

Category Budget

Budget Category Item	PIER	DOE Funds	TTI Funds	Total Cost (\$)
Personnel:				
Direct Labor	205,511	557,149	60,147	822,807
Fringe Benefits	57,543	156,002	16,841	230,386
Total Personal Services	263,054	713,151	76,988	1,053,193
Operating Expenses:				
Travel	3,800	30,400	3,800	38,000
Equipment				0
Materials / Supplies				0
Contractual	5,312	155,400	33,538	194,250
Drilling and well services		5,897,200	1,474,300	7,371,500
Total Operating Expenses	9,112	6,083,000	1,511,638	7,603,750
Overhead:				
Overhead	227,834	646,845	68,982	943,661
Total Overhead	227,834	646,845	68,982	943,661
Total	500,000	7,442,996	1,657,608	9,600,604

Note: The total budget for this DOE ARRA project is \$12,274,766 because, effective 9/17/10, the DOE funding was increased to \$9,819,813 and the Terralog match was increased to \$1,954,953. However, as of March 2011, \$2,674,162 of the total budget had already been spent in accordance with the DOE project agreement, prior to initiation of the Energy Commission cost share grant agreement.A27

BUDGET DETAILS

Direct Labor, Unloaded Hourly Rates

Name / Title / Job Classification	Maximum Rate to be Billed* (\$ / Hr)	Number of Hours	PIER Cost Share	DOE Funds	TTI Funds	Total Cost
Principal Investigator	\$ 125.06	1,602	\$50,040	\$135,661	\$14,645	\$200,346
Project Manager	\$ 64.05	1,848	\$29,563	\$80,149	\$8,653	\$118,365
Staff Geologist	\$ 37.55	3,196	\$29,974	\$81,262	\$8,773	\$120,009
Sr. Research Engineer Julia Diessl	\$ 40.38	2,862	\$28,865	\$78,255	\$8,449	\$115,569
Sr. Research Engineer Kang Lao	\$ 63.33	610	\$9,649	\$26,158	\$2,824	\$38,631
Sr. Facility Engineer Jeff Couture	\$ 63.33	1,210	\$19,140	\$51,888	\$5,601	\$76,629
Sr. Research Engineer Claudia Gruber	\$ 63.33	1,210	\$19,140	\$51,888	\$5,601	\$76,629
Sr. Research Engineer Eduard Marika	\$ 63.33	1,210	\$19,140	\$51,888	\$5,601	\$76,629
Total Direct Labor			\$205,511	\$557,149	\$60,147	\$822,807

PIER DOE TTI
0.249768 0.677132 0.0731

* Maximum salary rates are caps: PIER will not reimburse at a higher rate over the term of the project.

Fringe Benefits

Name / Title / Job Classification	Maximum % Rate to be Billed*	Base (Typically Total Direct Labor)	PIER Cost Share	DOE Funds	TTI Funds	Total Cost
Principal Investigator	28%	\$200,346	14,011	37,985	4,101	56,097
Project Manager	28%	\$118,365	8,278	22,442	2,422	33,142
Staff Geologist	28%	\$120,009	8,393	22,753	2,457	33,603
Sr. Research Engineer Julia Diessl	28%	\$115,569	8,082	21,911	2,366	32,359
Sr. Research Engineer Kang Lao	28%	\$38,631	2,702	7,324	791	10,817
Sr. Facility Engineer Jeff Couture	28%	\$76,629	5,359	14,529	1,568	21,456
Sr. Research Engineer Claudia Gruber	28%	\$76,629	5,359	14,529	1,568	21,456
Sr. Research Engineer Eduard Marika	28%	\$76,629	5,359	14,529	1,568	21,456
Total Fringe Benefits			57,543	156,002	16,841	230,386

PIER DOE TTI
0.249767 0.677133 0.073099

* Maximum fringe benefit rates are caps: PIER will not reimburse at a higher rate over the term of the project.

