instructions and Summary tab. If your project contains more than five budget periods, consult your DOE contact before adding additional budget period rows or columns.
8. ALL budget period cost categories are rounded to the nearest dollar.

BURDEN DISCLOSURE STATEMENT

Public reporting burden for this collection of information is estimated to average 3 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of Information Resources Management Policy, Plans, and Oversight, AD-241-2 - GTN, Paperwork Reduction Project (1910-5162), U.S. Department of Energy 1000 Independence Avenue, S.W., Washington, DC 20585; and to the Office of Management and Budget, Paperwork Reduction Project (1910-5162), Washington, DC 20503.

SUMMARY OF BUDGET CATEGORY COSTS PROPOSED

The values in this summary table are from entries made in subsequent tabs, only blank white cells require data entry

Section A - Budget Summary

	Federal	Cost Share			Total Costs	Cost Share %	Proposed Budget Period Dates
Budget Period 1	$799,173	$111,565			$910,737	12.25%	**01/01/2024 - 12/31/2024**
Budget Period 2	$381,424	$123,013			$504,437	24.39%	**01/01/2025 - 12/31/2025**
Budget Period 3	$402,036	$128,602			$530,638	24.24%	**01/01/2026 - 12/31/2026**
Budget Period 4	$416,139	$133,030			$549,169	24.22%	**01/01/2027 - 12/31/2027**
Budget Period 5	$0	$0			$0	0.00%	
Total	$1,998,771	$496,210			$2,494,981	19.89%	

Section B - Budget Categories

CATEGORY	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Total Costs	% of Project	Comments (as needed)
a. Personnel	$193,765	$208,263	$213,815	$219,535	$0	$835,378	33.48%	
b. Fringe Benefits	$76,964	$84,379	$87,845	$91,443	$0	$340,631	13.65%	
c. Travel	$11,820	$11,213	$9,015	$8,415	$0	$40,464	1.62%	
d. Equipment	$470,000	$0	$0	$0	$0	$470,000	18.84%	
e. Supplies	$19,325	$41,650	$52,775	$56,750	$0	$170,500	6.83%	
f. Contractual								
Sub-recipient	$0	$0	$0	$0	$0	$0	0.00%	
Vendor	$0	$0	$0	$0	$0	$0	0.00%	
FFRDC	$0	$0	$0	$0	$0	$0	0.00%	
Total Contractual	$0	$0	$0	$0	$0	$0	0.00%	
g. Construction	$0	$0	$0	$0	$0	$0	0.00%	
h. Other Direct Costs	$0	$0	$0	$0	$0	$0	0.00%	
Total Direct Costs	$771,874	$345,505	$363,450	$376,143	$0	$1,856,973	74.43%	
i. Indirect Charges	$138,863	$158,932	$167,187	$173,026	$0	$638,008	25.57%	
Total Costs	$910,737	$504,437	$530,638	$549,169	$0	$2,494,981	100.00%	

Additional Explanation (as needed):

a. Personnel

INSTRUCTIONS - PLEASE READ!!!

1. List project costs solely for employees of the entity completing this form. All personnel costs for subrecipients and vendors must be included under f. Contractual.

2. All personnel should be identified by position title and not employee name. Enter the amount of time (e.g., hours or % of time) and the base pay rate and the total direct personnel compensation will automatically calculate. Rate basis (e.g., actual salary, labor distribution report, state civil service rates, etc.) must also be identified.

3. If loaded labor rates are utilized, a description of the costs the loaded rate is comprised of must be included in the Additional Explanation section below. DOE must review all components of the loaded labor rate for reasonableness and unallowable costs (e.g. fee or profit).

4. If a position and hours are attributed to multiple employees (e.g. Technician working 4000 hours) the number of employees for that position title must be identified.

