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							
International Travel subtotal							
Budget Period 2 Total							
Budget Period 3							
Domestic Travel							
Exemption 4	Exemption 4						
Domestic Travel subtotal							
International Travel							
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). 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
	0		$0		
	0		$0		
	0		$0		
	0		$0		
	0		$0		
	0		$0		
	0		$0		
Budget Period 1 Total			$0		
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
	0		$0		
	0		$0		
	0		$0		
Budget Period 1 Total			**$0**		
Budget Period 2					
	0		$0		
	0		$0		
	0		$0		
	0		$0		
Budget Period 2 Total			$0		
Budget Period 3					
	0		$0		

General Category of Supplies	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need
Analytical supplies	Exemption 4				
Chemicals, solvents, polymers					
Disposable lab supplies (e.g. gloves)					
Safety supplies					
Minor engineering equipment					
Budget Period 3 Total					
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					

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,	$32,900	$86,500		**$119,400**
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
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
Budget Period 1 Total			
Budget Period 2			
Exemption 4	Exemption 4		
Budget Period 2 Total			
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 % 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.						

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
	Exemption 4					
		Totals	Exemption 4			

Total Project Cost: $Exemption 4

Cost Share Percent of Award: Exemption 4 %

Additional Explanations/Comments (as necessary)

Redacted

Exemption 4

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Exemption 4

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Exemption 4

Applicant Name: Algenol Biofuels Inc. Award Number: DE-EE0002867/000

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. DE-FOA-0000096	81.087			$25,000,000	Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$25,000,000		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) DE-FOA-0000096	(2)	(3)	(4)	
a. Personnel	Exemption 4				
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income					$0

Authorized for Local Reproduction

Section C - Non-Federal Resources

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE-FOA-0000096	Exemption 4			
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)				

Section D - Forecasted Cash Needs

	Total Budget Period 1	1st Quarter	2nd Quarter	3rd Quarter	4th quarter
13. Federal	$9,669,386	$2,342,099	$2,645,510	$2,758,464	$1,923,312
14. Non-Federal	Exemption 4				
15. **Total** (sum of lines 13 and 14)					

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project

	Future Funding Periods (Years)			
(a) Grant Program	(b) First - Phase !!	(c) Second	(d) Third	(e) Fourth
16. DE-FOA-0000096	$15,330,614	$0	$0	$0
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$15,330,614	$0	$0	$0

Section F - Other Budget Information

21. Direct Charges	22. Indirect Charges

23. Remarks Per page 15 in the FOA, the funding is based on Phases / Periods not years. Accordingly, the Forecasted Cash Needs in section D above agrees to the Phase I Total Project costs in the Budget justification file (in our case this is an 11 month period). In Section E, again we based it on Budget Periods as directed by the FOA. We have yearly information available and have included that as well. All tabs are labeled accordingly.

Applicant Name: Algenol Biofuels Inc. Award Number: Phase I

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. DE-FOA-0000096	81.087			$9,669,386	Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$9,669,386		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) DE-FOA-0000096	(2)	(3)	(4)	
a. Personnel	Exemption 4				
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income					$0

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Section C - Non-Federal Resources

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE-FOA-0000096	Exemption 4			
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)				

Section D - Forecasted Cash Needs

	Total Budget Period 1	1st Quarter	2nd Quarter	3rd Quarter	4th quarter
13. Federal	$9,669,386	$2,342,099	$2,645,510	$2,758,464	$1,923,312
14. Non-Federal	Exemption 4				
15. **Total** (sum of lines 13 and 14)					

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project

	Future Funding Periods (Years)			
(a) Grant Program	(b) First - Phase II	(c) Second	(d) Third	(e) Fourth
16. DE-FOA-0000096	$15,330,614	$0	$0	$0
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$15,330,614	$0	$0	$0

Section F - Other Budget Information

21. Direct Charges	22. Indirect Charges

23. Remarks

Per page 15 in the FOA, the funding is based on Phases / Periods not years. Accordingly, the Forecasted Cash Needs in section D above agrees to the Phase I Total Project costs in the Budget justification file (in our case this is an 11 month period). In Section E, again we based it on Budget Periods as directed by the FOA. We have yearly information available as well but wanted to follow the guidelines of the FOA.

