



CALIFORNIA ENERGY COMMISSION



California Energy Commission January 21, 2026 Business Meeting Backup Materials for County of Sonoma

The following backup materials for the above-referenced agenda item are available in this PDF packet as listed below:

1. Proposed Resolution
2. Grant Request Form
3. Scope of Work

[PROPOSED]

RESOLUTION NO: 26-0121-XX

STATE OF CALIFORNIA
STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION: County of Sonoma

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

RESOLVED, that the CEC approves agreement GEO-25-001 with County of Sonoma for a \$1,359,699 grant. This project will create reliable surface datasets and geospatial analysis that provide local county planning and permitting expertise for geothermal development, identify opportunities for industry to develop geothermal resources of conventional and next-generation technologies that are compatible with surface conditions, and foster meaningful engagement with community and tribal partners. The project aims to guide the industry towards lower-risk permitting opportunities and provide an important foundation for future updates to county zoning or general plan updates; and

FURTHER BE IT RESOLVED, that the Executive Director or their designee shall execute the same on behalf of the CEC.

CERTIFICATION

The undersigned Secretariat to the CEC 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 CEC held on January 21, 2026.

AYE:
NAY:
ABSENT:
ABSTAIN:

Dated:

Kim Todd
Secretariat



STATE OF CALIFORNIA
CALIFORNIA ENERGY COMMISSION

CEC-270 (Revised 01/2024)

GRANT REQUEST FORM (GRF)

A. New Agreement Number

IMPORTANT: New Agreement # to be completed by Contracts, Grants, and Loans Office.

New Agreement Number: GEO-25-001

B. Division Information

1. Division Name: Reliability, Renewable Energy & Decarbonization Incentives Division
2. Agreement Manager: Erica Loza
3. MS-45
4. Phone Number: 279-226-1095

C. Recipient's Information

1. Recipient's Legal Name: County of Sonoma
2. Federal ID Number:

D. Title of Project

Title of project: Sonoma-Lake-Mendocino Proactive Regional Geothermal Planning Project

E. Term and Amount

1. Start Date: March 30, 2026
2. End Date: June 29, 2029
3. Amount: \$1,359,699

F. Business Meeting Information

1. Are the ARFVTP agreements \$75K and under delegated to Executive Director? No
2. The Proposed Business Meeting Date: 01-21-26
3. Consent or Discussion? Consent
4. Business Meeting Presenter Name: N/A
5. Time Needed for Business Meeting: N/A
6. The email subscription topic is: Geothermal Energy

Agenda Item Subject and Description:

County of Sonoma. Proposed resolution approving agreement GEO-25-001 with County of Sonoma for a \$1,359,699 grant, and adopting staff's recommendation that this action is exempt from CEQA. This project will create reliable surface datasets and geospatial analysis that provide local county planning and permitting expertise for geothermal development, identify opportunities for industry to develop geothermal resources of conventional and next-generation technologies that are compatible with surface conditions, and foster meaningful engagement with community and tribal partners. The project aims to guide the industry towards lower-risk permitting opportunities and provide an important foundation for future updates to county zoning or general plan updates. (Geothermal Resources Development Account Funding) Contact: Erica Loza.

G. California Environmental Quality Act (CEQA) Compliance

1. Is Agreement considered a "Project" under CEQA?

Yes

If yes, skip to question 2.



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If no, complete the following (PRC 21065 and 14 CCR 15378) and explain why
Agreement is not considered a "Project":

Agreement will not cause direct physical change in the environment or a reasonably
foreseeable indirect physical change in the environment because:

If Agreement is considered a "Project" under CEQA skip to question 2. Otherwise,
provide explanation.

**2. If Agreement is considered a "Project" under CEQA answer the following
questions.**

a) Agreement **IS** exempt?

Yes

Statutory Exemption?

No

If yes, list PRC and/or CCR section number(s) and separate each with a comma. If no, enter "None" and go to the next question.

PRC section number: None

CCR section number: None

Categorical Exemption?

Yes

If yes, list CCR section number(s) and separate each with a comma. If no, enter "None" and go to the next question.

CCR section number: Cal. Code Regs., tit. 14 § 15306,

Cal. Code Regs., tit. 14, § 15306 provides that projects which consist of basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource, are categorically exempt from the provisions of the California Environmental Quality Act (CEQA). This project includes activities primarily involving office-based activities performed on computers, such as, the development of reliable surface datasets and geospatial analyses through a cutting-edge three-dimensional subsurface model, subsurface modeling to assess geothermal development potential as well as a surface constraint analysis to determine low-conflict opportunities for future exploration and development, conducting literature review, and research. Through research and collaboration with other agencies, the project will enhance local planning and permitting expertise for geothermal development and foster meaningful engagement with community and tribal partners to strengthen regional capacity for geothermal planning and permitting. For these reasons, the proposed project will have no significant effect on the environment and is categorically exempt under section 15306.

The project will not impact an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies; does not involve any cumulative impacts of successive projects of the same type in the same place that might be considered significant; does not involve unusual circumstances that might have a significant effect on the environment; will not result in damage to scenic resources within a highway officially designated as a state scenic highway; the project site is not



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included on any list compiled pursuant to Government Code section 65962.5; and the project will not cause a substantial adverse change in the significance of a historical resource. Therefore, none of the exceptions to categorical exemptions listed in CEQA Guidelines section 15300.2 apply to this project, and this project will not have a significant effect on the environment.

Common Sense Exemption? 14 CCR 15061 (b) (3)

No

If yes, explain reason why Agreement is exempt under the above section. If no, enter "Not applicable" and go to the next section.

Not applicable

b) Agreement **IS NOT** exempt.

IMPORTANT: consult with the legal office to determine next steps.

No

If yes, answer yes or no to all that applies. If no, list all as "no" and "None" as "yes".

Additional Documents	Applies
Initial Study	No
Negative Declaration	No
Mitigated Negative Declaration	No
Environmental Impact Report	No
Statement of Overriding Considerations	No
None	Yes

G. Is this project considered "Infrastructure"?

No

H. Subcontractors

List all Subcontractors listed in the Budget (s) (major and minor). Insert additional rows if needed. If no subcontractors to report, enter "No subcontractors to report" and "0" to funds.

Delete any unused rows from the table

Subcontractor Legal Company Name	CEC Funds	Match Funds
<i>Subrecipients of the Recipient</i>		
County of Mendocino	\$39,212	\$0
Sonoma Clean Power Authority	\$1,148,864	\$164,170

I. Vendors and Sellers for Equipment and Materials/Miscellaneous

List all Vendors and Sellers listed in Budget(s) for Equipment and Materials/Miscellaneous. Insert additional rows if needed. If no vendors or sellers to report, enter "No vendors or sellers to report" and "0" to funds. **Delete** any unused rows from the table.



