From: Bill Rooney
To: "Spurlin, Shayna"

Subject: RE: GA Proposal - Budget Justification

**Date:** Thursday, August 27, 2009 2:53:00 PM

Attachments: DOE PMC123 1-Budget Justification Salinity and Sorghum.xls

#### Shayna:

Attached is my best attempt. Here are my disclaimers:

- 1. As for years 2 and 3, I just assumed flat costs through the life of the project, so years 2 and 3 mirror exactly the activities and costs of year 1.
- 2. Indirect was simpling calculated by muliplying the total costs by
- 3. You're lucky I've had to fill one of these out before, or I would have just sent the damn thing back empty and told everybody to forget about it.

If you have questions, you can call and ask, but I'm pretty sure that I won't have a good answer.

regards,

bill

Dr. William L. Rooney Professor, Sorghum Breeding and Genetics Chair, Plant Release Committee Texas A&M University College Station, Texas 77843-2474 979 845 2151

----Original Message-----

From: Spurlin, Shayna [mailto:sfspurlin@tamu.edu]

Sent: Thursday, August 27, 2009 2:36 PM

To: Bill Rooney

**Subject:** RE: GA Proposal - Budget Justification

The totals shown on the individual task sheets don't include indirect ... it looks like Bob just transferred those totals to the overall tab and then added the IDC to that lump sum.

Also, Steve Searcy informed me that only a scope of work for year 1 was provided and so he could only complete the justification for year 1 and not the three year total also listed on that budget worksheet. For now, we are just going with that (justifying year 1 expenditures) while I talk to GA and see what has to be submitted to DOE. If worst comes to worst, we can just copy all the same materials and supplies, etc., that you list in the justification for each of the three years and then correct when we submit updated information at the beginning of years two and three.

That is probably all clear as mud ... just call me if you have other questions and we can discuss.

Thanks! Shayna Spurlin Texas AgriLife Research 979.845.2364 office 979.255.8319 cell 979.458.2155 fax

From: Bill Rooney [mailto:wlr@tamu.edu] Sent: Thursday, August 27, 2009 2:29 PM

**To:** Spurlin, Shayna

**Subject:** RE: GA Proposal - Budget Justification

#### Shayna:

Is the total include the indirect? If so, then the category totals will change and there are certain things on calculation that I'm not sure about.

regards,

bill

Dr. William L. Rooney Professor, Sorghum Breeding and Genetics Chair, Plant Release Committee Texas A&M University College Station, Texas 77843-2474 979 845 2151

-----Original Message-----

From: Spurlin, Shayna [mailto:sfspurlin@tamu.edu]

**Sent:** Thursday, August 27, 2009 10:29 AM **To:** Rooney Bill; Steve Searcy; James Richardson

Cc: Avant, Bob; Zak, Kendra

**Subject:** GA Proposal - Budget Justification

Importance: High

PLEASE SUBMIT TO ME BY 10 A.M. tomorrow, Friday, August 28, 2009

#### Good morning, All:

We are working to complete this proposal for submission to General Atomics, and we are required to use the DOE justification form (PMC123.1) that is attached to this email. Also attached is the Budget spreadsheet for this project containing a separate tab for each of the task areas.

Please complete the PMC123.1 form for your specific task area using the numbers in the attached budget.xls spreadsheet. Please do not change any of the numbers ... the project total here has been approved. We just need you to complete the justification for materials, equipment, supplies, and travel. We will take care of the other tabs and then take care of combining into one large project justification.

If you have any questions, please let us know.

Thanks for your help!