Applicant Name: Algenol Biofuels Inc. Award Number: Phase II

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. DE-FOA-0000096	81.087			$15,330,614	Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$15,330,614		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) DE-FOA-0000096	(2)	(3)	(4)	
a. Personnel	Exemption 4				
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income					$0

Authorized for Local Reproduction

Section C - Non-Federal Resources

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE-FOA-0000096	Exemption 4			
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)				

Section D - Forecasted Cash Needs

	Total Budget Period II	1st Quarter	2nd Quarter	3rd Quarter	4th quarter*
13. Federal	$15,330,614	$5,734,265	$7,575,027	$2,021,322	
14. Non-Federal	Exemption 4				
15. **Total** (sum of lines 13 and 14)					

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project

	Future Funding Periods (Years)			
(a) Grant Program	(b) First - Phase !!	(c) Second	(d) Third	(e) Fourth
16. DE-FOA-0000096		$0	$0	$0
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$0	$0	$0	$0

Section F - Other Budget Information

21. Direct Charges

22. Indirect Charges A provisional indirect was used

23. Remarks

* Since Phase II is a 25 month budget period, the 4th "quarter" was used to capture the remaining months (July '11 - December 12). The cash needs were not affected since Federal Funds were depleted in the prior quarter

Applicant Name: Algenol Biofuels Inc. Award Number: Phase III

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. DE-FOA-0000096	81.087				Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$0		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) DE-FOA-0000096	(2)	(3)	(4)	
a. Personnel	Exemption 4				
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income					$0

Authorized for Local Reproduction

Section C - Non-Federal Resources

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE-FOA-0000096	Exemption 4			
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)				

Section D - Forecasted Cash Needs

	Total Budget Period III	1st Quarter	2nd Quarter	3rd Quarter	4th quarter*
13. Federal					
14. Non-Federal	Exemption 4				
15. **Total** (sum of lines 13 and 14)					

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project

	Future Funding Periods (Years)			
(a) Grant Program	(b) First - Phase !!	(c) Second	(d) Third	(e) Fourth
16. DE-FOA-0000096		$0	$0	$0
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$0	$0	$0	$0

Section F - Other Budget Information

21. Direct Charges

22. Indirect Charges A provisional indirect was used

23. Remarks

* Since Phase III is a 24 month budget period, the 4th "quarter" was used to capture the remaining months (July '13 - December '14). No Federal Funds were requested for this period.

Applicant Name: Algenol Biofuels Inc. Award Number: _____ Year 1

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. DE-FOA-0000096	81.087			$10,122,637	Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$10,122,637		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) DE-FOA-0000096	(2)	(3)	(4)	
a. Personnel	Exemption 4				
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income					$0

Authorized for Local Reproduction

Section C - Non-Federal Resources

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE-FOA-0000096	Exemption 4			
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)				

Section D - Forecasted Cash Needs

	Total Budget Period III	1st Quarter	2nd Quarter	3rd Quarter	4th quarter
13. Federal	$10,122,637	$2,250,406	$2,479,452	$2,625,834	$2,766,943
14. Non-Federal	Exemption 4				
15. **Total** (sum of lines 13 and 14)					

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project

	Future Funding Periods (Years)			
(a) Grant Program	(b) First	(c) Second	(d) Third	(e) Fourth
16. DE-FOA-0000096		$0	$0	$0
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$0	$0	$0	$0

Section F - Other Budget Information

21. Direct Charges

22. Indirect Charges A provisional indirect was used

23. Remarks

Although the FOA requests the SF424 by "budget periods" we have also included one by year.

Applicant Name: Algenol Biofuels Inc. Award Number: Year 2

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. DE-FOA-0000096	81.087			$14,877,363	Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$14,877,363		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) DE-FOA-0000096	(2)	(3)	(4)	
a. Personnel	Exemption 4				
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income					$0

Authorized for Local Reproduction

Section C - Non-Federal Resources

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE-FOA-0000096	Exemption 4			
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)				

Section D - Forecasted Cash Needs

	Total For First Year	1st Quarter	2nd Quarter	3rd Quarter	4th quarter
13. Federal	$10,122,637	$2,250,406	$2,479,452	$2,625,834	$2,766,943
14. Non-Federal	Exemption 4				
15. **Total** (sum of lines 13 and 14)					

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project

	Future Funding Periods (Years)			
(a) Grant Program	(b) First	(c) Second	(d) Third	(e) Fourth
16. DE-FOA-0000096		$0	$0	$0
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$0	$0	$0	$0

Section F - Other Budget Information

21. Direct Charges

22. Indirect Charges A provisional indirect was used

23. Remarks

Although the FOA requests the SF424 by "budget periods" we have also included one by year.

Applicant Name: Algenol Biofuels Inc. Award Number: Year 3

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. DE-FOA-0000096	81.087				Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$0		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) DE-FOA-0000096	(2)	(3)	(4)	
a. Personnel	Exemption 4				
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income					$0

Authorized for Local Reproduction

Section C - Non-Federal Resources

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE-FOA-0000096	Exemption 4			
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)				

Section D - Forecasted Cash Needs

	Total For First Year	1st Quarter	2nd Quarter	3rd Quarter	4th quarter
13. Federal	$10,122,637	$2,250,406	$2,479,452	$2,625,834	$2,766,943
14. Non-Federal	Exemption 4				
15. **Total** (sum of lines 13 and 14)					

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project

	Future Funding Periods (Years)			
(a) Grant Program	(b) First	(c) Second	(d) Third	(e) Fourth
16. DE-FOA-0000096		$0	$0	$0
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$0	$0	$0	$0

Section F - Other Budget Information

21. Direct Charges	22. Indirect Charges	A provisional indirect was used

23. Remarks

Although the FOA requests the SF424 by "budget periods" we have also included one by year.

