## b. Fringe Benefits

| | Budget Period 1 | Budget Period 2 | Budget Period 3 | Total |
|---|---|---|---|---|
| Rate applied: | Exemption 4 | | | |
| Total fringe requested: | | | | |

**A federally approved fringe benefit rate agreement, or a proposed rate supported and agreed upon by DOE for estimating purposes is required if reimbursement for fringe benefits is requested. Please check (X) one of the options below and provide the requested information, if it has not already been provided to the Contracting Officer, OR if it has changed since it was. Calculate the fringe rate and enter the total amount in Section B, line 6.b. ("Fringe Benefits") of form SF-424A.**

____ **A fringe benefit rate has been negotiated with, or approved by, 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.**
*(When this option is selected, a presentation of the budget that demonstrates the appliction of the approved rate, to arrive at the proposed fringes benefits dollars should also be provided.)*

XXX **There is not a current, federally approved rate agreement negotiated and available.**
*(When this option is checked, the entity preparing this form shall submit a rate proposal in the format provided at the following website, 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. Go to https://www.eere-pmc.energy.gov/forms.aspx and select PMC 400.2 Sample Rate Proposal.)*

**Additional explanation/comments (as necessary)**

The Fringe Benefits rate is based on current actual and adjusted in the future periods for projected hiring salary levels.Currently a larger portion of our employess are senior level and as we expend they will represent a smaller portion of our staff. Since the majority of our fringe benefits is for healthcare insurance, the effect of this demographic change is that fringe benefits will be a higher percent of compensation. Please see the Indirect tab at the end of this file for the Fringe calculation.

## 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** | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 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** | | | | | | | |
| 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 |
| Analytical supplies | Exemption 4 | | | | |
| Chemicals, solvents, polymers | | | | | |
| Disposable lab supplies (e.g. gloves) | | | | | |
| Safety supplies | | | | | |
| Minor engineering equipment | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| **Budget Period 1 Total** | | | | | |
| **Budget Period 2** | | | | | |
| | | | | | |
| | Exemption 4 | | | | |
| Analytical supplies | | | | | |
| Chemicals, solvents, polymers | | | | | |
| Disposable lab supplies (e.g. gloves) | | | | | |
| Safety supplies | | | | | |
| Minor engineering equipment | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| **Budget Period 2 Total** | | | | | |
| **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 | | | | | |
| | | | | | |
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| | | | | | |
| | | | | | |
| **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, alignment, and placement (Task 4.) Required for expanding CRV | $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 |
| Exemption 4 | Exemption 4 | | |
| **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 | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

**Total Project Cost:** $Exemption 4

**Cost Share Percent of Award:** Exempt %

**Additional Explanations/Comments (as necessary)**

Redacted

Exemption 4

Redacted

Exemption 4

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Exemption 4

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PMC123.1 - Budget Justification for SF 424A Budget

## Instructions and Summary

**Award Number:** DE-FOA-0000096
**Award Recipient:** Algenol Biofuels Inc.

**Date of Submission:** Jan-10
**Form submitted by:** Algenol Biofuels Inc.
(May be award recipient or sub-recipient)

**Please read the instructions on each page before starting.**
**If you have any questions, please ask your DOE contact. It will save you time!**

**On this form, provide detailed support for the estimated project costs identified on the SF-424A form (Budget).**

- **The dollar amounts on this page must match the amounts on the associated SF-424A.**
- The award recipient and each sub-recipient with estimated costs of $100,000 or more must complete this form and a SF-424A form.
- The total budget presented on this form and on the SF424A must include both Federal (DOE), and Non-Federal (cost share) portions, thereby reflecting TOTAL PROJECT COSTS proposed.
- **For costs in each Object Class Category on the SF-424A, complete the corresponding worksheet on this form (tab at the bottom of the page).**
- **All costs incurred by the preparer's sub-recipients, vendors, contractors, consultants 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.**

**SUMMARY OF BUDGET CATEGORY COSTS PROPOSED**
(Note: The values in this summary table are from entries made in each budget category sheet.)