Shayna Spurlin Texas AgriLife Research 979.845.2364 office 979.255.8319 cell 979.458.2155 fax

From: Avant, Bob

**Sent:** Friday, August 21, 2009 3:16 PM

To: shay-simpson@tamu.edu; Spurlin, Shayna

Subject: GA

Bob Avant
Program Director
Texas AgriLife Research
979/845-2908
512/422-6171 (Cell)
bavant@tamu.edu
http://agbioenergy.tamu.edu



# **Instructions and Summary**

Award Number:	Date of Submission:	
Award Recipient:	Form submitted by:	
	<del></del>	(May be award recipient or sub-recipient)

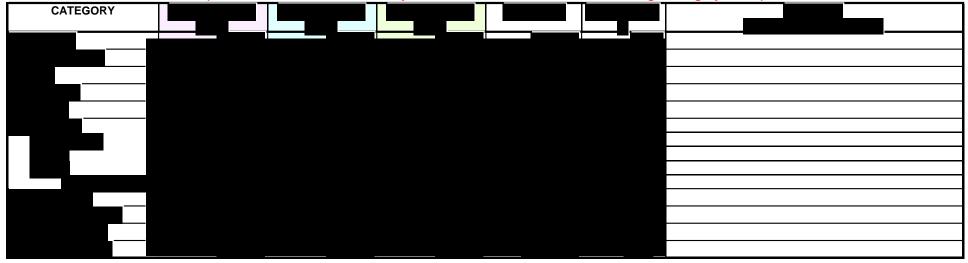
# Please read the instructions on each page before starting. If you have any questions, please ask your DOE contact. It will save you time!

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.)



Additional Explanations/Comments (as necessary)

## a. Personnel

#### PLEASE READ!!!

List costs solely for employees of the entity completing this form (award recipient or sub-recipient). All other personnel costs (of subrecipients or other contractual efforts of the entity preparing this) must be included under f., Contractual. This includes all consultants and FFRDCs.

Identify positions to be supported. Key personnel should be identified by title. All other personnel should be identified either by title or a group category. State the amounts of time (e.g., hours or % of time) to be expended, the composite base pay rate, total direct personnel compensation and identify the rate basis (e.g., actual salary, labor distribution report, technical estimate, state civil service rates, etc.).

Add rows as needed. Formulas/calculations will need to be entered by the preparer of this form. Please enter formulas as shown in the example.

Task #	Position Title	Budget Period 1 Budget Period 2 Budget Period 3		riod 3	Project	Project	Rate Basis						
and Title		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	Total Hours	Total Dollars	
2. (Task 2	Title)												
2 (Took 2	Title)												
3. (Task 3 etc.	Title)												
Cio.													

a. Personnel Page 1 of 2

Task #	Position Title  Budget Per  Time Pay (Hours) Rate (\$/Hr)	Budget Period 1			Budget Period 2			Budget Period 3			Project		Rate Basis
and Title		Total Budget Period 1	Time (Hours)	Pay Rate (\$/Hr)	Total Budget Period 2	Time (Hours)	Pay Rate (\$/Hr)	Total Budget Period 3	Total Hours	Total Dollars			

additional Explanations/Comments (as necessary)									

a. Personnel

# **b. Fringe Benefits**

Budget Period 1	Budget Period 2	Budget Period 3	
0.0%	0.0%	0.0%	

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 application of the approved rate, to arrive at the proposed fringes benefits dollars should also be provided.)

(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.)

# 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
			Bu	dget Period 1	
EXAMPLE ONLY!!! Thermal shock chamber	2	\$20,000			Reliability testing of PV modules- Task 4.3
			\$0		
			\$0		
			\$0		
			\$0		
			\$0		
			\$0		
			\$0		
			\$0		
			\$0		
Budget Period 1 Total			\$0		
				dget Period 2	
			\$0		
			\$0		
			\$0		
			\$0		
			\$0		
			\$0		
			\$0		
			\$0		
			\$0		
Budget Period 2 Total			\$0		

d. Equipment

Equipment Item	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need						
Budget Period 3											
			\$0								
			\$0								
			\$0								
			\$0								
			\$0								
			\$0								
			\$0								
			\$0								
			\$0								
			\$0								
			\$0								
Budget Period 3 Total			\$0								
PROJECT TOTAL			\$0								

