



**CALIFORNIA
ENERGY COMMISSION**



**California Energy Commission
January 21, 2025 Business Meeting
Backup Materials for Guidehouse Inc.**

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

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

[PROPOSED]

RESOLUTION NO: 25-121-03h

STATE OF CALIFORNIA

**STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION**

RESOLUTION: Guidehouse Inc.

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 800-24-004 with Guidehouse Inc. for up to \$750,000 to support the CEC with analysis of low carbon fuels, including clean and renewable hydrogen and fuels derived from biomass; 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, 2025.

AYE:

NAY:

ABSENT:

ABSTAIN:

Dated:

Kristine Banaag
Secretariat



CONTRACT REQUEST FORM (CRF)

A. New Agreement Number

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

New Agreement Number: 800-24-004

B. Division Information

1. Division Name: Energy Assessments
2. Agreement Manager: Jennifer Campagna
3. MS-"Not Applicable"
4. Phone Number: 916-776-3549

C. Contractor's Information

1. Contractor's Legal Name: Guidehouse Inc.
2. Federal ID Number: 36-4094854

D. Title of Project

Title of project: Technical Support for Low-Carbon Fuel Potential in California

E. Term and Amount

1. Start Date: January 21, 2025
2. End Date: January 20, 2028
3. Amount: \$750,000

F. Business Meeting Information

1. Operational agreement to be approved by Executive Director? No
2. Are the ARFVTP agreements \$75K and under delegated to Executive Director? No
3. The Proposed Business Meeting Date: 01/21/2025
4. Consent or Discussion? Consent
5. Business Meeting Presenter Name: Jennifer Campagna
6. Time Needed for Business Meeting: N/A
7. The email subscription topic is: EnergyPolicy (Integrated Energy Policy Report)

Agenda Item Subject and Description:

GUIDEHOUSE INC. Proposed resolution approving Agreement 800-24-004 with Guidehouse Inc., for up to \$750,000 to support the CEC with analysis of low carbon fuels, including clean and renewable hydrogen and fuels derived from biomass, and adopting staff's determination that this action is exempt from CEQA. Staff recommends conditional approval of this item based upon funding availability as of the 2024 Budget Act. (Funding Source: General Funds)
Contact: Jennifer Campagna

G. California Environmental Quality Act (CEQA) Compliance

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

No

If yes, skip to question 2.

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: the work in this contract is



providing technical expertise to the Energy Assessments Division, which involves forecasting and analysis. This work involves no physical change in the environment and involves computer modeling and office work only.

2. If Agreement is considered a “Project” under CEQA answer the following questions.

a) Agreement IS exempt?

No

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?

No

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: “None”

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	No

H. Is this project considered “Infrastructure”?

No

I. Subcontractors

List all Subcontractors listed in the Budget (s). 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	Budget
Jai J. Mitchell Analytics	\$27,667

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
"No Key Partner Legal Company to report"

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
General Funds	24/25	800.100	\$750,000

TOTAL Amount: \$750,000

R&D Program Area: Enter R&D Program Area. Example: EDMFO: EDMF

Explanation for "Other" selection Enter explanation for "Other"

Reimbursement Contract #: Enter Reimbursement Contract Number

Federal Agreement #: Enter Federal Agreement Number

L. Contractor's Contact Information

1. Contractor's Administrator/Officer

Name: Amul Sathe

Address: 101 California Street, Suite 4100

City, State, Zip: San Francisco, CA 94111

Phone: 415.399.2180

E-Mail: amul.sathe@guidedhouse.com

2. Contractor's Project Manager

Name: Debyani Ghosh



STATE OF CALIFORNIA
CALIFORNIA ENERGY COMMISSION

Contract Request Form
CEC-94 (Revised 01/2024)

Address: 101 California Street, Suite 4100

City, State, Zip: Francisco, CA 94111

Phone: 415.399.2128

E-Mail: debyani.ghosh@guidehouse.com

M. Selection Process Used

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

Selection Process	Additional Information
Competitive Solicitation #	RFP-24-802, # of bids 5
Non Competitive Bid (<i>Attach DGS-GSPD-09-007</i> https://www.dgs.ca.gov/PD/Forms)	"Not applicable"
Exempt	"Not applicable"

N. Contractor Entity Type

Contractor Entity Type	Yes or No?
Private Company (<i>including non-profits</i>)	Yes
CA State Agency (<i>including UC and CSU</i>)	No
Government Entity (<i>i.e. city, county, federal government, air/water/school district, joint power authorities, university from another state</i>)	No

O. Is Contractor a certified Small Business (SB), Micro Business (MB) or Disabled Veterans Business Enterprise (DVBE)?

The contractor is a certified: No.

