

## ORNL BUDGET JUSTIFICATION

Cost estimates presented in this proposal have been reclassified to be comparable with proposals from other research institutions. At Oak Ridge National Laboratory (ORNL), actual costs will be collected and reported in accordance with the Department of Energy (DOE) approved cost accounting system. Total cost presented in this proposal and actual costs will be equivalent, as will the subtotal of direct and indirect costs. Details of the budget breakdown of all budget categories, including salaries, benefits and fringe, and directs costs are described below. In consideration of cost estimates for ORNL staff support, it is important to understand that all ORNL costs are covered by proposals such as this one. There is no “base” funding for DOE Office of Science multiprogram national laboratories, including ORNL.

### A. Senior/Key Personnel

ORNL's cost accounting system utilizes wage pools, which are calculated hourly rates for staff in similar job categories and salary ranges. Due to the use of these wage pools, the salary figure listed for Senior/Key Personnel represents the average salary for a staff scientist within a specific wage pool and not actual salary. For budgeting purposes, one calendar month is assumed to be 152 hours for ORNL staff. Fringe benefits are included in the ORNL employee wage pool rate at 39.6% for FY19 and 43.9% for out years for ORNL staff. Below is a summary of the role of each Senior/Key Person.

#### **Gregory R. Watson, Principal Investigator**

Calendar Months: 24

Dr. Watson will serve as Principal Investigator and will provide technical advice, system design, and development support for the project.

### B. Other Personnel

Not applicable.

### C. Equipment

Not applicable.

### D. Travel

Travel amount includes estimated travel expense plus 2.8% travel administration value added tax (VAT) or "puddle" where G&A is applied on the puddle cost, but not the travel expense. Base travel cost is therefore made up of both the travel expense and 2.8% VAT.

Travel costs of \$2,000/year (plus the 2.8% VAT) Years 1-2 be for 2 trips/year \* 1 people @ ~\$1000/trip at which the PI will present their research results and coordinate the project via a face-to-face meeting.

E. Participant/Trainee Support Costs

Not applicable.

F. Other Direct Costs

Line 8. Organizational Burden Administration

Organizational Burden Administration costs include utilities (purchased utilities as well as laboratory staff associated with maintaining the utility systems), space charges (building maintenance), division managerial oversight, technical and administrative support, and other support personnel such as plant and equipment, instrumentation and controls, environmental, safety, and health, finance and budget, quality, and health physics provided for the general benefit of all staff and R&D activities. Inclusion of these costs is necessary to provide a full accounting of estimated cost for the project period. All cost will be collected and reported in ORNL's cost accounting system, as approved by DOE.

G. Direct Costs

Total direct costs are \$251,715 over project period.

H. Indirect Costs = \$98,285 over project period.

ORNL overhead is applied on a cost element basis. ORNL overhead supports central management and administrative costs for the total laboratory, central maintenance activities, limited general plant equipment purchases (major items not covered by normal maintenance support), etc. For this proposal period, the composite ORNL Overhead rates are 39.46% for staff labor and 17.06% for travel.

**ORNL Operating Rates**

<b>Description</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>
General & Administrative	14.4%	14.4%	14.4%
Institutional	4.4%	4.4%	4.4%
LDRD	4.0%	4.0%	4.0%
Management Fee	0.9%	0.9%	0.9%
Travel Administration VAT	2.8%	2.8%	2.8%
Site Services	10.9%	10.9%	10.9%
SPP Safeguards & Security	3.5%	3.5%	3.5%
<i>Composite Overhead Rate on:</i>			
<i>Labor</i>	<i>39.46%</i>	<i>39.46%</i>	<i>39.46%</i>
<i>Travel</i>	<i>17.06%</i>	<i>17.06%</i>	<i>17.06%</i>
Fringe Benefits (ORNL Staff)	39.6%	43.9%	43.9%
<b>Wage Pools (\$/hour)</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>
S&T D	\$145.37	\$152.37	\$159.20
<b>Organizational Burden (\$/hour)</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>
R&D Staff	\$53.68	\$54.75	\$55.85

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**Department of Energy**

ORNL Site Office  
P.O. Box 2008  
Oak Ridge, Tennessee 37831-6269

January 11, 2018

Mr. J. Scott Branham  
Chief Financial Officer  
Oak Ridge National Laboratory  
UT-Battelle, LLC  
Post Office Box 2008  
Oak Ridge, Tennessee 37831-6231


Dear Mr. Branham:

**CONTRACT NUMBER DE-AC05-00OR22725, GENERIC LETTER ON  
UT-BATTELLE, LLC (UT-BATTELLE) OAK RIDGE NATIONAL LABORATORY  
RATES**

The enclosed letter is furnished annually to answer questions on rates charged by UT-Battelle when performing work for sponsors other than the Department of Energy.

If there are any questions or additional information is required, please contact Rakisha Beatty at (865) 576-4522.