| CATEGORY | Budget Period 1 Costs | Budget Period 2 Costs | Budget Period 3 Costs | Total Costs | Project Costs % | Comments (Add comments as needed) |
|---|---|---|---|---|---|---|
| a. Personnel | Exemption 4 | | | | | |
| b. Fringe Benefits | | | | | | |
| c. Travel | | | | | | |
| d. Equipment | | | | | | |
| e. Supplies | | | | | | |
| f. Contractual | | | | | | |
| Sub-recipient | | | | | | |
| FFRDC | | | | | | |
| Vendor | | | | | | |
| Total Contractual | | | | | | |
| g. Construction | | | | | | |
| h. Other Direct Costs | | | | | | |
| i. Indirect Charges | | | | | | |
| Total Project Costs | | | | | | |

**Additional Explanations/Comments (as necessary)**

## a. Personnel

| Task # | Title | Position Title | Budget Period 1 | | | Budget Period 2 | | | Budget Period 3 | | | Project Total Hours | Project Total Dollars |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Time (Hours) | Pay Rate ($/Hr) | Total Budget Period 1 | Time (Hours) | Pay Rate ($/Hr) | Total Budget Period 2 | Time (Hours) | Pay Rate ($/Hr) | Total Budget Period 3 | | |
| 1. Generation 2A Receiver Design | | | 10000 | | $423,000 | 600 | | $24,000 | 800 | | $31,000 | 11400 | |
| EXAMPLE | | Sr. Engineer | 2000 | $85.00 | $170,000 | 200 | $50.00 | $10,000 | 200 | $50.00 | $10,000 | 2400 | |
| ONLY!!! | | Electrical engineers | 6200 | $35.00 | $217,000 | 400 | $35.00 | $14,000 | 600 | $35.00 | $21,000 | 7200 | |
| | | Technician | 1800 | $20.00 | $36,000 | 0 | $0.00 | $0 | 0 | $0.00 | $0 | 1800 | |
| | | | | | | | | | | | | | |

Exemption 4

Exemption 4

Exemption 4

| | | | |
|---|---|---|---|
| | | **Total Personnel Costs** | Exemption 4 |

**Additional Explanations/Comments (as necessary)**

For existing employees, salary rates were based on actual. For new hires, their salary was based on industry standards for their respective position, experience and education. In all cases, we will be Davis-Bacon compliant. /s/ Craig R. Smith, M.D.

## b. Fringe Benefits

| | Budget Period 1 | Budget Period 2 | Budget Period 3 | Total |
|---|---|---|---|---|
| Rate applied: | Exemption 4 | | | |
| Total fringe requested: | | | | |

**A federally approved fringe benefit rate agreement, or a proposed rate supported and agreed upon by DOE for estimating purposes is required if reimbursement for fringe benefits is requested. Please check (X) one of the options below and provide the requested information, if it has not already been provided to the Contracting Officer, OR if it has changed since it was. Calculate the fringe rate and enter the total amount in Section B, line 6.b. ("Fringe Benefits") of form SF-424A.**

____ **A fringe benefit rate has been negotiated with, or approved by, 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.**
*(When this option is selected, a presentation of the budget that demonstrates the appliction of the approved rate, to arrive at the proposed fringes benefits dollars should also be provided.)*

XXX **There is not a current, federally approved rate agreement negotiated and available.**
*(When this option is checked, the entity preparing this form shall submit a rate proposal in the format provided at the following website, 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. Go to https://www.eere-pmc.energy.gov/forms.aspx and select PMC 400.2 Sample Rate Proposal.)*

**Additional explanation/comments (as necessary)**

The Fringe Benefits rate is based on current actual and adjusted in the future periods for projected hiring salary levels.Currently a larger portion of our employess are senior level and as we expend they will represent a smaller portion of our staff. Since the majority of our fringe benefits is for healthcare insurance, the effect of this demographic change is that fringe benefits will be a higher percent of compensation. Please see the Indirect tab at the end of this file for the Fringe calculation.

## 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** | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 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** | | | | | | | |
| 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 |
| | | | | | |
| | | | | | |
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| | | | | | |
| | | | | | |
| | 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 | | | | | |
| | | | | | |
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| | | | | | |
| | | | | | |
| **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. |
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| | | | |
| **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 |
| | | | |
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| | | | |
| **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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