5. Each budget period is rounded to the nearest dollar.

SOPO Task #	Position Title	Budget Period 1			Budget Period 2			Budget Period 3			Budget Period 4			Budget Period 5			Project Total Hours	Project Total Dollars	Rate Basis
		Time (Hrs)	Pay Rate ($/Hr)	Total Budget Period 1	Time (Hrs)	Pay Rate ($/Hr)	Total Budget Period 2	Time (Hrs)	Pay Rate ($/Hr)	Total Budget Period 3	Time (Hrs)	Pay Rate ($/Hr)	Total Budget Period 4	Time (Hrs)	Pay Rate ($/Hr)	Total Budget Period 5			
1	Sr. Engineer **(EXAMPLE!!!)**	2000	$85.00	$170,000	200	$50.00	$10,000	200	$50.00	$10,000	200	$50.00	$10,000	200	$50.00	$10,000	2400	$190,000	Actual Salary
2	Technicians (2)	4000	$20.00	$80,000	0	$0.00	$0	0	$0.00	$0	0	$0.00	$0	0	$0.00	$0	4000	$80,000	Actual Salary
	Professor (PI)	(b) (4)		$29,178	(b) (4)		$30,053	(b) (4)		$30,955	(b) (4)		$31,883			$0	1026	$122,069	Actual Salary
	Education Specialist			$48,416			$49,868			$51,364			$52,905			$0	4992	$202,552	Actual Salary
	Curriculam Developer			$67,125			$68,325			$70,375			$72,486			$0	7009	$278,310	Actual Salary
	Program Coordinator			$9,379			$9,660			$9,950			$10,248			$0	1248	$39,237	Actual Salary
	Coordinator			$16,494			$27,182			$27,997			$28,837			$0	3016	$100,510	Actual Salary
	Hourly Student Support			$17,381			$17,381			$17,381			$17,381			$0	2781	$69,525	Actual Salary
	Summer Hourly Student Support			$5,794			$5,794			$5,794			$5,794			$0	927	$23,175	Actual Salary
				$0			$0			$0			$0			$0	0	$0	
				$0			$0			$0			$0			$0	0	$0	
				$0			$0			$0			$0			$0	0	$0	
				$0			$0			$0			$0			$0	0	$0	
				$0			$0			$0			$0			$0	0	$0	
				$0			$0			$0			$0			$0	0	$0	
				$0			$0			$0			$0			$0	0	$0	
				$0			$0			$0			$0			$0	0	$0	
				$0			$0			$0			$0			$0	0	$0	
				$0			$0			$0			$0			$0	0	$0	
				$0			$0			$0			$0			$0	0	$0	
				$0			$0			$0			$0			$0	0	$0	
				$0			$0			$0			$0			$0	0	$0	
				$0			$0			$0			$0			$0	0	$0	
				$0			$0			$0			$0			$0	0	$0	
				$0			$0			$0			$0			$0	0	$0	
	Total Personnel Costs	**5031.454**		**$193,765**	**5323**		**$208,263**	**5323**		**$213,815**	**5323**		**$219,535**	**0**		**$0**	**20999**	**$835,378**	

Additional Explanation (as needed):

b. Fringe Benefits

INSTRUCTIONS - PLEASE READ!!!
1. Fill out the table below by position title. If all employees receive the same fringe benefits, you can show "Total Personnel" in the Labor Type column instead of listing out all position titles.
2. The rates and how they are applied should not be averaged to get one fringe cost percentage. Complex calculations should be described/provided in the Additional Explanation section below.
3. The fringe benefit rates should be applied to all positions, regardless of whether those funds will be supported by Federal Share or Recipient Cost Share.
4. Each budget period is rounded to the nearest dollar.

Labor Type	Budget Period 1			Budget Period 2			Budget Period 3			Budget Period 4			Budget Period 5			Total Project
	Personnel Costs	Rate	Total	Personnel Costs	Rate	Total	Personnel Costs	Rate	Total	Personnel Costs	Rate	Total	Personnel Costs	Rate	Total	
EXAMPLE!!! Sr. Engineer	$170,000	20%	$34,000	$10,000	20%	$2,000	$10,000	20%	$2,000	$10,000	20%	$2,000	$10,000	20%	$2,000	$38,000
Professor (PI)	(b) (4)		$13,058	(b) (4)		$13,600	(b) (4)		$14,163	(b) (4)		$14,747			$0	$55,568
Education Specialist			$21,667			$22,567			$23,501			$24,470			$0	$92,206
Curriculam Developer			$30,040			$30,919			$32,199			$33,527			$0	$126,686
Program Coordinator			$4,197			$4,371			$4,552			$4,740			$0	$17,861
Coordinator			$7,381			$12,301			$12,810			$13,338			$0	$45,830
Student hourly			$139			$139			$139			$139			$0	$556
Summer student hourhly			$481			$481			$481			$481			$0	$1,924
Total:	**$193,765**		**$76,964**	**$208,263**		**$84,379**	**$213,815**		**$87,845**	**$219,535**		**$91,443**	**$0**		**$0**	**$340,631**