Applicant Name: Algenol Biofuels Inc. Award Number: Year 4

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. DE-FOA-0000096	81.087				Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$0		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) DE-FOA-0000096	(2)	(3)	(4)	
a. Personnel	Exemption 4				
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income					$0

Authorized for Local Reproduction

Section C - Non-Federal Resources

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE-FOA-0000096	Exemption 4			
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)				

Section D - Forecasted Cash Needs

	Total For First Year	1st Quarter	2nd Quarter	3rd Quarter	4th quarter
13. Federal	$10,122,637	$2,250,406	$2,479,452	$2,625,834	$2,766,943
14. Non-Federal	Exemption 4				
15. **Total** (sum of lines 13 and 14)					

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project

	Future Funding Periods (Years)			
(a) Grant Program	(b) First	(c) Second	(d) Third	(e) Fourth
16. DE-FOA-0000096		$0	$0	$0
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$0	$0	$0	$0

Section F - Other Budget Information

21. Direct Charges	22. Indirect Charges	A provisional indirect was used

23. Remarks

Although the FOA requests the SF424 by "budget periods" we have also included one by year.

Applicant Name: Algenol Biofuels Inc. Award Number: Year 5

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. DE-FOA-0000096	81.087				Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$0		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) DE-FOA-0000096	(2)	(3)	(4)	
a. Personnel	Exemption 4				
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income					$0

Authorized for Local Reproduction

Section C - Non-Federal Resources

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE-FOA-0000096	Exemption 4			
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)				

Section D - Forecasted Cash Needs

	Total For First Year	1st Quarter	2nd Quarter	3rd Quarter	4th quarter
13. Federal	$10,122,637	$2,250,406	$2,479,452	$2,625,834	$2,766,943
14. Non-Federal	Exemption 4				
15. **Total** (sum of lines 13 and 14)					

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project

	Future Funding Periods (Years)			
(a) Grant Program	(b) First	(c) Second	(d) Third	(e) Fourth
16. DE-FOA-0000096		$0	$0	$0
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$0	$0	$0	$0

Section F - Other Budget Information

21. Direct Charges

22. Indirect Charges A provisional indirect was used

23. Remarks

Although the FOA requests the SF424 by "budget periods" we have also included one by year.

Applicant Name: Algenol Biofuels Inc. Award Number: Total Project

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. DE-FOA-0000096	81.087			$25,000,000	Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$25,000,000		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) DE-FOA-0000096	(2)	(3)	(4)	
a. Personnel	Exemption 4				
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income					$0

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Section C - Non-Federal Resources

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE-FOA-0000096	$31,671,184	Exemption 4		
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)	$31,671,184			

Section D - Forecasted Cash Needs

	Total Budget Period 1	1st Quarter	2nd Quarter	3rd Quarter	4th quarter
13. Federal	$9,669,386	$2,342,099	$2,645,510	$2,758,464	$1,923,312
14. Non-Federal	Exemption 4				
15. **Total** (sum of lines 13 and 14)					

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project

	Future Funding Periods (Years)			
(a) Grant Program	(b) First - Phase !!	(c) Second	(d) Third	(e) Fourth
16. DE-FOA-0000096	$15,330,614	$0	$0	$0
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$15,330,614	$0	$0	$0

Section F - Other Budget Information

21. Direct Charges	22. Indirect Charges

23. Remarks Per page 15 in the FOA, the funding is based on Phases / Periods not years. Accordingly, the Forecasted Cash Needs in section D above agrees to the Phase I Total Project costs in the Budget justification file (in our case this is an 11 month period). In Section E, again we based it on Budget Periods as directed by the FOA. We have yearly information available and have included that as well. All tabs are labeled accordingly.