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Vendor/Seller Legal Company Name	CEC Funds	Match Funds
<i>Vendors of Sonoma Clean Power</i>		
WRA Inc.	\$125,032	\$0
Tukman Geospatial LLC	\$411,524	\$0
National Laboratory of the Rockies	\$562,308	\$0
TBD (Tribal Monitoring)	\$50,000	\$0

J. Key Partners

List all key partner(s). Insert additional rows if needed. If no key partners to report, enter “No key partners to report.” **Delete** any unused rows from the table.

Key Partner Legal Company Name
California Department of Fish and Wildlife

K. Budget Information

Include all budget information. Insert additional rows if needed. If no budget information to report, enter “N/A” for “Not Applicable” and “0” to Amount. **Delete** any unused rows from the table.

Funding Source	Funding Year of Appropriation	Budget List Number	Amount
GRDA	FY 24/25	501.008P	\$1,140,000.00
GRDA	FY 22/23	501.008N	\$219,699.00

TOTAL Amount: \$1,359,699.00

R&D Program Area: N/A

Explanation for “Other” selection: N/A

Reimbursement Contract #: N/A

Federal Agreement #: N/A

L. Recipient's Contact Information

1. Recipient's Administrator/Officer

Name: John Mack

Address: 2550 Ventura Ave

City, State, Zip: Santa Rosa, CA, 95403

Phone: (707) 565-1233

E-Mail: John.Mack@sonoma-county.org



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2. Recipient's Project Manager

Name: Robert Pennington

Address: 2550 Ventura Ave

City, State, Zip: Santa Rosa, CA, 95403

Phone: (707) 565-1352

E-Mail: robert.pennington@sonoma-county.org

M. Selection Process Used

There are three types of selection process. List the one used for this GRF.

Selection Process	Additional Information
Competitive Solicitation #	GFO-23-402
First Come First Served Solicitation #	Not Applicable
Other	Not Applicable

N. Attached Items

1. List all items that should be attached to this GRF by entering "Yes" or "No".

Item Number	Item Name	Attached
1	Exhibit A, Scope of Work/Schedule	Yes
2	Exhibit B, Budget Detail	Yes
3	CEC 105, Questionnaire for Identifying Conflicts	Yes
4	Recipient Resolution	Yes
5	Awardee CEQA Documentation	Yes

Approved By

Individuals who approve this form must enter their full name and approval date in the MS Word version.

Agreement Manager: Erica Loza

Approval Date: 10/16/2025

Office Manager: Elizabeth Giorgi

Approval Date: 10/21/25



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Deputy Director: Deana Carrillo

Approval Date: 12/09/2025

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Scope of Work
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I. TASK LIST

Task #	CPR ¹	Task Name
1		Administration
2		Subsurface Characterization Model and Commerciality Assessment
3	X	LiDAR Derivatives and Mapping Products
4		Staff Knowledge Development for Permitting and Planning
5		Community Engagement
6	X	Surface Constraint Analysis
7		Ground-truth Reconnaissance Surveys
8		Tribal Consultation and Reconnaissance
9		Public Outreach and Technology Transfer Activities

II. KEY NAME LIST

Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
1	County of Sonoma staff: Robert Pennington Sonoma Clean Power Authority staff: Ryan Tracey, Adam Jorge	Sonoma Clean Power Authority	N/A
2	National Laboratory of the Rockies staff: Whitney Trainor-Guitton, Mohammad Aljubran, Abra Gold Sonoma Clean Power Authority staff: Ryan Tracey	Sonoma Clean Power Authority	N/A
3	Tuckman Geospatial LLC staff: Mark Tukman	N/A	California Department of Fish and Wildlife
4	County of Sonoma staff: Robert Pennington County of Mendocino staff: Julia Krog Sonoma Clean Power Authority staff: Ryan Tracey	County of Mendocino, Sonoma Clean Power Authority	N/A
5	National Laboratory of the Rockies staff: Faith Smith	Sonoma Clean Power Authority, County of Mendocino	N/A

¹ Please see subtask 1.3 in Part V of the Scope of Work (Administration) for a description of Critical Project Review (CPR) Meetings.

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Task #	Key Personnel	Key Subcontractor(s)	Key Partner(s)
	County of Sonoma staff: Robert Pennington County of Mendocino staff: Julia Krog Sonoma Clean Power Authority staff, Ryan Tracey		
6	National Laboratory of the Rockies staff, Whitney Trainor-Guitton County of Sonoma staff: Robert Pennington County of Mendocino staff: Julia Krog WRA Inc. staff: Matt Richmond	Sonoma Clean Power Authority, County of Mendocino	WRA Inc. (Vendor)
7	County of Sonoma staff, Robert Pennington County of Mendocino staff: Julia Krog WRA Inc. staff: Matt Richmond	County of Mendocino, Sonoma Clean Power Authority	WRA Inc. (Vendor)
8	County of Sonoma staff; Robert Pennington County of Mendocino staff: Julia Krog	Sonoma Clean Power Authority, County of Mendocino	TBD Tribal Partner (Vendor)
9	County of Sonoma staff: Robert Pennington Sonoma Clean Power staff Authority: Ryan Tracey National Laboratory of the Rockies staff: Whitney Trainor-Guitton	Sonoma Clean Power Authority	N/A

III. GLOSSARY

Term/ Acronym	Definition
CAM	Commission Agreement Manager
CAO	Commission Agreement Officer
CEC	State Energy Resources Conservation and Development Commission or, the California Energy Commission
CPR	Critical Project Review
GIS	Geographic Information System
GRDA	Geothermal Resources Development Account

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Term/ Acronym	Definition
km	Kilometer
LiDAR	Light Detection and Ranging
MW	Megawatt
NLR	National Laboratory of the Rockies
Recipient	County of Sonoma
Region	Sonoma-Lake-Mendocino region
RREDI	Reliability, Renewable Energy & Decarbonization Incentives Division

**IV. PURPOSE OF AGREEMENT, PROBLEM/SOLUTION STATEMENT,
AND GOALS AND OBJECTIVES**

Purpose of Agreement

The purpose of this Agreement is to generate comprehensive datasets and geospatial analysis through the development of a cutting-edge three-dimensional subsurface model, provide county staff direct exposure to next-generation technologies, and foster meaningful engagement with community and tribal partners to enhance local capacity for geothermal planning and permitting in the Sonoma-Lake-Mendocino region (the Region).