A federally approved fringe benefit rate agreement, or a proposed rate supported and agreed upon by DOE for estimating purposes is required at the time of award negotiation if reimbursement for fringe benefits is requested. Please check (X) one of the options below and provide the requested information if not previously submitted.

_____ A fringe benefit rate has been negotiated with, or approved by, a federal government agency. A copy of the latest rate agreement is/was included with the project application.*

_____ There is not a current federally approved rate agreement negotiated and available.**

*Unless the organization has submitted an indirect rate proposal which encompasses the fringe pool of costs, please provide the organization's benefit package and/or a list of the components/elements that comprise the fringe pool and the cost or percentage of each component/element allocated to the labor costs identified in the Budget Justification (Form EERE 335.1).

**When this option is checked, the entity preparing this form shall submit an indirect rate proposal in the format provided in the Sample Rate Proposal at http://www1.eere.energy.gov/financing/resources.html, or a format that provides the same level of information and which will support the rates being proposed for use in the performance of the proposed project.

Additional Explanation (as necessary): Please use this box (or an attachment) to list the elements that comprise your fringe benefits and how they are applied to your base (e.g. Personnel) to arrive at your fringe benefit rate.

c. Travel

INSTRUCTIONS - PLEASE READ!!!

1. Identify Foreign and Domestic Travel as separate items. Examples of Purpose of Travel are subrecipient site visits, DOE meetings, project mgmt. meetings, etc. Examples of Basis for Estimating Costs are past trips, travel quotes, GSA rates, etc.

2. All listed travel must be necessary for performance of the Statement of Project Objectives.

3. Federal travel regulations are contained within the applicable cost principles for all entity types. Travel costs should remain consistent with travel costs incurred by an organization during normal business operations as a result of the organizations written travel policy. In absence of a written travel policy, organizations must follow the regulations prescribed by the General Services Administration.

4. Each budget period is rounded to the nearest dollar.

SOPO Task #	Purpose of Travel	Depart From	Destination	No. of Days	No. of Travelers	Lodging per Traveler	Flight per Traveler	Vehicle per Traveler	Per Diem Per Traveler	Cost per Trip	Basis for Estimating Costs
	Domestic Travel	**Budget Period 1**									
1	**EXAMPLE!!!** Visit to PV manufacturer			2	2	$250	$500	$100	$160	$2,020	Current GSA rates
	NTI Training for Instructor	TBD	Ann Arbor, Mi	9	1	$2,340	$650	$600	$530	$4,120	Past Trips
	Project Coordination	Logan, UT	Crater Lakes, Medford, OR	4	2	$1,040	$650	$325	$235	$4,500	Past Trips
	Site Visits	Logan, UT	TBD Counties in Utah	2	4	$460	$0	$280	$60	$3,200	Past Trips
										$0	
	International Travel										
										$0	
	Budget Period 1 Total									**$11,820**	
	Domestic Travel	**Budget Period 2**									
	NTI Training for Instructor	TBD	Ann Arbor, Mi	9	1	$2,385	$700	$600	$528	$4,213	Past Trips
	Project Coordination	Logan, UT	Crater Lakes, Medford, OR	4	2	$1,040	$650	$325	$235	$4,500	Past Trips
	Site Visits	Logan, UT	TBD Counties in Utah	2	3	$480	$0	$294	$59	$2,500	Past Trips
										$0	
	International Travel										
										$0	
	Budget Period 2 Total									**$11,213**	
	Domestic Travel	**Budget Period 3**									
	NTI Training for Instructor	TBD	Ann Arbor, Mi	9	1	$2,430	$750	$600	$535	$4,315	Past Trips
	Project Coordination	Logan, UT	Crater Lakes, Medford, OR	4	1	$1,040	$650	$275	$235	$2,200	Past Trips
	Site Visits	Logan, UT	TBD Counties in Utah	2	3	$480	$0	$294	$59	$2,500	Past Trips
										$0	
	International Travel										
										$0	
	Budget Period 3 Total									**$9,015**	
	Domestic Travel	**Budget Period 4**									
	NTI Training for Instructor	TBD	Ann Arbor, Mi	9	1	$2,475	$800	$600	$540	$4,415	Past Trips
	Project Coordination	Logan, UT	Crater Lakes, Medford, OR	2	1	$532	$650	$200	$118	$1,500	Past Trips
	Site Visits	Logan, UT	TBD Counties in Utah	2	3	$480	$0	$294	$59	$2,500	Past Trips
										$0	
	International Travel										
										$0	
	Budget Period 4 Total									**$8,415**	
	Domestic Travel	**Budget Period 5**									
										$0	
										$0	
										$0	
										$0	
	International Travel										
										$0	
	Budget Period 5 Total									**$0**	
	PROJECT TOTAL									**$40,464**	