Travel**

From and To Destination	Trip Purpose	Complete Description (Why Travel is Necessary)	Number of Trips	Who (Name all)	PIER Cost Share	DOE Funds	TTI Funds	Total Cost
Los Angeles, CA to Sacramento, CA	Kick-off Meeting, Final Meeting	Attend Kick-off Meeting and Final Meeting with the Energy Commission	2	Principal Investigator and Project Manager	\$ 160	\$ 1,280	\$ 160	\$ 1,600
Los Angeles, CA to Sacramento, CA	Critical Review Meetings	Attend Critical Project Review Meetings with the Energy Commission	4	Principal Investigator and Project Manager	\$ 320	\$ 2,560	\$ 320	\$ 3,200
Los Angeles, CA to Bay Area	WESTCARB Annual Business Meetings	Make technical presentations, as required by DOE agreement	4	Principal Investigator and Project Manager	\$ 320	\$ 2,560	\$ 320	\$ 3,200
Los Angeles, CA to Pittsburgh, PA	DOE Annual Meetings, Final Meeting, Contractor Update Meetings	Participate in project meetings and DOE/NETL meetings, as required by DOE agreement	6	Principal Investigator and Staff Researcher	\$ 2,250	\$ 18,000	\$ 2,250	\$ 22,500
Los Angeles, CA to CO ₂ conference (Destination to be announced)	National CO ₂ Sequestration Conference	Make technical presentations, as required by DOE agreement	2	Principal Investigator and Staff Researcher	\$ 750	\$ 6,000	\$ 750	\$ 7,500
Total Travel					\$ 3,800	\$ 30,400	\$ 3,800	\$ 38,000

* PIER Share: Travel is reimbursed at State rates. Higher travel costs can count as Match Share.

** Trips listed as "to be determined (TBD)" require advanced written approval from Commission Project Manager.

BUDGET DETAILS

Equipment

Item - Description	Quantity	Unit Cost	PIER Cost Share	DOE Funds	TTI Funds	Total Cost
Not Applicable		\$ -	\$ -	\$ -	\$ -	\$ -
Total Equipment			\$ -	\$ -	\$ -	\$ -

Materials, Supplies

Item - Description	Quantity	Unit Cost	PIER Cost Share	DOE Funds	TTI Funds	Total Cost
Not Applicable		\$ -	\$ -	\$ -	\$ -	\$ -
Total Materials and Supplies			\$ -	\$ -	\$ -	\$ -

Contractual

Subcontractor Name / Address	Purpose	PIER Cost Share	DOE Funds	TTI Funds	Total Cost
Dr. Mark Legg	Seismic Data acquisition, analysis and interpretation		\$52,900	\$13,225	\$66,125
Don Clarke	Geologic formation evaluation, well log analysis, geologic model	\$5,312	\$42,500	\$5,313	\$53,125
Subsea System	Seismic boat, crew and equipment		\$60,000	\$15,000	\$75,000
Total Contractual		\$5,312	\$155,400	\$33,538	\$194,250

Drilling and Well Services

Item - Description	Purpose	PIER Cost Share (10%)	DOE Funds (80%)	TTI Match Share (10%)	Total Cost
DOE#2 well	drilling and deepening DOE#2 well, coring, logging and misc drilling related services		\$ 3,250,000	\$ 812,500	\$ 4,062,500
Fluid and gas sampling	gas and fluid sampling for CO2 sequestration on 2 wells	\$ -	\$ 127,200	\$ 31,800	\$ 159,000
DOE#3 well	services	\$ -	\$ 2,400,000	\$ 600,000	\$ 3,000,000
P & A DOE wells	plugged and abandoned or transfer well	\$ -	\$ 120,000	\$ 30,000	\$ 150,000
Total Miscellaneous		\$ -	\$ 5,897,200	\$ 1,474,300	\$ 7,371,500

Overhead

Name of Overhead	Overhead Base*	Maximum % Rate to be Billed**	Base Cost	PIER Cost Share (10%)	DOE Funds (80%)	TTI Match Share (10%)	Total Cost
Indirect cost	89.6% of salaries and fringe benefits	89.6%	\$ 1,053,193.19	\$227,834	\$646,845	\$68,982	\$943,661
Total Overhead				\$227,834	\$646,845	\$68,982	\$943,661

* Base: Define cost categories used to charge Overhead rate, e.g., Total Labor, Total Direct Cost, Materials, Subcontracts, etc.