Problem and Solution Statement:

Problem

The increasing demand for clean firm power in the California energy market, coupled with the rapid pace of innovation in the geothermal industry, has greatly increased interest in exploration and development of geothermal resources in the Region. Although the local counties have experience in infill well permit and maintenance activities at the existing Geysers geothermal field, a new geothermal power plant has not been commissioned in the Region since 1989. Local planning departments have limited exposure to modern geothermal technologies such as binary power plants, horizontal drilling, enhanced geothermal systems, and advanced closed loop. Assembly Bill 1359 authorizes local counties to serve as the lead agency to permit geothermal exploration for the first time. Sonoma, Lake, and Mendocino counties lack a regional characterization of geothermal commerciality and surface conditions, which hinders comprehensive planning. Permitting staff will need to develop the necessary data and gain knowledge for new permits. Meanwhile, the industry has limited visibility into the surface compatibility of development, which may lead to the risk of developing in areas that are not viable. Ultimately, extending permitting timeframes and increasing project risk will reduce investment of geothermal development in the Region, and projects that do proceed may occur in areas less acceptable to the community.

Solution

The Director of Permit Sonoma, on behalf of the County of Sonoma (County of Sonoma or the Recipient), has identified the need to develop materials and tools, gain knowledge of emerging

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technologies, and strengthen community engagement efforts to support local county planning departments. Relying on the expertise of the National Laboratory of the Rockies (NLR) will enable the development of reliable, objective, and trusted datasets and products. It is important for local planning agencies to efficiently evaluate the near-term projects and develop a transparent plan for industry to follow for future development. Increased permitting staff expertise and identification of low-risk development opportunities will attract investment from other states that currently benefit from early deployment of new geothermal technologies.

Goals of the Agreement:

The goals of this Agreement are to:

- Create reliable datasets and provide experience that will grow the expertise of local county planning and permitting of geothermal development.
- Identify opportunities for industry to develop geothermal resources of conventional and next-generation technologies that are compatible with surface conditions.
- Develop and validate logic for using high-resolution remote sensing data to assess environmental conditions at a regional scale that can be replicated elsewhere.
- Provide the Region with the complete set of light detection and ranging (LiDAR) mapping products to inform geothermal project siting, but also inform other regional planning initiatives, including wildfire mitigation.
- Initiate geothermal-specific community and tribal engagement by leveraging best practices and demonstrating the application of community and tribal feedback in planning.

Objectives of the Agreement:

The objectives of this agreement are to:

- Identify at least 600 megawatts (MW) of technical geothermal development potential in the Region from a robust subsurface characterization model incorporating the capabilities of next-generation technologies.
- Demonstrate a surface constraint logic, leveraging high-resolution mapping data, that identifies locations with minimal surface constraints with a confirmation rate of at least 70 percent validated through field reconnaissance surveys.
- Provide 100 percent coverage of LiDAR mapping products throughout the three (3) counties in the Region.
- Facilitate robust and representative community engagement on local geothermal development through at least three (3) events that include at least 25 attendees each, including at least 10 attendees that live within 10 miles of a geothermal development opportunity and at least five (5) attendees from an underrepresented community.
- Develop at least two (2) subject matter experts on geothermal development at each participating county through direct experience in the project's tasks, a field visit to a next-generation project site, and internal knowledge sharing.

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V. ADMINISTRATION TASKS

Products

Subtask 1.1 Products

The goal of this subtask is to establish the requirements for submitting project products (e.g., reports, summaries, plans, and presentation materials). Unless otherwise specified by the Commission Agreement Manager (CAM), the Recipient must deliver products as required below by the dates listed in the **Project Schedule (Part VII)**. All products submitted which will be viewed by the public, must comply with the accessibility requirements of Section 508 of the federal Rehabilitation Act of 1973, as amended (29 U.S.C. Sec. 794d), and regulations implementing that act as set forth in Part 1194 of Title 36 of the Federal Code of Regulations. All technical tasks should include product(s). Products that require a draft version are indicated by marking “**(draft and final)**” after the product name in the “Products” section of the task/subtask. If “(draft and final)” does not appear after the product name, only a final version of the product is required. With respect to due dates within this Scope of Work, “**days**” means working days.

The Recipient shall:

For products that require a draft version, including the Final Report Outline and Final Report

- Submit all draft products to the CAM for review and comment in accordance with the Project Schedule (Part V). The CAM will provide written comments to the Recipient on the draft product within 15 days of receipt, unless otherwise specified in the task/subtask for which the product is required.
- Consider incorporating all CAM comments into the final product. If the Recipient disagrees with any comment, provide a written response explaining why the comment was not incorporated into the final product.
- Submit the revised product and responses to comments within 10 days of notice by the CAM, unless the CAM specifies a longer time period, or approves a request for additional time.

For products that require a final version only

- Submit the product to the CAM for acceptance. The CAM may request minor revisions or explanations prior to acceptance.

For all products

- Submit all data and documents required as products in accordance with the following.

Instructions for Submitting Electronic Files and Developing Software:

Electronic File Format

- Submit all data and documents required as products under this Agreement in an electronic file format that is fully editable and compatible with the California Energy Commission's (CEC) software and Microsoft (MS)-operating computing platforms, or with any other format approved by the CAM. Deliver an electronic copy of the full text of any Agreement data and documents in a format specified by the CAM, such as memory stick.

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The following describes the accepted formats for electronic data and documents provided to the CEC as products under this Agreement, and establishes the software versions that will be required to review and approve all software products:

- Data sets will be in MS Access or MS Excel file format (version 2007 or later), or any other format approved by the CAM.
- Text documents will be in MS Word file format, version 2007 or later.
- Project management documents will be in Microsoft Project file format, version 2007 or later.

Software Application Development

Use the following standard Application Architecture components in compatible versions for any software application development required by this Agreement (e.g., databases, models, modeling tools), unless the CAM approves other software applications such as open-source programs:

- 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 Electronic File Format requirements above must be approved in writing by the CAM. The CAM will consult with the CEC's Information Technology Services Branch to determine whether the exceptions are allowable.

Meetings

Subtask 1.2 Attend Kick-off Meeting

The goal of this task is to establish the lines of communication and procedures for implementing this Agreement. The CAM shall designate the date and location of this meeting and provide an agenda to the Recipient prior to the meeting.

The Recipient shall:

- Attend a "Kick-Off" meeting with the CAM, the Commission Agreement Officer (CAO), and a representative of the CEC Accounting Office. The Recipient shall bring its Project Manager, Agreement Administrator, Accounting Officer, and others designated by the CAM to this meeting.
- Discuss the following administrative and technical aspects of this Agreement:
 - Agreement Terms and Conditions

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- Invoicing and auditing procedures.
- Critical Project Review (CPR) (Subtask 1.3).
- Monthly Progress Reports (Subtask 1.5).
- Technical Products (Product Guidelines located in Section 5 of the Terms and Conditions).
- Final Report (Subtask 1.6).
- Match fund documentation (Subtask 1.7) No reimbursable work may be done until this documentation is in place.
- Permit documentation (Subtask 1.8)
- Subcontracts needed to carry out project (Subtask 1.9).
- The CAM's expectations for accomplishing tasks described in the Scope of Work.
- An updated Product Schedule and Due Dates.
- Technical Advisory Committee (TAC) meetings (subtasks 1.10 and 1.11).
- Any other relevant topics.