Additional Explanation (as needed):

d. Equipment

INSTRUCTIONS - PLEASE READ!!!

1. Equipment is generally defined as an item with an acquisition cost greater than $5,000 and a useful life expectancy of more than one year. Please refer to the applicable Federal regulations in 2 CFR 200 for specific equipment definitions and treatment.

2. List all equipment below, providing a basis of cost (e.g. vendor quotes, catalog prices, prior invoices, etc.). Briefly justify items as they apply to the Statement of Project Objectives. If it is existing equipment, provide logical support for the estimated value shown.

3. During award negotiations, provide a vendor quote for all equipment items over $50,000 in price. If the vendor quote is not an exact price match, provide an explanation in the additional explanation section below. If a vendor quote is not practical, such as for a piece of equipment that is purpose-built, first of its kind, or otherwise not available off the shelf, provide a detailed engineering estimate for how the cost estimate was derived.

4. Each budget period is rounded to the nearest dollar.

SOPO Task #	Equipment Item	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need
				Budget Period 1		
3,4,5	**EXAMPLE!!!** Thermal shock chamber	2	$70,000	$140,000	Vendor Quote - Attached	Reliability testing of PV modules- Task 4.3
	Mobile Traninig Unit	1	$470,000	$470,000	Estimate	Mobile training unit to support training at rural high schools. Includes an electric truck, custom mobile education unit electric trailer with 120 kWh batteries, 25 kW inverter, and solar panels for off-grid operation, graphics wrapper on program, renewable energy and EV charging demonstrations, student stations with tools, interior retrofit for training, smart training board
				$0		
				$0		
				$0		
				$0		
				$0		
	Budget Period 1 Total			$470,000		
				Budget Period 2		
				$0		
				$0		
				$0		
				$0		
				$0		
				$0		
				$0		
				$0		
	Budget Period 2 Total			$0		
				Budget Period 3		
				$0		
				$0		
				$0		
				$0		
				$0		
				$0		
	Budget Period 3 Total			$0		
				Budget Period 4		
				$0		
				$0		
				$0		
				$0		
				$0		
				$0		
	Budget Period 4 Total			$0		
				Budget Period 5		
				$0		
				$0		
				$0		
				$0		
				$0		
				$0		
	Budget Period 5 Total			$0		
	PROJECT TOTAL			**$470,000**		

Additional Explanation (as needed):

e. Supplies

INSTRUCTIONS - PLEASE READ!!!

1. Supplies are generally defined as an item with an acquisition cost of $5,000 or less and a useful life expectancy of less than one year. Supplies are generally consumed during the project performance. Please refer to the applicable Federal regulations in 2 CFR 200 for specific supplies definitions and treatment.

2. List all proposed supplies below, providing a basis of costs (e.g. vendor quotes, catalog prices, prior invoices, etc.). Briefly justify the need for the Supplies as they apply to the Statement of Project Objectives. Note that Supply items must be direct costs to the project at this budget category, and not duplicative of supply costs included in the indirect pool that is the basis of the indirect rate applied for this project.

3. Multiple supply items valued at $5,000 or less used to assemble an equipment item with a value greater than $5,000 with a useful life of more than one year should be included on the equipment tab. If supply items and costs are ambiguous in nature, contact your DOE representative for proper categorization.

4. Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

5. Each budget period is rounded to the nearest dollar.

SOPO Task #	General Category of Supplies	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need
				Budget Period 1		
4,6	**EXAMPLE!!!** Wireless DAS components	10	$360.00	$3,600	Catalog price	For Alpha prototype - Task 2.4
	Maintenance/Charging/Insurance for Mobile Unit	1	$5,000.00	$5,000	Estimate	Operating cost for mobile unit to serve rural high schools
	Training Materials for students	25	$350.00	$8,750	Previous pruchases	Instruction materials required for students
	Misc. Training Hardware/Components	1	$3,500.00	$3,500	Prior purchases	Misc. fittings, hardware, tools, parts, wire, plugs, switches, etc., consumables for training at all high schools
	Instructor Training, National Tranining Institute	1	$1,275.00	$1,275	Previous attendance	Instructor continuing education and development
	Human Research Subject Incentives & Survey Materials	1	$800.00	$800	Previous programs	Participant support for assessment and community surveys, including tribal communities and rural regions
				$0		
				$0		
	Budget Period 1 Total			**$19,325**		
				Budget Period 2		
	Maintenance/Fuel/Insurance for Mobile Unit	1	$16,000.00	$16,000	Estimate	Operating cost for mobile unit to serve rural high schools
	Training Materials for students	55	$350.00	$19,250	Previous pruchases	Instruction materials required for students
	Misc. Training Hardware/Components	1	$3,500.00	$3,500	Prior purchases	Misc. fittings, hardware, tools, parts, wire, plugs, switches, etc., consumables for training at all high schools
	Instructor Training, National Tranining Institute	1	$1,300.00	$1,300	Previous attendance	Instructor continuing education and development
	Human Research Subject Incentives & Survey Materials	1	$1,600.00	$1,600	Previous programs	Participant support for assessment and community surveys, including tribal communities and rural regions
				$0		
				$0		
				$0		
	Budget Period 2 Total			$41,650		
				Budget Period 3		
	Maintenance/Fuel/Insurance for Mobile Unit	1	$17,850.00	$17,850	Estimate	Operating cost for mobile unit to serve rural high schools
	Training Materials for students	80	$350.00	$28,000	Previous pruchases	Instruction materials required for students
	Misc. Training Hardware/Components	1	$3,500.00	$3,500	Prior purchases	Misc. fittings, hardware, tools, parts, wire, plugs, switches, etc., consumables for training at all high schools
	Instructor Training, National Tranining Institute	1	$1,325.00	$1,325	Previous attendance	Instructor continuing education and development
	Human Research Subject Incentives & Survey Materials	1	$2,100.00	$2,100	Previous programs	Participant support for assessment and community surveys, including tribal communities and rural regions
				$0		
				$0		
				$0		
	Budget Period 3 Total			$52,775		
				Budget Period 4		
	Maintenance/Fuel/Insurance for Mobile Unit	1	$18,100.00	$18,100	Estimate	Operating cost for mobile unit to serve rural high schools
	Training Materials for students	90	$350.00	$31,500	Previous pruchases	Instruction materials required for students
	Misc. Training Hardware/Components	1	$3,500.00	$3,500	Prior purchases	Misc. fittings, hardware, tools, parts, wire, plugs, switches, etc., consumables for training at all high schools
	Instructor Training, National Tranining Institute	1	$1,350.00	$1,350	Previous attendance	Instructor continuing education and development
	Human Research Subject Incentives & Survey Materials	1	$2,300.00	$2,300	Previous programs	Participant support for assessment and community surveys, including tribal communities and rural regions
				$0		
				$0		
				$0		
	Budget Period 4 Total			$56,750		
				Budget Period 5		
				$0		
				$0		
				$0		
				$0		
				$0		
				$0		
				$0		
				$0		
	Budget Period 5 Total			$0		
	PROJECT TOTAL			**$170,500**		

Additional Explanation (as needed):

f. Contractual

INSTRUCTIONS - PLEASE READ!!!

1. The entity completing this form must provide all costs related to subrecipients, vendors, and FFRDC partners in the applicable boxes below.

