c. Travel

PLEASE READ!!!

Provide travel detail as requested below, identifying total Foreign and Domestic Travel as separate items. Purpose of travel are items such as professional conference, DOE sponsored meeting, project management meeting, etc. The Basis for Estimating Costs are items such as past trips, current quotations, Federal Travel Regulations, etc.

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

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

Purpose of travel	No. of Travelers	Depart From (not required for domestic travel)	Destination (not required for domestic travel)	No. of Days	Cost per Traveler	Cost per Trip	Basis for Estimating Costs
Budget Period 1							
Domestic Travel							
EXAMPLE ONLY!!! Visit to PV cell mfr. to set up vendor agreement	2			2	$650	$1,300	Internet prices
Exemption 4	Exemption 4						
Domestic Travel subtotal							
International Travel							
Exemption 4							
International Travel subtotal							
Budget Period 1 Total							
Budget Period 2							
Domestic Travel							
Exemption 4							

Purpose of travel	No. of Travelers	Depart From (not required for domestic travel)	Destination (not required for domestic travel)	No. of Days	Cost per Traveler	Cost per Trip	Basis for Estimating Costs
Exemption 4	Exemption 4						
Domestic Travel subtotal							
International Travel							
Exemption 4							
International Travel subtotal							
Budget Period 2 Total							
Budget Period 3							
Domestic Travel	Exemption 4						
Exemption 4							
Domestic Travel subtotal							
International Travel							
Exemption 4							
International Travel subtotal							
Budget Period 3 Total							
PROJECT TOTAL							

Additional Explanations/Comments (as necessary)

In the interest of having a more reader-friendly schedule, column B above represents the number of trips, not the number of travelers on each trip (e.g. Exemption 4 trips will be made by a combination of the personnel assigned to that task). The general assumption (based on past experience) is that each trip would be Exemption 4 . We anticipated lower hotel rates due to the volume and ability to book in advance.

d. Equipment

PLEASE READ!!!

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. Further definitions can be found at 10 CFR 600 found on the PMC Recipient Resources Forms page at https://www.eere-pmc.energy.gov/Forms.aspx#regs .

List all proposed equipment below, providing a basis of cost such as vendor quotes, catalog prices, prior invoices, etc., and briefly justifying its need as it applies to the Statement of Project Objectives. If it is existing equipment, and the value of its contribution to the project budget is being shown as cost share, provide logical support for the estimated value shown. If it is new equipment which will retain a useful life upon completion of the project, provide logical support for the estimated value shown.

For equipment over $50,000 in price, also include a copy of the associated vendor quote or catalog price list.

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

Equipment Item	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need
Budget Period 1					
EXAMPLE ONLY!!! Thermal shock chamber	2	$20,000	$40,000	Vendor Quote	Reliability testing of PV modules- Task 4.3
	Exemption 4				
Budget Period 1 Total					
Budget Period 2					
	Exemption 4				
Lab equipment - see attached detail sheet					
Office equipment and set-up - see attached detail					
Budget Period 2 Total					
Budget Period 3					
	0		$0		

Equipment Item	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need
	Exemption 4				
Budget Period 3 Total					
PROJECT TOTAL					

Additional Explanations/Comments (as necessary)

At the end of this file there are 2 tabs, one for Lab equipment the other for Office equipment which details the above amounts by item. Basis for quotes include vendor quotes, known actual and catalogs.

e. Supplies

PLEASE READ!!!

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. Further definitions can be found at 10 CFR 600 found on the PMC Recipient Resources Forms page at https://www.eere-pmc.energy.gov/Forms.aspx#regs.

List all proposed supplies below, providing a bases of cost such as vendor quotes, catalog prices, prior invoices, etc., and briefly justifying 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.

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

General Category of Supplies	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need
Budget Period 1					
EXAMPLE ONLY!!! Wireless DAS components	10	$360.00	$3,600	Catalog price	For Alpha prototype - Task 2.4
Exemption 4					
	0		$0		
	0		$0		
	0		$0		
Budget Period 1 Total	Exemption 4				
Budget Period 2					
	0		$0		
Exemption 4					
	0		$0		
	0		$0		
	0		$0		
Budget Period 2 Total	Exemption 4				
Budget Period 3					
	0		$0		

General Category of Supplies	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need
Exemption 4					
	0		$0		
	0		$0		
	0		$0		
	0		$0		
	0		$0		
Budget Period 3 Total	Exemption 4				
PROJECT TOTAL					

Additional Explanations/Comments (as necessary)

The above was based on our historic usage and cost rates. These supplies are required in the normal course of running a biorefinery and for lab analysis and monitoring.