Recipient Products:

- Kick-off Meeting Presentation.
- Updated Products Schedule.
- Updated List of Match Funds (if applicable).
- Updated List of Permits (if applicable).

CAM Product:

- Kick-Off Meeting Agenda.

Subtask 1.3 Critical Project Review (CPR) Meetings

CPR meetings provide the opportunity for frank discussions between the CEC and the Recipient. The goal of this task is to determine if the project should continue to receive CEC funding to complete this Agreement and to identify any needed modifications to the tasks, products, schedule, or budget.

The CAM may schedule CPR meetings as necessary, and meeting costs will be borne by the Recipient. Discussions may include project status, challenges, successes, advisory group findings and recommendations, final report preparation, and progress on technical transfer and production readiness activities (if applicable).

Meeting participants include the CAM and the Recipient and may include the CAO, Reliability, Renewable Energy & Decarbonization Incentives (RREDI) Division or other CEC staff and management as well as other individuals selected by the CAM to provide support to the CEC.

The CAM shall

- Determine the location, date, and time of each CPR meeting with the Recipient. These meetings generally take place at the CEC, but they may take place at another location or remotely.

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- Send the Recipient the agenda and a list of expected participants in advance of each CPR. If applicable, the agenda shall include a discussion on both match funding and permits.
- Conduct and make a record of each CPR meeting. Prepare a schedule for providing the progress determination described below.
- Determine whether to continue the project, and if continuing, whether or not modifications are needed to the tasks, schedule, products, and/or budget for the remainder of the Agreement. Modifications to the Agreement may require a formal amendment (please see section 6 of the Terms and Conditions). If the CAM concludes that satisfactory progress is not being made, this conclusion will be referred to the Director of the RREDI Division for his or her concurrence.
- Provide the Recipient with a progress determination on continuation of the project, in accordance with the schedule. The written response may include a requirement for the Recipient to revise one or more products.

The Recipient shall:

- Prepare a CPR Report for each CPR that (1) discusses the progress of the Agreement toward achieving its goals and objectives. This report shall (2) include recommendations and conclusions regarding continued work of the projects. This report shall be submitted along with any other products identified in this scope of work. The Recipient shall submit these documents to the CAM and any other designated reviewers at least 15 working days in advance of each CPR meeting.
- Present the required information at each CPR meeting and participate in a discussion about the Agreement.

CAM Products:

- Agenda and a list of expected participants.
- Schedule for Progress Determination.
- Progress Determination.

Recipient Product:

- CPR Report(s).

Subtask 1.4 Final Meeting

The goal of this task is to complete the closeout of this Agreement.

The Recipient shall:

- Meet with CEC staff to present the project findings, conclusions, and recommendations. The final meeting must be completed during the closeout of this Agreement.
- This meeting will be attended by, at a minimum, the Recipient, the CAO, and the CAM. The technical and administrative aspects of Agreement closeout will be discussed at the meeting, which may be divided into two separate meetings at the CAMs discretion.
- The technical portion of the meeting will involve a presentation of an assessment of the degree to which project and task goals and objectives were achieved, findings,

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conclusions, recommended next steps (if any) for the Agreement, and recommendations for improvements. The CAM will determine the appropriate meeting participants.

- The administrative portion of the meeting shall be a discussion with the CAM and the CAO the following Agreement closeout items:
 - Disposition of any procured equipment purchased with CEC funds (Options) (if applicable).
 - CEC requests for specific “generated” data (not already provided in Agreement products).
 - Documentation of Recipient’s disclosure of “subject inventions” developed under the Agreement (if applicable).
 - “Surviving” Agreement provisions such as repayment provisions and confidential products (if applicable).
 - Final invoicing and release of retention.
- Prepare a schedule for completing the closeout activities for this Agreement.
- Prepare a Final Meeting Agreement Summary that documents any agreements made between the Recipient and CEC staff during the meeting.
- Prepare a *Schedule for Completing Agreement Closeout Activities*.
- Provide copies of *All Final Products* on a USB memory stick, organized by the tasks in the Agreement.

Products:

- Final Meeting Agreement Summary (if applicable).
- Schedule for completing agreement closeout activities.
- All Final Products.

Reports and Invoices

Subtask 1.5 Progress Reports and Invoices

The goal of this task is to (1) periodically verify that satisfactory and continued progress is made towards achieving the project objectives of this Agreement on time and within budget and (2) ensure that invoices contain all required information and are submitted in the appropriate format.

The objectives of this task are to summarize activities performed during the reporting period, to identify activities planned for the next reporting period, to identify issues that may affect performance and expenditures, and to form the basis for determining whether invoices are consistent with work performed.

The Recipient shall:

- Prepare a Monthly Progress Report that summarizes all Agreement activities conducted by the Recipient, as specified in the scope of work for the preceding month of the reporting period, including an assessment of the ability to complete the Agreement within

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the current budget and any anticipated cost overruns, accomplishments, milestones, products, schedule, fiscal status.

- Each progress report is due to the CAM within 10 days of the end of the reporting period. The recommended specifications for each progress report are contained in Section 6 of the Terms and Conditions of this Agreement.
- Submit a monthly or quarterly Invoice that follows the instructions in Section 8 (Payment of Funds) of the Exhibit C standard terms and conditions, including a financial report on Match Funds and in-state expenditures.

Product:

- Monthly Progress Reports.
- Invoices.

Subtask 1.6 Final Report

The goal of this task is to prepare a comprehensive Final Report to assess the project's success in achieving the Agreement's goals and objectives.

The objectives of the Final Report are to clearly and completely describe the project's purpose, approach, activities performed, discussion results, and conclusions of the work performed under this Agreement. When creating the Final Report Outline and the Final Report, the Recipient must use the CEC Style Manual provided by the CAM.

The Final Report shall be a public document. If the Recipient has obtained confidential status from the CEC for any project tasks and will be preparing a confidential version of the Final Report as well, the Recipient shall perform the following activities for both the public and confidential versions of the Final Report.

Task 1.6.1 Final Report Outline

The Recipient shall:

- Prepare an Outline of the Final Report, in accordance with the *CEC Style Manual* provided by the CAM.

Recipient Products:

- Final Report Outline (Draft and Final).

CAM Products:

- CEC Style Manual.
- Web Accessibility Guidelines.
- Comments on Draft Final Report Outline.