2. Subrecipients (partners, sub-awardees): Subrecipients shall submit a Budget Justification describing all project costs and calculations when their total proposed budget exceeds either (1) $100,000 or (2) 50% of total award costs. These subrecipient forms may be completed by either the subrecipients themselves or by the preparer of this form. The budget totals on the subrecipient's forms must match the subrecipient entries below. A subrecipient is a legal entity to which a subaward is made, who has performance measured against whether the objectives of the Federal program are met, is responsible for programmatic decision making, must adhere to applicable Federal program compliance requirements, and uses the Federal funds to carry out a program of the organization. All characteristics may not be present and judgment must be used to determine subrecipient vs. vendor status.

3. Vendors (including contractors): List all vendors and contractors supplying commercial supplies or services used to support the project. For each Vendor cost with total project costs of $250,000 or more, a Vendor quote must be provided. A vendor is a legal entity contracted to provide goods and services within normal business operations, provides similar goods or services to many different purchasers, operates in a competitive environment, provides goods or services that are ancillary to the operation of the Federal program, and is not subject to compliance requirements of the Federal program. All characteristics may not be present and judgment must be used to determine subrecipient vs. vendor status.

4. Federal Funded Research and Development Centers (FFRDCs): FFRDCs must submit a signed Field Work Proposal during award application. The award recipient may allow the FFRDC to provide this information directly to DOE, however project costs must also be provided below.

5. Each budget period is rounded to the nearest dollar.

SOPO Task #	Sub-Recipient Name/Organization	Purpose and Basis of Cost	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Project Total
2,4	**EXAMPLE!!!** XYZ Corp.	Partner to develop optimal lens for Gen 2 product. Cost estimate based on personnel hours.	$48,000	$32,000	$16,000			**$96,000**
								$0
								$0
								$0
								$0
								$0
								$0
		Sub-total	$0	$0	$0	$0	$0	$0

SOPO Task #	Vendor Name/Organization	Purpose and Basis of Cost	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Project Total
6	**EXAMPLE!!!** ABC Corp.	Vendor for developing robotics to perform lens inspection. Estimate provided by vendor.	$32,900	$86,500				**$119,400**
								$0
								$0
								$0
								$0
								$0
		Sub-total	$0	$0	$0	$0	$0	$0

SOPO Task #	FFRDC Name/Organization	Purpose and Basis of Cost	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Project Total
								$0
								$0
		Sub-total	$0	$0	$0	$0	$0	$0

	Total Contractual		$0	$0	$0	$0	$0	$0

Additional Explanation (as needed):

g. Construction

PLEASE READ!!!

1. Construction, for the purpose of budgeting, is defined as all types of work done on a particular building, including erecting, altering, or remodeling. Construction conducted by the award recipient is entered on this page. Any construction work that is performed by a vendor or subrecipient should be entered under f. Contractual.

2. List all proposed construction below, providing a basis of cost such as engineering estimates, prior construction, etc., and briefly justify its need as it applies to the Statement of Project Objectives.

3. Each budget period is rounded to the nearest dollar.

Overall description of construction activities: Example Only!!! - Build wind turbine platform

SOPO Task #	General Description	Cost	Basis of Cost	Justification of need
Budget Period 1				
3	EXAMPLE ONLY!!! Three days of excavation for platform site	$28,000	Engineering estimate	Site must be prepared for construction of platform.
	Budget Period 1 Total	$0		
Budget Period 2				
	Budget Period 2 Total	$0		
Budget Period 3				
	Budget Period 3 Total	$0		
Budget Period 4				
	Budget Period 4 Total	$0		
Budget Period 5				
	Budget Period 5 Total	$0		
	PROJECT TOTAL	**$0**		

Additional Explanation (as needed):

h. Other Direct Costs

INSTRUCTIONS - PLEASE READ!!!

1. Other direct costs are direct cost items required for the project which do not fit clearly into other categories. These direct costs must not be included in the indirect costs (for which the indirect rate is being applied for this project). Examples are: tuition, printing costs, etc. which can be directly charged to the project and are not duplicated in indirect costs (overhead costs).