f. Contractual

Sub-Recipient Name/Organization	Purpose/Tasks in SOPO	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Total
EXAMPLE ONLY!!! XYZ Corp.	Partner to develop optimal fresnel lens for Gen 2 product - Task 2.4	$48,000	$32,000	$16,000	$96,000
Georgia Tech	Exemption 4				
MTR - Membrane Technology and Research, Inc.					
The Dow Chemical Company					
	Sub-total	Exemption 4			

Vendor Name/Organization	Product or Service, Purpose/Need and Basis of Cost (Provide additional support at bottom of page as needed)	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Total
EXAMPLE ONLY!!! ABC Corp.	Vendor for developing custom robotics to perform lens inspection, alignment, and placement (Task 4.) - Required for expanding CRV	$32,900	$86,500		$119,400
					$0

Exemption 4

Sub-Recipient Name/Organization	Purpose/Tasks in SOPO	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Total
Exemption 4					

Sub-Recipient Name/Organization	Purpose/Tasks in SOPO	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Total
Exemption 4					

FFRDC Name/Organization	Purpose	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Total
					$0
NREL- National Renewable Energy Laboratory	Exemption 4				

Total Contractual		Exemption 4			

g. Construction

PLEASE READ!!!

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 to the award recipient should be entered under f. Contractual.

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.

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

Overall description of construction actiivities:

Example Only!!! - Build wind turbine platform

General Description	Cost	Basis of Cost	Justification of need
Budget Period 1			
Three days of excavation for platform site EXAMPLE ONLY!!!	$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		

General Description	Cost	Basis of Cost	Justification of need
Budget Period 3			
Budget Period 3 Total	$0		
PROJECT TOTAL	**$0**		

Additional Explanations/Comments (as necessary)

Construction will be sub-contracted, one of our sub-recipient partners, The Dow Chemical Company, will provide ground clearing/ land prep work while the actual construction contractor is TBD. These amounts have been included on the Contractual tab. At the end of the this file there is a tab, Construct Recon, which summarizes the the capitalized costs.

h. Other Direct Costs

PLEASE READ!!!

Other direct costs are direct cost items required for the project which do not fit clearly into other categories, and are not included in the indirect pool for which the indirect rate is being applied to this project. Examples are meeting costs, postage, couriers or express mail, telephone/fax costs, printing costs, etc.

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

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

General description	Cost	Basis of Cost	Justification of need
Budget Period 1			
EXAMPLE ONLY!!! Grad student tuition	$16,000	Established UCD costs	Support of graduate students working on project
Exemption 4	Exemption 4		
Budget Period 1 Total			
Budget Period 2			
Exemption 4	Exemption 4		
Exemption 4			
Budget Period 3			
	$0		

General description	Cost	Basis of Cost	Justification of need
Exemption 4			

i. Indirect Costs

	Budget Period 1	Budget Period 2	Budget Period 3	Total
Rate applied:	Exemption 4			
Total indirect costs requested:				

A federally approved indirect rate agreement, or rate proposed supported and agreed upon by DOE for estimating purposes is required if reimbursement of fringe benfits 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. Calculate the indirect rate dollars and enter the total in the Section B., line 6.j. (Indirect Charges) of form SF 424A.

____ **There is a federally approved indirect rate agreement. A copy is provided with this application and will be provided electronically to the Contracting Officer for this project.**
(When this option is selected, a presentation of the budget that demonstrates the application of the approved rate, to arrive at the proposed indirect charges proposed should also be provided.)

X **There is no current, federally-approved indirect rate agreement.**
(When this option is checked, the entity preparing this form shall submit an indirect cost rate proposal in the format provided at the following website, or in a format that provides the same level of information and which supports the rate(s) being proposed for use in estimating the project. Go to https://www.eere-pmc.energy.gov/forms.aspx and select PMC 400.2 Sample Rate Proposal.)

Additional Explanations/Comments (as necessary)

Please see the Indirect Proposal tab at the end of this file for indirects calculation. The allowable rate per the calculation is Exemption 4% and we request this rate during Phase II since we anticipate during the construction period this would require maximum overhead effort. Please note the overhead rate was not applied to Fringe, Travel nor construction costs.

Cost Share

PLEASE READ!!!

A detailed presentation of the cash or cash value of all cost share proposed for the project must be provided in the table below. Identify the source & amount of each item of cost share proposed by the award recipient and each sub-recipient or vendor. Letters of committment must be submitted for all third party cost share (other than award recipient).

Note that "cost-share" is not limited to cash investment. Other items that may be assigned value in a budget as incurred as part of the project budget and necessary to performance of the project, may be considered as cost share, such as: contribution of services or property; donated, purchased or existing equipment; buildings or land; donated, purchased or existing supplies; and/or unrecovered personnel, fringe benefits and indirect costs, etc. For each cost share contribution identified as other than cash, identify the item and describe how the value of the cost share contribution was calculated.