Task 1.6.2 Final Report

The Recipient shall:

- Prepare a Draft Final Report in accordance with the approved Final Report Outline, *CEC Style Manual, and Final Report Template* provided by the CAM with the following considerations:
 - Ensure that the report includes the following items, in the following order:

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- Cover page (**required**).
- Credits page on the reverse side of cover with legal disclaimer (**required**).
- Acknowledgements page (optional).
- Preface (**required**).
- Abstract, keywords, and citation page (**required**).
- Table of Contents (**required**, followed by List of Figures and List of Tables, if needed).
- Executive summary (**required**).
- Body of the report (**required**).
- References (if applicable).
- Glossary/Acronyms (If more than 10 acronyms or abbreviations are used, it is required).
- Bibliography (if applicable).
- Appendices (if applicable) (Create a separate volume if very large).
- Attachments (if applicable).
- Ensure that the report is following CEC's Digital Accessibility Standards.

- Submit a draft of the Executive Summary to the TAC for review and comment.
- Develop and submit a *Summary of TAC Comments on Draft Final Report* received on the Executive Summary. For each comment received, the recipient will identify in the summary the following:
 - Comments the recipient proposes to incorporate.
 - Comments the recipient does propose to incorporate and an explanation for why.
- Submit a draft of the report to the CAM for review and comment. The CAM shall provide written comments on the Draft Final Report within fifteen (15) business days of receipt. The Draft Final Report must be submitted at least 60 days before the end of the Agreement Term. If the Recipient disagrees with any comment, provide a *Written Responses to Comments* explaining why the comments were not incorporated into the final product.
- Prepare and submit a Final Report that addresses any comments from the CAM.
- Submit the revised Final Report electronically with any Written Responses to Comments within 10 days of receipt of CAM's Written Comments on the Draft Final Report, unless the CAM specifies a longer time period or approves a request for additional time.
- Submit a hardcopy and electronic files (in both MS Word and .pdf formats) of the Final Report to the CAM for final review and formatting prior to CEC publication of the report. The .pdf file must follow Americans with Disability Act Guidelines.
- Work with the CAM as necessary to address any questions about the Final Report or any formatting requirements necessary for CEC publication of the Final Report.

Recipient Products:

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- Summary of TAC Comments on Draft Final Report.
- Draft Final Report.
- Written Responses to Comments (if applicable).
- Final Report.

CAM Products:

- Written Comments on Draft Final Report.

Subtask 1.7 Identify and Obtain Match Funds

The goal of this task is to ensure that the Recipient obtains any match funds planned for this Agreement are obtained for and applies them to this Agreement during the Agreement term.

While the costs to obtain and document match funds are not reimbursable under this Agreement, the Recipient may spend match funds for this task. The Recipient may only spend match funds during this Agreement term, either concurrently prior to the use of CEC funds for each task during the term of this Agreement. Match funds must be identified in writing and the Recipient must obtain any associated commitments obtained before the Recipient can incur any costs for which the Recipient will request reimbursement.

The Recipient shall:

- Prepare a Match Funds Status Letter documenting the match funds committed to this Agreement and submit it to the CAM at least 2 working days prior to the kick-off meeting. If no match funds were part of the proposal that led to the CEC awarding this Agreement and none have been identified at the time this Agreement starts, then state this in the letter. If match funds were a part of the proposal that led to the CEC awarding this Agreement, then provide in the letter a list of the match funds that identifies the:
 - Amount of each cash match funds, its source(s), including a contact name, address and telephone number and the task(s) to which the match funds will be applied.
 - Amount of each in-kind contribution, a description, of the contribution type (e.g., property, services), the documented market or book value, and the source, including a contact name, address and telephone number and the task(s) to which the match funds will be applied. If the in-kind contribution is equipment or other tangible or real property, the Recipient must identify its owner and provide a contact name, address and telephone number, and the address where the property is located.
- If different from the solicitation application, provide a copy of the letter of commitment from an authorized representative of each source of cash match funding or in-kind contributions that these funds or contributions have been secured. For match funds provided by a grant, a copy of the executed grant shall be submitted in place of a letter of commitment.
- At the Kick-off meeting, discuss match funds and the implications or impact to the Agreement if they are significantly reduced or not obtained as committed. If applicable, match funds will be included as a line item in the progress reports and will be a topic at CPR meetings.
- Provide the Supplemental Match Funds Notification Letter to the CAM during the course of the Agreement additional match funds are received.

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- Provide the Match Funds Reduction Notification Letter and Notify the CAM within 10 days if during the course of the Agreement existing match funds are reduced and may trigger an additional CPR meeting.

Products:

- Match Funds Status Letter.
- Copy(ies) of each match fund commitment letter(s).
- Supplemental Match Funds Notification Letter(s) for new match funds (if applicable).
- Match Funds Reduction Notification Letter that matches funds were reduced (if applicable).

Subtask 1.8 Identify and Obtain Required Permits

The goal of this task is to obtain all permits required for work completed under this Agreement in advance of the date they are needed to keep the Agreement schedule on track.

Permit costs and the expenses associated with obtaining permits are not reimbursable under this Agreement. Permits must be identified in writing and obtained before the Recipient can make any expenditure for which a permit is required.

The Recipient shall:

- Prepare a Permit Status Letter documenting the permits required to conduct this Agreement and submit it to the CAM at least 2 working days prior to the kick-off meeting. If there are no permits required at the start of this Agreement, then state such in the letter. If it is known at the beginning of the Agreement that permits will be required during the course of the Agreement, provide in the letter:
 - A list of the permits that identifies the:
 - Type of permit.
 - Name, address and telephone number of the permitting jurisdictions or lead agencies.
 - The schedule the Recipient will follow in applying for and obtaining these permits.
- The list of permits and the schedule for obtaining them will be discussed at the kick-off meeting and develop a timetable for submitting the updated list, schedule, and the copies of the permits. The implications to the Agreement if the permits are not obtained in a timely fashion or are denied will also be discussed. If applicable, permits will be included as a line item in the Progress Reports and will be a topic at CPR meetings.
- If during the course of the Agreement additional permits become necessary, provide the CAM with an Updated List of Permits (including the appropriate information on each permit) and an updated Schedule for Acquiring Permits to the CAM.
- As permits are obtained, send a copy of each approved permit to the CAM.
- If during the course of the Agreement permits are not obtained on time or are denied, notify the CAM within 5 working days. Either of these events may trigger an additional CPR.

Products:

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- Permit Status Letter documenting the permits or stating that no permits are required.
- A copy of each final approved permit (if applicable).
- Updated list of permits as they change during the term of the Agreement (if applicable).
- Updated schedule for acquiring permits as changes occur during the term of the Agreement (if applicable).

Subtask 1.9 Obtain and Execute Subcontracts

The goal of this task is to (1) ensure quality products and (2) to procure subcontractors required to carry out the tasks under this Agreement consistent with the Agreement Terms and Conditions and the Recipient's own procurement policies and procedures. It will also provide the CEC an opportunity to review the subcontracts to ensure that the tasks are consistent with this Agreement, and that the budgeted expenditures are reasonable and consistent with applicable cost principles.