Applicant Name: Algenol Biofuels Inc. Award Number: Phase I

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. DE-FOA-0000096	81.087			$10,722,046	Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$10,722,046		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) DE-FOA-0000096	(2)	(3)	(4)	
a. Personnel	Exemption 4				
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income					$0

Authorized for Local Reproduction

Section C - Non-Federal Resources

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE-FOA-0000096	$2,105,796	Exemption 4		
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)	$2,105,796			

Section D - Forecasted Cash Needs

	Total Budget Period 1	1st Quarter	2nd Quarter	3rd Quarter	4th quarter
13. Federal	$10,722,046	$2,605,265	$2,908,675	$3,021,629	$2,186,477
14. Non-Federal	Exemption 4				
15. **Total** (sum of lines 13 and 14)					

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project

	Future Funding Periods (Years)			
(a) Grant Program	(b) First - Phase II	(c) Second	(d) Third	(e) Fourth
16. DE-FOA-0000096	$14,277,954	$0	$0	$0
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$14,277,954	$0	$0	$0

Section F - Other Budget Information

21. Direct Charges	22. Indirect Charges

23. Remarks

Per page 15 in the FOA, the funding is based on Phases / Periods not years. Accordingly, the Forecasted Cash Needs in section D above agrees to the Phase I Total Project costs in the Budget justification file (in our case this is an 11 month period). In Section E, again we based it on Budget Periods as directed by the FOA. We have yearly information available as well but wanted to follow the guidelines of the FOA.

Applicant Name: Algenol Biofuels Inc. Award Number: Phase II

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. DE-FOA-0000096	81.087			$14,277,954	Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$14,277,954		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) DE-FOA-0000096	(2)	(3)	(4)	
a. Personnel	Exemption 4				
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income					$0

Authorized for Local Reproduction

Section C - Non-Federal Resources

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE-FOA-0000096	$20,873,531	Exemption 4		
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)	$20,873,531			

Section D - Forecasted Cash Needs

	Total Budget Period II	1st Quarter	2nd Quarter	3rd Quarter	4th quarter*
13. Federal	$14,277,954	$5,956,601	$7,797,363	$523,990	
14. Non-Federal	Exemption 4				
15. **Total** (sum of lines 13 and 14)					

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project

	Future Funding Periods (Years)			
(a) Grant Program	(b) First - Phase !!	(c) Second	(d) Third	(e) Fourth
16. DE-FOA-0000096		$0	$0	$0
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$0	$0	$0	$0

Section F - Other Budget Information

21. Direct Charges

22. Indirect Charges A provisional indirect was used

23. Remarks

* Since Phase II is a 25 month budget period, the 4th "quarter" was used to capture the remaining months (July '11 - December 12). The cash needs were not affected since Federal Funds were depleted in the prior quarter

Applicant Name: Algenol Biofuels Inc. Award Number: Phase III

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. DE-FOA-0000096	81.087				Exemption 4	
2.						
3.						
4.						
5. Totals		$0	$0	$0		

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) DE-FOA-0000096	(2)	(3)	(4)	
a. Personnel	Exemption 4				
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. **Totals** (sum of 6i-6j)					
7. Program Income					$0

Authorized for Local Reproduction

Section C - Non-Federal Resources

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) **Totals**
8. DE-FOA-0000096	$14,496,909	Exemption 4		
9.				
10.				
11.				
12. **Total** (sum of lines 8 - 11)	$14,496,909			

Section D - Forecasted Cash Needs

	Total Budget Period III	1st Quarter	2nd Quarter	3rd Quarter	4th quarter*
13. Federal					
14. Non-Federal	Exemption 4				
15. **Total** (sum of lines 13 and 14)					

Section E - Budget Estimates of Federal Funds Needed for Balance of the Project

	Future Funding Periods (Years)			
(a) Grant Program	(b) First - Phase !!	(c) Second	(d) Third	(e) Fourth
16. DE-FOA-0000096		$0	$0	$0
17.				
18.				
19.				
20. **Total** (sum of lines 16-19)	$0	$0	$0	$0

Section F - Other Budget Information

21. Direct Charges	22. Indirect Charges	A provisional indirect was used

23. Remarks

* Since Phase III is a 24 month budget period, the 4th "quarter" was used to capture the remaining months (July '13 - December '14). No Federal Funds were requested for this period.

STATEMENT OF PROJECT OBJECTIVES
Algenol Biofuels Inc.
Pilot-Scale Integrated Biorefinery for Producing Ethanol from Hybrid Algae

A. PROJECT OBJECTIVES

Exemption 4

B. PROJECT SCOPE

The DOE Office of Energy Efficiency and Renewable Energy (EERE) has established performance goals. Among these goals are to: 1) dramatically reduce, or even end, dependence on imported oil; and 2) spur the creation of the domestic bio-industry. To that end, the Office of the Biomass Program is offering to fund integrated biorefinery projects under this FOA entitled "Demonstration of Integrated Biorefinery Operations". The FOA lists three main criteria for selection; 1) technical merit and rationale, 2) credible economics and competitive advantages that justify an award, and 3) knowledge and experience in project management.

Algenol and its collaborators, The Dow Chemical Company, National Renewable Energy Laboratory, Membrane Technology & Research Inc., and The Georgia Institute of Technology, have collectively prepared an application that is responsive to the selection criteria as detailed below.

Exemption 4

Exemption 4

C. TASKS TO BE PERFORMED

Exemption 4

Exemption 4

Exemption 4

Exemption 4