Funds from other Federal sources MAY NOT be counted as cost share. **This prohibition includes FFRDC sub-recipients. Non-Federal sources include private, state or local Government, or any source not originally derived from Federal funds. Documentation of cost sharing commitments must be provided, if not already provided with the original application and they have not changed since its submission.**

Fee or profit will not be paid to the award recipients or subrecipients of financial assistance awards. Additionally, foregone fee or profit by the applicant shall not be considered cost sharing under any resulting award. Reimbursement of actual costs will only include those costs that are allowable and allocable to the project as determined in accordance with the applicable cost principles prescribed in 10 CFR 600.127, 10 CFR 600.222 or 10 CFR 600.317. Also see 10 CFR 600.318 relative to profit or fee.

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

Organization/Source	Type (cash or other)	Cost Share Item	Budget Period 1 Cost Share	Budget Period 2 Cost Share	Budget Period 3 Cost Share	Total Project Cost Share
ABC Company EXAMPLE ONLY!!!	Cash	Project partner ABC Company will provide 40 PV modules for product development at 50% off the of the retail price of $680	$13,600			$13,600
Algenol Biofuels Inc	Exemption 4					
The Dow Chemical Company						
The Dow Chemical Company						
Membrabe Technology and Research, Inc.						
						$0
						$0

Organization/Source	Type (cash or other)	Cost Share Item	Budget Period 1 Cost Share	Budget Period 2 Cost Share	Budget Period 3 Cost Share	Total Project Cost Share
						$0
						$0
						$0
						$0
		Totals	Exemption 4			

Total Project Cost: $Exemption 4

Cost Share Percent of Award: Exemption 4

Additional Explanations/Comments (as necessary)

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Project Management Plan

Pilot-Scale Integrated Biorefinery Operations for Producing Ethanol From Algae

Algenol Biofuels Inc.

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II. **Management Organization and Responsibilities**

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VIII. **Process Hazard Analysis / Environmental Health and Safety**

IX. **Resource Loaded Project Plan**

Proprietary Information: All information in this document is proprietary. Algenol Biofuels requests all information in this document not be released to persons outside the Government, except for the purposes of review and evaluation.

I. Introduction:

Exemption 4

Exemption 4

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Exemption 4

Attachment A: Resource Loaded Project Plan

ID	WBS	Task Name	Cost ($)	FTE Hours	Duration	Start	Finish	20
								Exemption 4

Attachment A: Resource Loaded Project Plan

ID	WBS	Task Name	Cost ($)	FTE Hours	Duration	Start	Finish	20 Qt
Exemption 4								

Attachment A: Resource Loaded Project Plan

ID	WBS	Task Name	Cost ($)	FTE Hours	Duration	Start	Finish	20
								Exemption 4

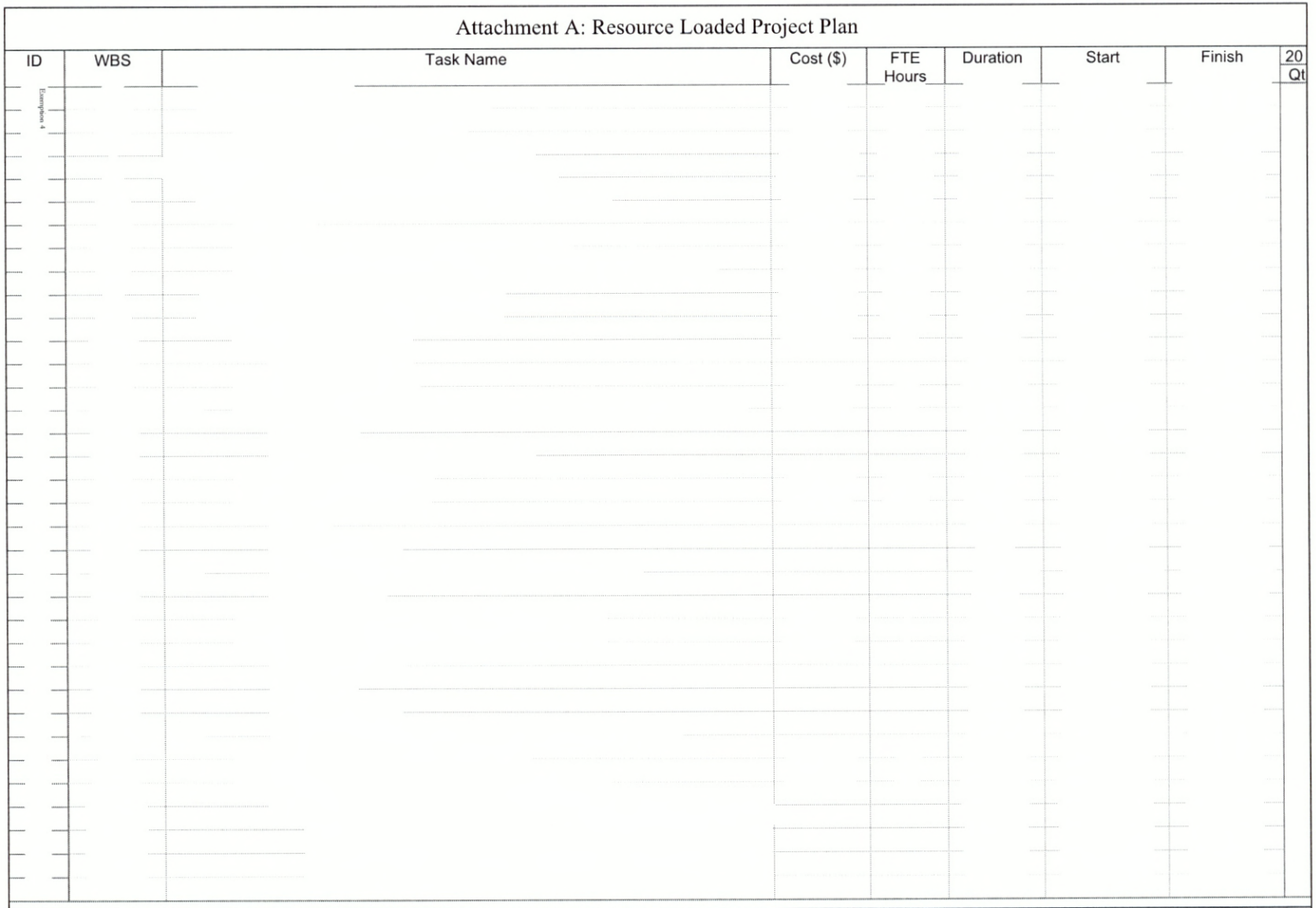
Attachment A: Resource Loaded Project Plan