The Recipient shall:

- Manage and coordinate subcontractor activities in accordance with the requirements of this Agreement.
- Incorporate this Agreement by reference into each subcontract.
- Submit a draft of each subcontract required to conduct the work under this Agreement to the CAM for review.
- Include any required CEC flow-down provisions in each subcontract, in addition to a statement that the terms of this Agreement will prevail if they conflict with the subcontract terms.
- Submit a final copy of the executed subcontract.
- If Recipient decides to add new subcontractors, then the Recipient shall notify and receive written approval from the CAM prior to adding any new subcontractors.

Products:

- Draft subcontracts (if required by the CAM).
- Final subcontracts.

Technical Advisory Committee

Subtask 1.10 Technical Advisory Committee (TAC)

The goal of this subtask is to create an advisory committee for this Agreement. The TAC should be composed of diverse professionals. The composition will vary depending on interest, availability, and need. TAC members will serve at the CAM's discretion. The purpose of the TAC is to:

- Provide guidance in project direction. The guidance may include scope and methodologies, timing, and coordination with other projects. The guidance may be based on:
 - Technical area expertise.
 - Knowledge of market applications; or

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- Linkages between the agreement work and other past, present, or future projects (both public and private sectors) that TAC members are aware of in a particular area.
- Review products and provide recommendations for needed product adjustments, refinements, or enhancements.
- Evaluate the tangible benefits of the project to the state of California, and provide recommendations as needed to enhance the benefits.
- Provide recommendations regarding information dissemination, market pathways, or commercialization strategies relevant to the project products.
- Help set the project team's goals and contribute to the development and evaluation of its statement of proposed objectives as the project evolves.
- Provide a credible and objective sounding board on the wide range of technical and financial barriers and opportunities.
 - Help identify key areas where the project has a competitive advantage, value proposition, or strength upon which to build.
 - Advocate, to the extent the TAC members feel is appropriate, on behalf of the project in its effort to build partnerships, governmental support, and relationships with a national spectrum of influential leaders.
 - Ask probing questions that insure a long-term perspective on decision-making and progress toward the project's strategic goals.

The TAC may be composed of qualified professionals spanning the following types of disciplines:

- Researchers knowledgeable about the project subject matter.
- Members of trades that will apply the results of the project (e.g., designers, engineers, architects, contractors, and trade representatives).
- Public interest market transformation implementers.
- Product developers relevant to the project.
- U.S. Department of Energy research managers, or experts from other federal or state agencies relevant to the project.
- Public interest environmental groups.
- Utility representatives.
- Air district staff; and
- Members of relevant technical society committees.

The Recipient shall:

- Prepare a *List of Potential TAC Members* that includes the names, companies, physical and electronic addresses, and phone numbers of potential members. The list will be discussed at the Kick-off meeting, and a schedule for recruiting members and holding the first TAC meeting will be developed.

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- Recruit TAC members. Ensure that each individual understands member obligations and the TAC meeting schedule developed in subtask 1.11.
- Prepare a *List of TAC Members* once all TAC members have committed to serving on the TAC.
- Submit *Documentation of TAC Member Commitment* (such as Letters of Acceptance) from each TAC member.

Products:

- List of Potential TAC Members.
- List of TAC Members.
- Documentation of TAC Member Commitment.

Subtask 1.11 TAC Meetings

The goal of this subtask is for the TAC to provide strategic guidance for the project by participating in regular meetings, which may be held via teleconference.

The Recipient shall:

- Discuss the TAC meeting schedule with the CAM at the Kick-off meeting. Determine the number and location of meetings (in-person and via teleconference) in consultation with the CAM.
- Prepare a *TAC Meeting Schedule* that will be presented to the TAC members during recruiting. Revise the schedule after the first TAC meeting to incorporate meeting comments.
- Prepare a *TAC Meeting Agenda* and *TAC Meeting Back-up Materials* for each TAC meeting.
- Organize and lead TAC meetings in accordance with the TAC Meeting Schedule. Changes to the schedule must be pre-approved in writing by the CAM.
- Prepare *TAC Meeting Summaries* that include any recommended resolutions of major TAC issues.

The TAC shall:

- Help set the project team's goals and contribute to the development and evaluation of its statement of proposed objectives as the project evolves.
- Provide a credible and objective sounding board on the wide range of technical and financial barriers and opportunities.
- Help identify key areas where the project has a competitive advantage, value proposition, or strength upon which to build.
- Advocate on behalf of the project in its effort to build partnerships, governmental support, and relationships with a national spectrum of influential leaders.
- Ask probing questions that insure a long-term perspective on decision-making and progress toward the project's strategic goals.

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- Review and provide comments to proposed project Draft Public Outreach and Technology Transfer Plan.
- Review and provide comments to the draft of the Executive Summary of the Final Report.

Products:

- TAC Meeting Schedule (draft and final).
- TAC Meeting Agendas (draft and final).
- TAC Meeting Back-up Materials.
- TAC Meeting Summaries.

VI. TECHNICAL TASKS

TASK 2 SUBSURFACE CHARACTERIZATION MODEL AND COMMERCIALITY ASSESSMENT

The goal of this task is to develop a public, high-resolution, three-dimensional temperature model of at least the kilometer (km) scale or finer across all three counties. The model will identify the potential extent of commercial development of geothermal resources with conventional and next-generation technologies in the Region, including but not limited to the characterization of temperature at different depths, rock properties, and subsurface features important to project viability, such as faults, aquifers, and the depth of basement rock.

The Recipient shall:

- Compile a database of reliable well data for modeling in the Region.
- Develop and submit a *Three-Dimensional Thermal Model* that represents a high-resolution (one (1) km²) across the Region, calibrated to represent the geologic complexity around the Geysers. Raw data and layers by depth maps from this model will be accessible in the Geographic Information System (GIS) portal.
- Use the results of the Three-Dimensional Thermal Model to:
 - Characterize subsurface features such as faults, aquifers, and the depth of low-permeability basement rock that impact the risk profile and viability of different geothermal technologies. Submit a *Subsurface Features and “High Risk” Area Layer* that will be used as shapefiles accessible in the GIS portal.
 - Assess the level of uncertainty in modeling thermal properties to inform the need for geothermal exploration. Submit a *Qualitative Uncertainty Grid* that will be used as a shapefile accessible in the GIS portal.
 - Create *two-dimensional maps* of estimated project capacity (in MW) and leveled cost of electricity based on temperature, depth, technology, and distance to transmission. Submit *Two-Dimensional Maps* that will include, but is not limited to, raw data and layers by depth in the GIS portal.
 - Calculate regional supply curves of geothermal development potential versus cost and calibrate a commerciality cutoff to derive the total development potential

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in the Region and geographic extent. Submit *Regional Supply Curves* in Microsoft Excel.

- Develop a *Subsurface Characterization & Commerciality Assessment Memo* that includes, but is not limited to, documenting modeling methodologies, describing uncertainty, and summarizing developable capacity by cost, temperature, technology, depth, and sensitivity to temperature and depth of low permeability basement rock.