Additional Explanations/Comments (as necessary)								

d. Equipment

# 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)		Cost per Traveler	Cost per Trip	Basis for Estimating Costs
		<b>Budget Period</b>	1				
Domestic Travel							
<b>EXAMPLE ONLY!!!</b> Visit to PV cell mfr. to set up vendor agreement	2			2	\$650	\$1,300	Internet prices
San Diego for project meetings	4			3	\$1,000	\$4,000	internet prices
Local Travel to conduct research	4			5	\$500	\$2,000	
						\$0	
						\$0	
						\$0	
						\$0	
						\$0	
						\$0	
Domestic Travel subtotal						\$6,000	
International Travel							
						\$0	
						\$0	
						\$0	
						\$0	
International Travel subtotal						\$0	
Budget Period 1 Total						\$6,000	

c. Travel Page 1 of 2

Purpose of travel	No. of	Depart From	Destination	No. of	Cost per	Cost per	Basis for Estimating Costs
·	Travelers	(not required	(not required		Traveler	Trip	
		for domestic	for domestic				
		travel)	travel)				
		<b>Budget Period</b>	12				
Domestic Travel							
San Diego for project meetings	4			3	\$1,000		internet price
Local Travel to conduct research	4			5	\$500	\$2,000	internet price
						\$0	
						\$0	
						\$0	
						\$0	
Domestic Travel subtotal						\$6,000	
International Travel						•	
						\$0	
						\$0	
						\$0 \$0	
International Travel subtotal						\$0 \$0	
International Travel Subtotal  Budget Period 2 Total						\$6, <b>000</b>	
Budget Period 2 Total		Budget Period	12			\$6,000	
Domestic Travel		Budget Period	3	1			
San Diego for Project Meeting	4			3	\$1,000	\$4,000	
Local Travel for Research	4			5	\$500	\$2,000	
2004 Travol of Research					φοσσ	\$0	
						\$0	
						\$0	
						\$0	
						\$0	
Domestic Travel subtotal						\$6,000	
International Travel							
						\$0	
						\$0	
						\$0	
						\$0	
International Travel subtotal						\$0	
Budget Period 3 Total						\$6,000	
PROJECT TOTAL						\$18,000	

Additional	<b>Explanations/Comments</b>	(as necessary)
Auditional		(as liecessaly)

c. Travel

# 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
		l l	Period 1		
EXAMPLE ONLY!!! Wireless DAS components	10	\$360.00	\$3,600	Catalog price	For Alpha prototype - Task 2.4
Fuel			\$10,000	estimated pump price	
Expendables for research			\$52,000	estimated on price	
			\$0		
			\$0		
			\$0		
			\$0		
			\$0		
			\$0		
			\$0		
			\$0		
Budget Period 1 Total			\$62,000		
			Budget	Period 2	
Fuel			\$10,000		
Expendables for research			\$52,000		
			\$0		
			\$0		
			\$0		
			\$0		
			\$0		
			\$0		
			\$0		
			\$0		
			\$0		
Budget Period 2 Total			\$62,000		

e. Supplies Page 1 of 2

General Category of Supplies	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need
			Budget F	Period 3	
Fuel			\$10,000		
Expendables for research			\$52,000		
			\$0		
			\$0		
			\$0		
			\$0		
			\$0		
			\$0		
			\$0		
			\$0		
			\$0		
Budget Period 3 Total			\$62,000		
PROJECT TOTAL			\$186,000		

Additional Explanations/Comments (as necessary)		

e. Supplies Page 2 of 2

## f. Contractual

# PLEASE READ!!!

The entity completing this form must provide all costs related to sub-recipients, vendors, contractors, consultants and FFRDC partners in the applicable boxes below.

#### Sub-recipients (partners, sub-awardees):

For each sub-recipient with total project costs of \$100,000 or more, a separate SF-424A budget and PMC123.1 budget justification form must be submitted. These sub-recipient forms may be completed by either the sub-recipients themselves or by the preparer of this form. The budget totals on the sub-recipient's forms must match the sub-recipient entries below.

The preparer of this form need only provide further support of the completed sub-recipient budget forms as they deem necessary. The support to justify the budgets of sub-recipients with estimated costs less than \$100,000 may be in any format, and at a minimum should provide what Statement of Project Objectives task(s) are being performed, the purpose/need for the effort, and a basis of the estimated costs that is considered sufficient for DOE evaluation.