2. Basis of cost are items such as vendor quotes, prior purchases of similar or like items, published price list, etc.

3. Each budget period is rounded to the nearest dollar.

SOPO Task #	General Description and SOPO Task #	Cost	Basis of Cost	Justification of need
			Budget Period 1	
5	**EXAMPLE!!!** Grad student tuition - tasks 1-3	$16,000	Established UCD costs	Support of graduate students working on project
	Budget Period 1 Total	$0		
			Budget Period 2	
	Budget Period 2 Total	$0		
			Budget Period 3	
	Budget Period 3 Total	$0		
			Budget Period 4	
	Budget Period 4 Total	$0		
			Budget Period 5	
	Budget Period 5 Total	$0		
	PROJECT TOTAL	**$0**		

Additional Explanation (as needed):

i. Indirect Costs

INSTRUCTIONS - PLEASE READ!!!
1. Fill out the table below to indicate how your indirect costs are calculated. Use the box below to provide additional explanation regarding your indirect rate calculation.
2. The rates and how they are applied should not be averaged to get one indirect cost percentage. Complex calculations or rates that do not do not correspond to the below categories should be described/provided in the Additional Explanation section below. If questions exist, consult with your DOE contact before filling out this section.
3. The indirect rate should be applied to both the Federal Share and Recipient Cost Share.
4. Each budget period is rounded to the nearest dollar.

	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Total	Explanation of BASE
Provide ONLY Applicable Rates:							
Overhead Rate	46.00%	46.00%	46.00%	46.00%	0.00%		**MTDC**
General & Administrative (G&A)	0.00%	0.00%	0.00%	0.00%	0.00%		
FCCM Rate, if applicable	0.00%	0.00%	0.00%	0.00%	0.00%		
OTHER Indirect Rate	0.00%	0.00%	0.00%	0.00%	0.00%		
Indirect Costs (As Applicable):							
Overhead Costs	$138,863	$158,932	$167,187	$173,026		**$638,008**	
G&A Costs						**$0**	
FCCM Costs, if applicable						**$0**	
OTHER Indirect Costs						**$0**	
Total indirect costs requested:	**$138,863**	**$158,932**	**$167,187**	**$173,026**	**$0**	**$638,008**	

A federally approved indirect rate agreement, or rate proposed (supported and agreed upon by DOE for estimating purposes) is required if reimbursement of indirect costs is requested. Please check (X) one of the options below and provide the requested information if it has not already been provided as requested, or has changed.

__x____ An indirect rate has been approved or negotiated with a federal government agency. A copy of the latest rate agreement is included with this application, and will be provided electronically to the Contracting Officer for this project.

_____ There is not a current, federally approved rate agreement negotiated and available*.

***When this option is checked, the entity preparing this form shall submit an indirect rate proposal in the format provided by your DOE contact, or a format that provides the same level of information and which will support the rates being proposed for use in performance of the proposed project. Additionally, any non-Federal entity that has never received a negotiated indirect cost rate, except for those non-Federal entities described in Appendix VII to Part 200—States and Local Government and Indian Tribe Indirect Cost Proposals, paragraph D.1.b, may elect to charge a de minimis rate of 10% of modified total direct costs (MTDC) which may be used indefinitely.As described in §200.403 Factors affecting allowability of costs, costs must be consistently charged as either indirect or direct costs, but may not be double charged or inconsistently charged as both. If chosen, this methodology once elected must be used consistently for all Federal awards until such time as a non-Federal entity chooses to negotiate for a rate, which the non-Federal entity may apply to do at any time.**

You must provide an explanation (below or in a separate attachment) and show how your indirect cost rate was applied to this budget in order to come up with the indirect costs shown.

Additional Explanation (as needed): *IMPORTANT: Please use this box (or an attachment) to further explain how your total indirect costs were calculated. If the total indirect costs are a cumulative amount of more than one calculation or rate application, the explanation and calculations should identify all rates used, along with the base they were applied to (and how the base was derived), and a total for each (along with grand total).

Cost Share

PLEASE READ!!!

1. A detailed presentation of the cash or cash value of all cost share proposed must be provided in the table below. All items in the chart below must be identified within the applicable cost category tabs a. through i. in addition to the detailed presentation of the cash or cash value of all cost share proposed provided in the table below. Identify the source organization & amount of each cost share item proposed in the award.