Products:

- Three-Dimensional Thermal Model.
- Subsurface Features and “High Risk” Area Layer.
- Qualitative Uncertainty Grid.
- Two-Dimensional Maps.
- Regional Supply Curves.
- Subsurface Characterization & Commerciality Assessment Memo (draft and final).

TASK 3 LiDAR DERIVATIVES AND MAPPING PRODUCTS

The goal of this task is to cover one hundred (100) percent of the Region with the complete set of high-resolution LiDAR mapping products that can inform surface conditions and project siting for geothermal development.

The Recipient shall:

- Coordinate with Tukman Geospatial LLC and the California Department of Fish and Wildlife on prioritizing completion of fine-scale vegetation mapping across the Region (product externally funded).
- Create a *Sonoma-Lake-Mendocino LiDAR Derivatives and Mapping Products Inventory* that includes, but is not limited to, high-resolution maps of impervious surfaces in Sonoma and Lake counties (County of Mendocino externally funded).
- Create a *Wildfire Report* that includes, but is not limited to, creating high-resolution maps of wildfire fuel and wildfire hazard in Sonoma and Lake counties (County of Mendocino portion is externally funded), as well as improvements to dozer lines, roads, fire roads, and addresses. A summary of data layers, including wildfire fuel maps, wildfire hazard, and wildfire risk to structure maps, and their application to geothermal development planning in the Region, will be documented in a final wildfire report.
- Create a *Sonoma-Lake-Mendocino Geothermal Prospector Inputs G/S Portal* that includes, but is not limited to, raster and polygon feature data products from LiDAR and fine-scale vegetation maps (funded externally) for accessibility by regulators, industry, and stakeholders. Submit the *Sonoma-Lake-Mendocino Geothermal Prospector Inputs G/S Portal* in a Microsoft Word document that includes, but is not limited to, screenshots of the web portal.

Products:

- Wildfire Report (draft and final).
- Sonoma-Lake-Mendocino LiDAR Derivatives and Mapping Products Inventory.

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- Sonoma-Lake-Mendocino Geothermal Prospector Inputs GIS Portal.

TASK 4 STAFF KNOWLEDGE DEVELOPMENT FOR PERMITTING AND PLANNING

The goal of this task is to provide staff from the Recipient, Sonoma Clean Power, and County of Mendocino with experience and knowledge on new geothermal technologies and permitting strategies to enhance permitting and planning capacity and better inform the project's surface constraint analysis.

The Recipient shall:

- Develop a *Next-generation Geothermal Field Trip Itinerary*.
- Facilitate a four-day visit to a next-generation geothermal project in Utah attended by at least one member of each participating county's staff; the field trip will include direct exposure to drilling, development, and operations of a geothermal project and interactions with the local host community and government.
- Develop a *Next-generation Geothermal Field Trip Report-out Memo* that includes, but is not limited to, expected impacts of new geothermal development, well density, and surface disturbance per well pad.
- Conduct virtual consultations with other host communities of active geothermal development, including, but is not limited to, Imperial County; allowing the project team to collect best practices, insights on project impacts, and strategies for community engagement.
- Develop a *Geothermal Planning and Permitting Best Practices Engagement Memo* and submit a preliminary plan that includes, but is not limited to, local values, ecological constraints, and cultural resources.
- Review current local permitting process for the existing operation at the Geysers and identify any opportunities to prioritize and streamline permitting, leveraging project data and best practices from other jurisdictions.
- Develop *Local Geothermal Permitting Inventory and Improvement Opportunities Memo* that includes, but is not limited to, timelines of approvals, identification of opportunities to incorporate data from the project, or best practices from other jurisdictions.
- Develop *Next-Generation Geothermal Learnings Report* that includes but is not limited to observations and learnings from the field visit and virtual consultations to provide a long-lived reference to inform later stages of the project and future planning and permitting.
- Develop a *Surface Constraint Analysis Surface Impact Assumptions Memo* that includes but is not limited to observed impacts of geothermal exploration and development from field trip and virtual consultations, and recommended assumptions on the expected impact (land disturbance, ecological concerns, etc.) to be employed in Region surface constraint analysis.

Products:

- Next-generation Geothermal Field Trip Itinerary.
- Next-generation Geothermal Field Trip Report-out Memo (draft and final).

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- Geothermal Planning and Permitting Best Practices Engagement Memo (preliminary plan, draft and final).
- Local Geothermal Permitting Inventory and Improvement Opportunities Memo (draft and final).
- Next-Generation Geothermal Learnings Report (draft and final).
- Surface Constraint Analysis Surface Impact Assumptions Memo (draft and final).

TASK 5 COMMUNITY ENGAGEMENT

The goal of this task is to raise public awareness of geothermal development opportunities, build county staff experience in engaging the public on geothermal projects, and capture concerns and questions from the local community to guide the project's analysis.

The Recipient shall:

- Receive coaching from NLR and develop a *Community Engagement Best Practice Report* that includes, but is not limited to, the best practices for organizing and facilitating community engagement on large-scale renewable development.
- Organize at least three community engagement meetings on local geothermal development—with at least one in each participating county.
- Develop a *Community Engagement Outreach and Publicity Plan* for community engagement meetings with a specific focus on outreach to underrepresented communities.
- Develop *Community Engagement Materials Package*, such as a presentation and feedback catalog that includes, but is not limited to, general background on geothermal energy, information on new next-generation technologies, observed and expected impacts from geothermal development, and a description of the project's objectives and deliverables.
- Create a diverse set of mechanisms for the public to provide input during and following facilitation of community engagement meetings that includes, but is not limited to, an opportunity for in-person verbal and written feedback, e-mails, and online surveys.
- Develop a *Sonoma-Lake-Mendocino Geothermal Community Engagement Best Practices Memo* that includes, but is not limited to, a comprehensive list of community concerns and questions, along with a strategy for applying input into the project's surface constraint analysis, recommendations on future community outreach on geothermal development by both local government and industry.

Products:

- NLR Community Engagement Best Practices Report (draft and final).
- Community Engagement Outreach and Publicity Plan (draft and final).
- Community Engagement Materials (draft and final).
- Sonoma-Lake-Mendocino Geothermal Community Engagement Best Practices Memo (draft and final).

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TASK 6 SURFACE CONSTRAINT ANALYSIS

The goal of this task is to apply high-resolution datasets, including the LiDAR products completed through Task 3, the local expertise of the project team, best practices from ongoing geothermal development, and community feedback, to establish a logic for assessing surface constraints and opportunities for commercial geothermal resources.

