

A) New Agreement 500-17-004 (To be completed by CGL Office)				
500 Renewable Energy Division	Elisabeth de	Jong	45	916-654-4878
Department of Conservation - Division of C	il, Gas, and Geotherma	I Resources	94-6001	347
Geothermal Well Plugging and Abandonme	ent Tech Support			
0./40./0040	0 / 4 / 0040		1 74 750	
6 / 13 / 2018	6 / 1 / 2019		\$ 74,756	
	nuel for liet) to be appre	und by Evenutive E	Nina atau	
Operational agreement (see CAM MaARFVTP agreements \$75K and under			Jirector	
	13 / 2018	Consent		Discussion
Business Meeting Presenter Elis	sabeth de Jong	Time N	Needed: 5 mi	nutes
Please select one list serve. Geothermal				
Agenda Item Subject and Description Proposed resolution approving Agreement	500 17 004 with the De	partment of Conso	ryation's Divi	cion of Oil Gos
and Geothermal Resources for a \$74,756 c				
and inspecting geothermal wells eligible for	r plugging and abandon	ment. The Division	will create a	
detailed plugging and abandonment plan for	or each of the identified	unused geotherma	ıl wells.	
Is Agreement considered a "Project" ur	nder CEQA?			
Yes (skip to question 2)	☐ No (con	nplete the following) (PRC 21065 ar	nd 14 CCR 15378)):
Explain why Agreement is not consider				de College College
Agreement will not cause direct physic change in the environment because	al change in the environ	ment or a reasona	bly foreseear	ole indirect physical
If Agreement is considered a "Project"	under CEQA:			
a) Agreement IS exempt. (Attach d				
Statutory Exemption. List PRC section number:	and/or CCR			
☐ Section number. ☐ Categorical Exemption. List Co	CR 15306			
section number:				
Common Sense Exemption. 1				
Explain reason why Agreement is ex This agreement involves identifying	cempt under the above and inspecting geothers	section:	oomont fite w	ithin the Class 6
Categorical exemption (Information				itiliii tile Olass o
Consists of basic data collection, research, experimental management, and resource evaluation				
activities;				
 Which do not result in a serious or major disturbance to and environmental resource is strictly for information purposes, and will not result in a disturbance to an environmental resource; 				
3) A further action has not yet been approved, adopted, or funded.				
b) Agreement IS NOT exempt. (Consult with the legal office to determine next steps.)				
Check all that apply Initial Study Environmental Impact Report				
Negative Declaration	H	Statement of Over	riding Consid	erations
Mitigated Negative Declaration				
Legal Company Name:	* • •	Budget	SB	MB DVBE
	\$ 0 \$ 0			
	<u> </u>			

STATE OF CALIFORNIA CONTRACT REQUEST FORM (CRF) CEC-94 (Revised 10/2015)



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	920
	INTERIOR COMPANION
ON	

Legal Company Name:							
Fun	ding Source	Funding Year of Appropriation	Budg	et Lis	t No.		Amount
GRDA		16/17	500.011E			\$57,725	
GRDA		17/18	500.011F			\$17,031	
Funding Source						\$	
Funding Source						\$	
Funding Source						\$	
R&D Program A		am Area				\$74,756	
	"Other" selection		T=				
Reimbursemen	t Contract #:		Federal Ag	green	nent #:		
Name:	Susan Cartwright		Name:		Amar Rad)	
Address:	801 K Street, MS 22-0	05	Address:		801 K Str	eet, MS 18	3-05
City, State, Zip:	Sacramento, CA 9581	14	City, State	. Zip:	Sacramer	nto. CA 95	814
	322-5256 Fax:	916-445-0975	Phone:		322-1110	Fax:	916-445-3319
	n.cartwright@conserv		E-Mail:		r.rao@con		
							<u> </u>
Solicitation	Select Type Solid	citation #:	# of	Dido		Low Bid?	P
	etitive Bid (Attach CEC 96)		# 01	Dius.		LOW DIG	:
Exempt	Interagency)					
Z Exchipt	interagency						
	npany (including non-profit						
I —— ·	gency (including UC and C		- 1 1 - 1 - 1 - 1 - 1 - 1		·		
Governmen	t Entity (i.e. city, county, fe	ederai government, air/wa	ater/scriooi dist	пст, јо	int power aut	nonties, unive	ersity from another state)
							No □ Yes
If yes, check ap	propriate box:					SB	☐ MB ☐ DVBE
Not Applica	ble (Agreement is with	a CA State Entity o	r a members	ship/o	co-sponsor	ship)	
	ources Code 25620, et						ct work. (PIER)
☐ The Service	es Contracted:						
are not a	vailable within civil ser	vice					
☐ cannot b	e performed satisfacto	rily by civil service e	mployees				
	ch a highly specialized		that the exp	ert kı	nowledge,	expertise,	and ability are not
	ough the civil service s	ystem.					
	The Services are of such an:						
urgent							
temporary, or							
occasional nature							
that the delay to implement under civil service would frustrate their very purpose.							
Justification:							
A. Reimbursement in arrears based on:							
☐ Itemized Monthly ☐ Itemized Quarterly ☐ Flat Rate ☐ One-time							
	□ B. Advanced Payment□ C. Other, explain:						
ILL C. Other, ex	vpiali I.						