2. Cash Cost Share - encompasses all contributions to the project made by the recipient, subrecipient, or third party (an entity that does not have a role in performing the scope of work) for costs incurred and paid for during the project. This includes when an organization pays for personnel, supplies, equipment, etc. for their own company with organizational resources. If the item or service is reimbursed for, it is cash cost share. All cost share items must be necessary to the performance of the project. Any partial donation of goods or services is considered a discount and is not allowable.

3. In Kind Cost Share - encompasses all contributions to the project made by the recipient, subrecipient, or third party (an entity that does not have a role in performing the scope of work) where a value of the contribution can be readily determined, verified and justified but where no actual cash is transacted in securing the good or service comprising the contribution. In Kind cost share items include volunteer personnel hours, the donation of space or use of equipment, etc. The cash value and calculations thereof for all In Kind cost share items must be justified and explained in the Cost Share Item section below. All cost share items must be necessary to the performance of the project. If questions exist, consult your DOE contact before filling out In Kind cost share in this section. Vendors may not provide cost share. Any partial donation of goods or services is considered a discount and is not allowable.

4. Funds from other Federal sources MAY NOT be counted as cost share. This prohibition includes FFRDC sub-recipients. Non-Federal sources include any source not originally derived from Federal funds. Cost sharing commitment letters from subrecipients and third parties must be provided with the original application.

5. Fee or profit, including foregone fee or profit, **are not allowable** as project costs (including cost share) under any resulting award. The project may only incur those costs that are allowable and allocable to the project (including cost share) as determined in accordance with the applicable cost principles prescribed in FAR Part 31 for For-Profit entities and 2 CFR Part 200 Subpart E - Cost Principles for all other non-federal entities.

6. NOTE: A Recipient who elects to employ the 10% de minimis Indirect Cost rate **cannot claim the resulting indirect costs as a Cost Share contribution.**

7. NOTE: A Recipient **cannot claim "unrecovered indirect costs"** as a Cost Share contribution, **without prior approval.**

8. Each budget period is rounded to the nearest dollar.

Organization/Source	Type (Cash or In Kind)	Cost Share Item	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Total Project Cost Share
ABC Company **EXAMPLE!!!**	Cash	Project partner ABC Company will provide 20 PV modules for product development at the price of $680 per module	$13,600					**$13,600**
USU	Cash	PI Salary with Fringe and Indirect	$42,133	$43,547	$45,008	$46,517		**$177,206**
USU	Cash	Waived F&A as Cost Share	$69,431	$79,466	$83,594	$86,513		**$319,004**
								$0
								$0
								$0
								$0
								$0
								$0
								$0
								$0
		Totals	**$111,565**	**$123,013**	**$128,602**	**$133,030**	**$0**	**$496,210**

Total Project Cost: $2,494,981 **Cost Share Percent of Award: 19.9%**

Additional Explanation (as needed):

Applicant Name: 0 Award Number: 0

Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget			
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)		Total (g)
1. Budget Period 1				$799,173	$111,565		$910,737
2. Budget Period 2				$381,424	$123,013		$504,437
3. Budget Period 3				$402,036	$128,602		$530,638
4. Budget Period 4				$416,139	$133,030		$549,169
5. Budget Period 5				$0	$0		$0
6. Totals				$1,998,771	$496,210		$2,494,981

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity					Total (5)
	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	
a. Personnel	$193,765	$208,263	$213,815	$219,535	$0	$835,378
b. Fringe Benefits	$76,964	$84,379	$87,845	$91,443	$0	$340,631
c. Travel	$11,820	$11,213	$9,015	$8,415	$0	$40,464
d. Equipment	$470,000	$0	$0	$0	$0	$470,000
e. Supplies	$19,325	$41,650	$52,775	$56,750	$0	$170,500
f. Contractual	$0	$0	$0	$0	$0	$0
g. Construction	$0	$0	$0	$0	$0	$0
h. Other	$0	$0	$0	$0	$0	$0
i. Total Direct Charges (sum of 6a-6h)	$771,874	$345,505	$363,450	$376,143	$0	$1,856,973
j. Indirect Charges	$138,863	$158,932	$167,187	$173,026	$0	$638,008
k. **Totals** (sum of 6i-6j)	$910,737	$504,437	$530,638	$549,169	$0	$2,494,981
7. Program Income						$0

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