ID	WBS	Task Name	Cost ($)	FTE Hours	Duration	Start	Finish	20 Qt
Exemption 4								

Attachment A: Resource Loaded Project Plan

ID	WBS	Task Name	Cost ($)	FTE Hours	Duration	Start	Finish	20 Qt

Attachment A: Resource Loaded Project Plan



Attachment A: Resource Loaded Project Plan

ID	WBS	Task Name	Cost ($)	FTE Hours	Duration	Start	Finish	20
								Exemptions 4

Attachment A: Resource Loaded Project Plan

ID	WBS	Task Name	Cost ($)	FTE Hours	Duration	Start	Finish	20

U.S. Department of Energy	**Name of Applicant**	Company Name Here
Generic Pro-Forma	**Name of Facility**	Facility Name Here
	Completion of Independent	
Form Revision 1	**Engineer Performance Test**	**6/1/2009**
	Facility Capitalized Const Cost	$ Exemption 4

Projected Operating Results

Year Ending December 31,		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
PERFORMANCE		Exemption 4									
Plant Operating Days											
Plant Availability Factor											
Production	*Units* [1]										
#1 Product Number One Name Here	XX/year										
#2 Product Number Two Name Here	XX/year										
#3 Product Number Three Name Here	XX/year										
#4 Product Number Four Name Here	XX/year										
Feedstock Consumption	*Units* [1]										
A Feedstock Number One Name Here	XX/year										
B Feedstock Number Two Name Here	XX/year										
C Feedstock Number Three Name Here	XX/year										
D Feedstock Number Four Name Here	XX/year										
E Feedstock Number Five Name Here	XX/year										
Utility Consumption											
Natural Gas Consumed	MMBTU										
Net Electricity Consumed	MWh										
Water Consumed	kGal										
Other Consumed	XX										
Facility Emissions & Wastes											
SO_2	tons/yr										
NO_x	tons/yr										
Other Wastes	tons/yr										
COMMODITY PRICES											
General Inflation											
Product Pricing	*Units* [1]										
#1 Product Number One Name Here	$/XX										
#2 Product Number Two Name Here	$/XX										
#3 Product Number Three Name Here	$/XX										
#4 Product Number Four Name Here	$/XX										
Feedstock Pricing	*Units* [1]										
A Feedstock Number One Name Here	$/XX										
B Feedstock Number Two Name Here	$/XX										
C Feedstock Number Three Name Here	$/XX										
D Feedstock Number Four Name Here	$/XX										
E Feedstock Number Five Name Here	$/XX										
Utility Consumption											
Natural Gas Consumed	$/MMBTU										
Net Electricity Consumed	$/MWh										
Water Consumed	$/kGal										
Other Consumed	$/XX										
Emmissions & Waste Allowances											
SO_2	$/ton										
NO_x	$/ton										
Other Wastes	$/ton										
OPERATING REVENUES											
Product Revenues											
#1 Product Number One Name Here											
#2 Product Number Two Name Here											
#3 Product Number Three Name Here											
#4 Product Number Four Name Here											
TOTAL OPERATING REVENUES											