STATE OF CALIFORNIA CONTRACT REQUEST FORM (CRF) CEC-94 (Revised 10/2015)



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<u>N</u>	1

Q) Retention		
1. Is Agreement subject to retention?	⊠ No	☐ Yes
If Yes, Will retention be released prior to Agreement termination?	☐ No	☐ Yes
1. Exempt (Interagency/Other Government Entity)		
2. Meets DVBE Requirements DVBE Amount:\$ 0	DVBE %:	
Contractor is Certified DVBE		
☐ Contractor is Subcontracting with a DVBE: Name of DVBE Company		
3. Contractor selected through CMAS or MSA with no DVBE participation.		
4. Requesting DVBE Exemption (attach CEC 95)		
Will there be Work Authorizations?	⊠ No	Yes
Is the Contractor providing confidential information?	⊠ No	☐ Yes
Is the contractor going to purchase equipment?	⊠ No	☐ Yes
Check frequency of progress reports		
Monthly □ Quarterly □ Other		
5. Will a final report be required?	☐ No	Yes
6. Is the Agreement, with amendments, longer than a year? If yes, why?	⊠ No	☐ Yes
1. Exhibit A, Scope of Work		Attached
Exhibit B, Budget Detail	□ N/A	Attached
3. CEC 96, NCB Request		Attached
4. CEC 95, DVBE Exemption Request	\square N/A \square .	Attached
5. CEQA Documentation	\boxtimes N/A \square	Attached
6. Resumes		Attached
7. CEC 105, Questionnaire for Identifying Conflicts		Attached
Agreement Manager Date Office Manager Date Depu	uty Director	Date

Exhibit A SCOPE OF WORK

TASK LIST

Task #	Task Name
1	Agreement Management
2	Well Identification and Inspection
3	Develop Individual Abandonment Plans for Unused or Deserted Wells
4	Outreach

ACRONYMS/GLOSSARY

Specific acronyms and terms used throughout this scope of work are defined as follows:

Acronym	Definition
CAM	Commission Agreement Manager
Energy	California Energy Commission
Commission	
Deserted	Geothermal wells that do not have a owner and/or operator on record
Division/	Department of Conservation, Division of Oil, Gas, and Geothermal
Contractor	Resources (DOGGR)
GRDA	Geothermal Resources Development Account; sometimes used as a
	short title for the Geothermal Grant and Loan Program
LTGW	Low Temperature Geothermal Wells
Plug and	To prepare a well to be closed permanently in accordance with
Abandon (P & A)	Division plugging and abandonment regulations.
Well bond	A life-of-the-well surety deposit collected by the Division from any
	person who engages in the drilling, redrilling, deepening, maintaining,
	or abandoning of any geothermal well on State or private land.

BACKGROUND/PROBLEM STATEMENT

This agreement (Agreement), with a total amount provides the expertise of the Division of Oil, Gas, and Geothermal Resources (Division) to the California Energy Commission (Energy Commission) as technical assistance for the Geothermal Grant and Loan Program, which provides funding from the Geothermal Resources Development Account (GRDA).

Low Temperature Geothermal Wells (LTGWs) were drilled in California, mostly during the 1980s, by local school districts, rural communities and municipalities with the intention of utilizing the geothermal fluids for direct use in applications such as district heating, and the heating of swimming pools and greenhouses. Funding for drilling came from the (GRDA), administered by the Energy Commission. The Division permitted these and other geothermal wells under Public Resources Code §3700 and §3703.1, as well as under the California Code of Regulations (CCR) §1930 and §1931.