Sincerely,

  
Judson A. Kingman  
Contracting Officer

Enclosure

cc w/enclosure:  
Deborah U. Mann, ORNL  
Jeremy D. Bivins, SC-OR  
Jerry M. McKeehan, SC-OR  
Michael D. Ashworth, SC-OSO  
Rakisha M. Beatty, SC-OSO  
Michele G. Branton, SC-OSO  
H. Randall Fair, SC-OSO  
Johnny O. Moore, SC-OSO

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**Department of Energy**

ORNL Site Office  
P.O. Box 2008  
Oak Ridge, Tennessee 37831-6269

January 11, 2018

To Whom It May Concern:

**OAK RIDGE NATIONAL LABORATORY (ORNL) - FULL COST RECOVERY**

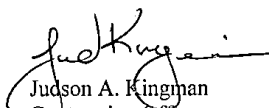
UT-Battelle, LLC (UT-Battelle) manages and operates ORNL for the Department of Energy (DOE) under management and operating contract number DE-AC05-00OR22725. ORNL is a multi-program laboratory facility performing applied and basic scientific research. In addition to performing research for DOE, ORNL conducts research for the private sector, other Federal agencies, and states. All work is performed on the basis of full-cost recovery, as mandated by law. For ORNL, full cost includes all direct costs incurred in performing research work, all allocable costs incurred by DOE or UT-Battelle, and a Federal Administrative Charge (FAC) of three percent of these costs. The FAC does not apply when prices or charges are otherwise established or prohibited by statute, Executive Order, or regulation. In addition, the Department has established exceptions for assessing the FAC for small business concerns; institutions of higher education; nonprofit entities, State and Local Governments; and certain research, development, testing, evaluation, training, and exercises directly related to specified activities and approved by the Secretary of Energy.

Generally, rates charged by UT-Battelle are based on a standard rate methodology. Under this process, rates for labor, organization burden, space pool, general and administrative, etc., are set at the beginning of the year. As costs are incurred, the difference between the actual costs incurred and the standard rate being charged is accumulated in a variance account. The variance balances are routinely reviewed, balances are distributed, and standard rates adjusted, as necessary. All ORNL employees are assigned to an organization. When a cost objective is charged for an employee's time, an indirect organizational burden cost is applied, at an hourly rate, on a causal beneficial relationship in the same proportion as direct labor hours associated with each project. The application of these types of cost and the elements that make up the rates are approved by DOE via the UT-Battelle Cost Accounting Standards disclosure statement.

The accounting system, operated and maintained by UT-Battelle, meets all contractual requirements and is fully integrated with the DOE accounting system. The system conforms to DOE Orders and is periodically reviewed by DOE. The system is also subject to routine audits by the UT-Battelle Internal Audit and the DOE Office of Inspector General.

If there are any questions or additional information is required, please contact Rakisha Beatty, of the ORNL Site Office, at (865) 576-4522 or Jerry McKeen, of the Financial Evaluation and Accountability Division, at (865) 576-0863.

Sincerely,

  
Judson A. Kingman  
Contracting Officer

SUMMARY BUDGET ESTIMATE

LABOR		YEAR 1										YEAR 2										TOTAL			
BADGE	NAME	HOURS	SALARY	FRINGE	OB	VAT	OH	PT	COST	FTEs	CAL MOS	HOURS	SALARY	FRINGE	OB	VAT	OH	PT	COST	FTEs	CAL MOS	HOURS	COST	FTEs	CAL MOS
938444	Gregory R Watson	710.9	75,127	32,604	16,100		48,869	-	172,699	0.39	4.69	682.0	75,067	32,954	15,752		48,846	-	172,619	0.37	4.50	1,392.9	345,318	0.76	9.19
	Senior/Key Personnel Subtotal	710.9	75,127	32,604	16,100		48,869	-	172,699	0.39	4.69	682.0	75,067	32,954	15,752		48,846	-	172,619	0.37	4.50	1,392.9	345,318	0.76	9.19
	Labor Subtotal	711	75,127	32,604	16,100		48,869	-	172,699	0.39	4.69	682.0	75,067	32,954	15,752		48,846	-	172,619	0.37	4.50	1,392.9	345,318	0.76	9.19
TRAVEL																									
		BASE	BASE			VAT	OH	PT	COST	FTEs	CAL MOS	BASE	BASE		OB	VAT	OH	PT	COST	FTEs	CAL MOS	BASE	COST	FTEs	CAL MOS
	Domestic	2,000	2,000			56	285	-	2,341			2,000	2,000			56	285	-	2,341				4,682		
	Travel Subtotal		2,000			56	285	-	2,341				2,000			56	285	-	2,341				4,682		
	TOTAL		77,127	32,604	16,100	56	49,154	-	175,040	0.39	4.69		77,067	32,954	15,752	56	49,131	-	174,960	0.37	4.50		350,000	0.76	9.19
	FAC								-										-				-		
	TOTAL including FAC								175,040										174,960				350,000		