** Maximum Indirect Overhead rates are caps. PIER will not reimburse at higher rates over the term of the project.

PIER DOE TTI

SUMMARY BUDGET BY TASK

Task #	Task Name	PIER Cost Share (\$)	DOE Funds (\$)	Match Funding (\$)	Total (\$)
1.1	Attend Kick-off Meeting	\$687	\$5,496	\$686	\$6,869
1.2	Critical Project Review Meetings	\$2,748	\$21,984	\$2,748	\$27,480
1.3	Final Meeting	\$687	\$5,496	\$687	\$6,870
1.4	Quarterly Progress Reports	\$622	\$4,974	\$622	\$6,218
1.5	Final Report	\$1,229	\$9,830	\$1,228	\$12,287
1.6	Identify & Obtain Matching Funds	\$607	\$4,856	\$607	\$6,070
1.7	Identify & Obtain Required Permits	\$729	\$5,832	\$729	\$7,290
1.8	DOE Contract Management	\$21,627	\$173,015	\$21,627	\$216,269
2.0	Seismic Data Analysis	\$0	\$112,900	\$28,225	\$141,125
3.0	Well Data Review and Formation Evaluation	\$21,124	\$168,994	\$21,126	\$211,244
4.0	New Well Drilling, Logging and Core Analysis	\$0	\$6,121,741	\$1,530,436	\$7,652,177
5.0	Geologic Model Development	\$15,935	\$127,480	\$15,934	\$159,349
6.0	Geomechanical Model Development	\$10,735	\$85,882	\$10,736	\$107,353
7.0	CO2 Injection and Migration Modeling	\$68,710	\$68,710	\$0	\$137,420
8.0	Risk Assessment and Characterization	\$332,343	\$348,067	\$0	\$680,410
9.0	Technology Transfer and data sharing	\$22,217	\$177,739	\$22,217	\$222,173
	Total	\$500,000	\$7,442,996	\$1,657,608	\$9,600,604

PIER COST SHARE BY TASK

PIER Funding (\$)		Direct Labor	Fringe Benefits	Travel	Equipment	Materials	Contractual	Drilling	Indirect Overhead	G&A	Total
Task	Project Administration Activities										
1.1	Attend Kick-off Meeting	250	70	80					287		\$687
1.2	Critical Project Review Meetings	1,000	280	320					1,148		\$2,748
1.3	Final Meeting	250	70	80					287		\$687
1.4	Quarterly Progress Reports	256	72						294		\$622
1.5	Final Report	506	142						581		\$1,229
1.6	Identify and Obtain Matching Funds	250	70						287		\$607
1.7	Identify and Obtain Required Permits	300	84						345		\$729
1.8	DOE Contract Management	8,780	2,458	320					10,069		\$21,627
	Administration Activities Subtotals	\$11,593	\$3,246	\$800	\$0	\$0	\$0	\$0	\$13,296	\$0	\$28,935
Task	Project Technical Activities										
2.0	Seismic Data Analysis										\$0
3.0	Well Data Review and Formation Evaluation	6,515	1,824				5,312		7,473		\$21,124
4.0	New Well Drilling, Logging and Core Analysis										\$0
5.0	Geologic Model Development	6,566	1,838						7,531		\$15,935
6.0	Geomechanical Model Development	4,424	1,238						5,073		\$10,735
7.0	CO2 Injection and Migration Modeling	28,312	7,927						32,471		\$68,710
8.0	Risk Assessment and Characterization	140,182	39,251						152,910		\$332,343
9.0	Technology Transfer and data sharing	7,919	2,217	3,000					9,081		\$22,217
	Technical Activities Subtotals	\$193,917	\$54,297	\$3,000	\$0	\$0	\$5,312	\$0	\$214,538	\$0	\$471,064
		Direct Labor	Fringe Benefits	Travel	Equipment	Materials	Contractual	Drilling	Indirect Overhead	G&A	Total
	PIER Reimbursable Totals	\$205,511	\$57,543	\$3,800	\$0	\$0	\$5,312	\$0	\$227,834	\$0	\$500,000
	Percent of the Total	41%	12%	1%	0%	0%	1%	0%	46%	0%	100%