The Division also maintains official records on each of these wells. The Division has continually monitored the use and maintenance of the wells in the intervening years. Many wells have remained unused after being drilled due to the respective owners' inabilities to complete additional

construction necessary for their specific direct use. Other wells are unused with no intention of being used at any time but have not been appropriately plugged and abandoned. In the instance, that the original permittee lacks the ability, either financially or technically, to properly plug and abandon the wells, these wells are considered deserted. Due to their generally shallow depths, these unused and deserted wells are a potential threat to the State's groundwater resources. Although the Division required a bond on each well when they were drilled with the intended purpose of the bond to ensure that the well was properly plugged and abandoned if deserted, the majority of the bond funds are not sufficient to complete the work. Additionally, some of the entities that are still responsible for the bonded wells are unable to maintain the interest payments to maintain the bonds. Typically these are small, economically limited municipalities.

The Division does not normally take on the task of outlining the requirements to plug and abandon wells unless they are deserted oil and gas wells, which are regulated differently and have distinct funding sources for plugging and abandonment. However, the Division has the technical expertise to assist in completing activities as outlined in this agreement which will support public health and safety. It is in the best interest of the State to provide technical and financial support for projects to plug and abandon these long-term unused wells that are currently a burden on local governments and small public agencies, as well as a potential threat to public health and safety

GOALS AND OBJECTIVES OF THE AGREEMENT Goals of the Agreement

This agreement between the Energy Commission and the Division will provide technical expertise to develop plugging and abandonment plans for identified unused LTGWs in California. Under this agreement, the Division will prepare plugging and abandonment plans to assist with local needs for abandonment of LTGWs. The Energy Commission will be able to take the plugging and abandonment programs produced by the Division for this contract and provide them to the responsible entities in need of support for plugging and abandoning unused wells.

Objectives of the Agreement

The specific objectives of this agreement are to:

- Confirm the identity (location, responsible parties) of unused and/or deserted LTGWs.
 - o Include details of the temperature gradient wells in the City of San Bernardino that tend to be narrower and smaller in scope than other LTGWS.
- Provide individual clear and complete plans for plugging and abandoning each eligible LTGWs, as described in the subtasks below.
- Assist Geothermal Grant and Loan Program staff by identifying responsible parties and potential additional parties that can complete the plans for each identified well, potentially with financial support from future grant solicitations.

FORMAT/REPORTING REQUIREMENTS

Deliverables/Reports

When creating reports, the Contractor shall use and follow, unless otherwise instructed in writing by the Commission Agreement Manager (CAM), the latest version of the Consultant Reports Style Manual published on the Energy Commission's web site:

http://www.energy.ca.gov/contracts/consultant_reports/index.html

Each final deliverable shall be delivered as one original, reproducible, $8\,\frac{1}{2}$ " by 11", camera-ready master in black ink. Illustrations and graphs shall be sized to fit an $8\,\frac{1}{2}$ " by 11" page and readable if printed in black and white.

Exhibit A

Formats for Plugging and Abandonment Plans will be agreed upon by the Division staff and the Energy Commission CAM.

Electronic File Format

The Contractor shall deliver an electronic copy (CD ROM or memory stick or as otherwise specified by the CAM) of the full text in a compatible version of Microsoft Word (.doc).

The following describes the accepted formats of electronic data and documents provided to the Energy Commission as contract deliverables and establishes the computer platforms, operating systems and software versions that will be required to review and approve all software deliverables.

- Data sets shall be in Microsoft (MS) Access or MS Excel file format.
- PC-based text documents shall be in MS Word file format.
- Documents intended for public distribution shall be in PDF file format, with the native file format provided as well.
- Project management documents shall be in MS Project file format.

Software Application Development

If this scope of work includes any software application development, including but not limited to databases, websites, models, or modeling tools, contractor shall utilize the following standard Application Architecture components in compatible versions:

- Microsoft ASP.NET framework (version 3.5 and up) Recommend 4.0
- Microsoft Internet Information Services (IIS), (version 6 and up) Recommend 7.5
- Visual Studio.NET (version 2008 and up) Recommend 2010
- C# Programming Language with Presentation (UI), Business Object and Data Layers
- SQL (Structured Query Language)
- Microsoft SQL Server 2008, Stored Procedures Recommend 2008 R2
- Microsoft SQL Reporting Services Recommend 2008 R2
- XML (external interfaces)

Any exceptions to the Software Application Development requirements above must be approved in writing by the Energy Commission Information Technology Services Branch.