#### **Vendors (includes contractors and consultants):**

List all vendors, contractors and consultants supplying commercial supplies or services used to support the project. The support to justify vendor costs (in any amount) should provide the purpose for the products or services and a basis of the estimated costs that is considered sufficient for DOE evaluation.

## Federal Research and Development Centers (FFRDCs):

For FFRDC partners, award recipient will provide a Field Work Proposal (if not already provided with the original application), along with the FFRDC labor mix and hours, by category and FFRDC major purchases greater than \$25,000, including Quantity, Unit Cost, Basis of Cost, and Justification. The award recipient may allow the FFRDC to provide this information directly to DOE.

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

Sub-Recipient Name/Organization	Purpose/Tasks in SOPO	Budget Period 1	Budget Period 2	Budget Period 3	Project Total
		Costs	Costs	Costs	
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
TBD	Custom Contracting - Farm Operations including but not limited to planting, irrigation, and harvesting	\$70,000	\$70,000	\$70,000	\$210,000
					\$0
					\$0
					\$0
					\$0

f. Contractual Page 1 of 2

Sub-Recipient Name/Organization	Purpose/Tasks in SOPO	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Tota
					\$
					\$
					\$
	Sub-total	\$70,000	\$70,000	\$70,000	\$210,00
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 Tota
KAMPLE ONLY!!! ABC Corp.	Vendor for developing custom robotics to perform lens inspection, alignment, and placement (Task 4). Required for expanding CPV module mfg. capacity. Cost is from competitive quotes.	\$32,900	\$86,500		\$119,40
					\$
					\$
					\$
					\$
					\$
		\$0	\$0	\$0	\$
FFRDC Name/Organization	Purpose	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Tota
					•
					\$
		\$0	\$0	\$0	\$
Total Contractu		\$70,000	\$70,000	\$70,000	\$210,00

f. Contractual Page 2 of 2

# 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 activities:

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									
	Budge	et Period 2							
Budget Period 2 Total	\$0								

g. Construction Page 1 of 2

General Description	Cost	Basis of Cost	Justification of need						
Budget Period 3									
Budget Period 3 Total	\$0								
PROJECT TOTAL	\$0								
	· .	<u>'</u>							
onal Explanations/Comments (as necessary)									

g. Construction Page 2 of 2

## 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
Graduate Student Tuition	\$8,000	Established UCD costs	Support of graduate students working on project
Graduate Student Tuition	\$8,000	Established UCD costs	Support of graduate students working on project
Graduate Student Tuition	\$8,000	Established UCD costs	Support of graduate students working on project
Budget Period 1 Total	\$24,000		
		Budget Period 2	
Graduate Student Tuition		established UCD costs	support of graduate students working on project
Graduate Student Tuition	· ·	established UCD costs	support of graduate students working on project
Graduate Student Tuition	\$8,000	established UCD costs	support of graduate students working on project
Budget Period 2 Total	\$24,000		
		Budget Period 3	
Graduate Student Tuition		established UCD costs	support of graduate students working on project
Graduate Student Tuition		established UCD costs	support of graduate students working on project
Graduate Student Tuition	\$8,000	established UCD costs	support of graduate students working on project
Budget Period 3 Total	\$24,000		
PROJECT TOTAL	\$72,000		

# Additional Explanations/Comments (as necessary)

#### **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!!!		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
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0

Cost Share Page 1 of 2

Organization/Source	Type	Cost Share Item	Budget	Budget	Budget	Total Project
	(cash or		Period 1	Period 2	Period 3	Cost Share
	other)		Cost Share	Cost Share	Cost Share	
						\$0
						\$0
						\$0
						\$0
		Totals	\$0	\$0	\$0	\$0
Total Project Cost: \$1,396,380 Cost Share Percent of Award		t of Award:	0.0%			
Additional Explanation	ns/Commen	ts (as necessary)				

Additional Explanations/Comments (as necessary)

Cost Share Page 2 of 2