The Recipient shall:

- Compile all relevant surface datasets, including but not limited to LiDAR products, California Natural Diversity Database, California Aquatic Resource Inventory, National Wetlands Inventory, CEC's Land-use Screening process and federal inventories of wildlife and flora, land ownership, pre-disturbance, zoning, conservation contracts, etc. into a single compendium. Submit *Surface Constraint Analysis Inputs Compendium*.
- Collaborate with representatives of County of Mendocino, Sonoma Clean Power, County of Lake (as available), and WRA Inc., to develop a *Surface Compatibility Logic Methods Paper* that includes, but is not limited to, surface compatibility logic output layers, a weighted methodology, and surface datasets to define at least five (5) levels of surface compatibility for geothermal exploration and development (from "exclusion zones" to "minimum conflict").
- Develop a *Capacity Sensitivity to Surface Compatibility Summary* that includes, but is not limited to, the estimate of developable capacity as a function of technology, acceptable levelized cost, and surface compatibility ranking.
- Develop an interactive *Sonoma-Lake-Mendocino Geothermal Prospector GIS Portal* (with downloadable features) that includes, but is not limited to, a compendium with input layers and surface logic made available to the public. Submit the *Sonoma-Lake-Mendocino Geothermal Prospector Inputs GIS Portal* in a Microsoft Word document that includes, but is not limited to, screenshots of the web portal.

Products:

- Surface Constraint Analysis Inputs Compendium
- Surface Compatibility Logic Methods Paper (draft and final).
- Capacity Sensitivity to Surface Compatibility Summary (draft and final).
- Sonoma-Lake-Mendocino Geothermal Prospector GIS Portal

TASK 7 GROUND-TRUTH RECONNAISSANCE SURVEYS

The goal of this task is to provide field validation of the outputs of the surface constraint analysis, as well as direct experience for the project team in evaluating environmental conditions, with at least sixteen half-day reconnaissance surveys of "high potential or low conflict" opportunities.

The Recipient shall:

- Collaboratively select at least 16 sites to target for reconnaissance surveys that are "high potential or low conflict" and provide a geographically diverse validation of the surface constraint logic. Submit a *Ground-truth Reconnaissance Survey Site Selection List*.

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- Develop a *Landowner Engagement Plan* that includes, but is not limited to, standard communication on project intent, reconnaissance survey activities, and roles and responsibilities for contacting and managing relationships with landowners.
- Coordinate logistics with landowners and WRA Inc. to carry out surveys.
- Conduct at least 16 half-day reconnaissance surveys with a qualified biologist with local expertise and collect field observations to assess relevant surface constraint layers, site photographs, description of any uncertainties and risks, and recommendations for future study; county staff to attend at least a subset of surveys to grow direct experience.
- WRA Inc to prepare a *Ground-truth Reconnaissance Surveys Summary Report* that includes, but is not limited to, a matrix linking field observations to relevant surface constraint data sets, site photographs, description of uncertainties, risks, and recommended areas for further study.
- Refine the surface constraint logic, if necessary, to improve the ability of the logic to predict “low conflict” opportunities.
- Prepare a *Ground-truth Reconnaissance Survey Lessons Learned Report* that includes, but is not limited to, a summary of observations and lessons learned across the entire study area, including recommendations on refining mapping logic, assessing data validity, offering guidance on expected biological survey requirements for prospective development, and surface constraint logic validation.

Products:

- Ground-truth Reconnaissance Survey Site Selection List.
- Landowner Engagement Plan (draft and final).
- Ground-truth Reconnaissance Survey Summary Report (draft and final).
- Ground-truth Reconnaissance Survey Lessons Learned Report (draft and final).

TASK 8 TRIBAL CONSULTATION AND RECONNAISSANCE

The goal of this task is to grow tribal awareness of geothermal development opportunities and impacts, improve the representation of tribal concerns in geothermal planning and permitting, and assess cultural resources on geothermal development sites of interest.

The Recipient shall:

- Facilitate an initial tribal consultation with representatives across the Region to share the scope of the project and collect early tribal input on the project, cultural resource reconnaissance, and geothermal development.
- Develop an *Initial Tribal Consultation Feedback Catalog* that includes, but is not limited to, a record of all issues raised, questions received, and recommendations during initial tribal consultation.
- Identify targeted sites for cultural resource reconnaissance that demonstrate commerciality, are assessed to have low surface conflict, and are validated through reconnaissance surveys. Submit *Tribal Reconnaissance Site Selection List*.

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- Develop a *Tribal Reconnaissance Outreach Plan* that includes, but is not limited to, the support for tribal reconnaissance of targeted sites.
- Complete tribal reconnaissance on targeted sites to assess cultural resources.
- Develop a *Tribal Reconnaissance Results Summary* that includes, but is not limited to, a description of tribal reconnaissance results in a format agreed to by tribes, along with tribal feedback, concerns, recommendations, and partnership opportunities.

Products:

- Initial Tribal Consultation Feedback Catalog.
- Tribal Reconnaissance Site Selection List (draft and final).
- Tribal Reconnaissance Outreach Plan (draft and final).
- Tribal Reconnaissance Results Summary (draft and final).

TASK 9 PUBLIC OUTREACH AND TECHNOLOGY TRANSFER ACTIVITIES

The goal of this task is to develop a plan for public outreach during the term of the Agreement and to make the knowledge gained, results, and lessons learned from Agreement tasks available to the public, interested parties, and appropriate decision-makers.

The Recipient shall:

- Develop and submit a Public Outreach and Technology Transfer Plan explaining any public outreach actions proposed during the term of the Agreement and how the knowledge gained from Agreement tasks will be made available to the public. Key elements from this report shall be included in the Final Report for this Agreement.
- Present the draft Public Outreach and Technology Transfer Plan to the TAC for feedback and comments.
- Develop and submit a Summary of TAC Comments that summarizes comments received from the TAC members on the Draft Public Outreach and Technology Transfer Plan. This document will identify:
 - TAC comments the Recipient proposes to incorporate into the final Public Outreach and Technology Transfer Plan.
 - TAC comments the Recipient does not propose to incorporate with and explanation why.
- Submit the final Public Outreach and Technology Transfer Plan to the CAM for approval.
- Conduct and implement the public outreach/technology transfer activities in accordance with the Final Public Outreach and Technology Transfer Plan.
- Develop and submit Monthly Progress Reports that include high level summaries of the activities, results, and lessons learned of tasks performed relating to implementing the Final Public Outreach and Technology Transfer Plan. This report should not include any proprietary information.

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- Provide at least (6) six *High Quality Digital Photographs* (minimum resolution of 1300x500 pixels in landscape ratio) of pre and post technology installation at the project sites or related project photographs, if applicable.

Products:

- Draft Public Outreach and Technology Transfer Plan.
- Summary of TAC Comments.
- Final Public Outreach and Technology Transfer Plan.
- Monthly Progress Reports (draft and final).
- High Quality Digital Photographs, if applicable.

VII. PROJECT SCHEDULE

Please see the Excel spreadsheet in Attachment 6.