TASK 1- AGREEMENT MANAGEMENT

Task 1.1 Kick-off Meeting

The goal of this task is to establish the lines of communication and procedures for implementing this Agreement.

The Contractor shall:

- Attend a "kick-off" meeting with the CAM, the Contracts Officer, and a representative of the Energy Commission's Accounting Office. The meeting will be held in Sacramento, CA and the CAM will designate the specific location. The Contractor shall include their Project Manager, Contracts Administrator, Accounting Officer, and others designated by the CAM in this meeting. The administrative and technical aspects of this Agreement will be discussed at the meeting.
- If necessary, prepare an updated Schedule of Deliverables based on the decisions made in the kick-off meeting.

The CAM shall:

- Arrange the meeting including scheduling the date and time.
- Provide an agenda to all potential meeting participants prior to the kick-off meeting.

Deliverables:

An **Updated Schedule of Deliverables** (if applicable)

Task 1.2 Invoices

The Contractor shall:

Prepare invoices for all reimbursable expenses incurred performing work under this Agreement in compliance with the Exhibit B of the Terms and Conditions of the Agreement. Invoices shall be submitted with the same frequency as progress reports (task 1.4). Invoices must be submitted to the Energy Commission's Accounting Office.

Deliverables:

Invoices

Task 1.3 Manage Subcontractors

The goal of this task is to ensure quality products, to enforce subcontractor Agreement provisions, and in the event of failure of the subcontractor to satisfactorily perform services, recommend solution to resolve the problem.

The Contractor shall:

Manage and coordinate subcontractor activities. The Contractor is responsible for the quality of all subcontractor work and the Energy Commission will assign all work to the Contractor. If the Contractor decides to add new subcontractors, they shall initially notify the Energy Commission CAM who will follow the Energy Commission's process for adding or replacing subcontractors. The Contractor is responsible for ensuring that any subcontractors comply with the Terms and Conditions of the Agreement.

Task 1.4 Monthly Progress Reports

The goal of this task is to regularly provide sufficient information to allow the CAM to verify that satisfactory and continued progress is being made towards achieving the objectives of this Agreement.

The Contractor shall:

Prepare progress reports which summarize all Agreement activities conducted by the
Contractor for the reporting period, including an assessment of the ability to complete the
Agreement within the current budget and any anticipated cost overruns. Each progress report
is due within 15 calendar days after the end of the reporting period. Monthly Progress Reports
must also be submitted as additional backup material with invoices. The CAM will provide the
format for the progress reports.

Deliverables:

• Monthly Progress Reports

Task 1.5 Final Report

The goal of this task is to prepare a comprehensive written Final Report that describes the original purpose, approach, results and conclusions of the work completed under this Agreement. The Final Report shall be prepared in language easily understood by the public or layperson with a limited technical background.

The Final Report must be completed before the termination date of the Agreement in accordance with the Schedule of Deliverables.

The Final Report shall be a public document. If the Contractor has obtained confidential status from the Energy Commission and will be preparing both a public and a confidential version of the Final Report, the Contractor shall perform the following subtasks for both the public and confidential versions of the Final Report.

Task 1.5 Final Report Outline

The Contractor shall:

- Prepare and submit a draft outline of the Final Report for review and approval. The CAM will
 provide written comments to the Contractor on the draft outline. The Contractor shall review
 the comments and discuss any issues with the recommended changes with the CAM.
- Prepare and submit the final outline of the Final Report, incorporating CAM comments.

Deliverables:

- Draft Outline of the Final Report
- Final Outline of the Final Report

Task 1.6 Final Meeting

The goal of this task is to discuss closeout of this Agreement and review the project.

The Contractor shall:

- Meet with Energy Commission staff prior to the term end date of this Agreement. The meeting
 will be held in Sacramento, CA and the CAM will designate the specific location. This
 meeting will be attended by the Contractor Project Manager and the CAM. The CAM will
 determine any additional appropriate meeting participants. The administrative and technical
 aspects of Agreement closeout will be discussed at the meeting.
- Present findings, conclusions, and recommended next steps (if any) for the Agreement, based on the information included in the Final Report.

- Prepare a written document of meeting agreements and unresolved activities.
- Prepare a schedule for completing the closeout activities for this Agreement, based on determinations made within the meeting.

Deliverables:

- Written documentation of meeting agreements
- Schedule for completing closeout activities

TECHNICAL TASKS

Task 2 Well Identification and Inspection

The goal of this task is to identify and inspect all LTGWs identified by the Division as eligible for plugging and abandonment plans.

The Contractor shall:

- Confirm identity of unused and/or deserted wells that would be eligible for plugging and abandonment.
- Create a List of Wells to be Assessed.
- Identify any Division bond on the well(s).
- Prepare Orders, if required, for the State to declare the well(s) deserted.
- Prepare complete descriptions of all wells, including at minimum, a review and compilation of all well records including the following:
 - Location Google Earth map of well location, GPS coordinates for the wellhead;
 - Photos pictures of the well and location;
 - Well records documentation of the well completion, current condition, other issues related to the well status;
 - If needed to verify location and/or current conditions, inspect the well;
 - When appropriate, Division staff will conduct well site inspections to review its condition and state of completion (this includes physical directions, etc.);
 - Responsible parties:
 - o Correspondence to confirm current plans for plugging and abandonment;
 - Complete Bond information including copies of relevant documents;
- The Division will contact well owners and/or operators if known to discuss the proposed plugging and abandonment plans, and whether the owners and/or operators have funding available to support the well work. The division will review the potential to apply well bonds to the cost of the well work, and incorporate all well bond information in the report provided to the Energy Commission.
- Create a **Well Identification and Inspection Report** to for each well, developed for responsible parties to use.

Deliverables:

• Lists of Wells to be Assessed.

• A Well Identification and Inspection Report for each well.

Task 3 Develop Individual Plugging and Abandonment Plans for All Identified Unused or Deserted Wells

The goal of this task is to develop a Plugging and Abandonment Plan for each well identified meeting the Division's regulations with a goal of protecting freshwater, other natural resources, and public health and safety.

The Contractor shall:

- Create a Plugging and Abandonment Plan for each well identified, including:
 - Well Bore Diagram
 - Description of plugging operation- for example, clean out depth, mudding and cementing requirements.
 - Site Restoration requirements for example, cutting the well head off 6 feet below grade and backfilling in the area.

Deliverables:

• A *Plugging and Abandonment Plan* for each well.

Task 4 Outreach

The goal of this task is to provide contacts to the Energy Commission and to facilitate Energy Commission communication with the owners and/or operators responsible for the wells.

The Contractor shall:

- Identify the responsible owners and/or operators and Contact Information for each well.
- Support communication between the Energy Commission and owners and/or operators responsible for the wells to follow through with *Plugging and Abandonment Plan* for each well location.
- Develop a *Bid Package* for possible use by the well owners and/or operators. The package will include relevant information from Tasks 2, 3, and 4. This package will allow the owner to solicit bids for work and support each owner and/or operator's ability to create work orders for subsequent projects to plug and abandon the wells.

Deliverables:

- Owner and/or operator **Contact Information**
- Bid Package for each well.

RESOLUTION NO: 18-0613-6

STATE OF CALIFORNIA

STATE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION - RE: DEPARTMENT OF CONSERVATION – DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

RESOLVED, that the State Energy Resources Conservation and Development Commission (Energy Commission) adopts the staff CEQA findings contained in the Agreement or Amendment Request Form (as applicable); and

RESOLVED, that the Energy Commission approves Agreement 500-17-004 with the Department of Conservation's Division of Oil, Gas, and Geothermal Resources for a \$74,756 contract to support the Geothermal Grant and Loan Program by identifying and inspecting geothermal wells eligible for plugging and abandonment. The Division will create a package with a detailed plugging and abandonment plan for each of the identified unused geothermal wells; and

FURTHER BE IT RESOLVED, that the Executive Director or his/her designee shall execute the same on behalf of the Energy Commission.

CERTIFICATION

The undersigned Secretariat to the Commission does hereby certify that the foregoing is a full, true, and correct copy of a Resolution duly and regularly adopted at a meeting of the California Energy Commission held on June 13, 2018.

AYE: [List of Commissioners]
NAY: [List of Commissioners]
ABSENT: [List of Commissioners]
ABSTAIN: [List of Commissioners]

Cody Goldthrite,	
Secretariat	