P. Civil Service Considerations

- Not Applicable (Agreement is with a CA State Entity or a membership/co-sponsorship)? No
- Public Resources Code 25620, et seq., authorizes the Commission to contract for the subject work. (PIER) No
- The Services Contracted: Yes

If no, go to the next question. If yes, which of the following applies to the contract? More than one can apply, list each answer choice, and separate them with a comma:

- are not available within civil service



- cannot be performed satisfactorily by civil service employee
- are of such a highly specialized or technical nature that the expert knowledge, expertise, and ability are not available through the civil service system

The following applies to the contract: “are not available within civil service, cannot be performed satisfactorily by civil service employee, are of such a highly specialized or technical nature that the expert knowledge, expertise, and ability are not available through the civil service system”.

- d. The Services are of such an urgent, temporary, or occasional nature that the delay to implement under civil service would frustrate their very purpose?

“Urgent”.

Justification:

Guidehouse, Inc., the proposed contractor, has the experience, knowledge, and skills required to conduct a comprehensive and in-depth analysis of low carbon fuels, especially hydrogen. Guidehouse’s subject matter expertise, industry experience, and analysis will meet the complex analytical and technical support required under this contract. Guidehouse has experience in all required aspects of evaluation, including characterization and assessment of production technologies, energy inputs and feedstocks, production costs, and technology performance. The diverse sets of skills, expertise and infrastructure required to conduct this analysis are not available at the Energy Commission. Energy Commission staff conducted two hiring recruitments in 2024 to secure in-house support on low carbon fuels. Neither effort was successful. The few candidates that possessed the expertise and depth of experience are employed in the private sector at a salary level far above what the Energy Commission can offer with available civil service classifications. Three candidates turned down the offer from the Energy Commission due to this issue. This technical support contract will provide the Energy Commission with access to energy scientists, data analysts, engineers, and economists with a level of expertise in low carbon fuels, including clean and renewable hydrogen and fuels derived from biomass, that is not readily available in state service.

Q. Payment Method

1. Is the payment method Reimbursement, Advanced Payment, or Other?
“Reimbursement”
If Other, explain: N/A
2. If Reimbursement, is it in arrears based on Itemized Monthly, Itemized Quarterly, Flat Rate, or One-time?
“Itemized monthly”

R. Retention

Is Agreement subject to retention? Yes

If Yes, Will retention be released prior to Agreement termination? No

S. Justification of Rates

Staff assessed the contractor’s rates and deemed them to be fair and reasonable based on research of other similar contracts and technical work. This contract was competitively bid and staff found that Guidehouse’s proposed rates matched the market rates. Further, Guidehouse’s rates are similar to their rates in a previous contract with the Energy Commission (800-23-012).

T. Disabled Veteran Business Enterprise Program (DVBE)



Provide requested additional information.

1. Exempt (Interagency/Other Government Entity) No
2. Meets DVBE Requirements DVBE Yes.
Amount: \$ 27,667 DVBE %: 4%
3. Is the Contractor Certified DVBE or Subcontracting with a DVBE? If subcontracting with a DVBE, provide the name of the DVBE company. Jai J. Mitchell Analytics
4. Contractor selected through CMAS or MSA with no DVBE participation. No
5. Requesting DVBE Exemption (attach CEC 95) No.

U. Miscellaneous Agreement Information

1. Will there be Work Authorizations? Yes
2. Is the contractor providing confidential information? No
3. Is the contractor going to purchase equipment? No.
4. What is the check frequency of the progress reports? Monthly, Quarterly, or Other? If Other, please provide explanation.

Monthly

5. Will a final report be required? No
6. Is the Agreement, with amendments, longer than three years? If yes, why?

No

V. The following items should be attached to this CRF (as applicable)

List all items that should be attached to this CRF 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	DGS-GSPD-09-007, NCB Request	No
4	CEC 95, DVBE Exemption Request	Yes
5	Awardee CEQA Documentation	No
6	Resumes	No
7	CEC 105, Questionnaire for Identifying Conflicts	Yes

Approved By

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

Agreement Manager: Jennifer Campagna

Approval Date: 1/8/2025

Office Manager: Max Solanki

Approval Date: 1/8/2025



STATE OF CALIFORNIA
CALIFORNIA ENERGY COMMISSION

Deputy Director: David Erne

Approval Date: 1/8/2025

Contract Request Form
CEC-94 (Revised 01/2024)

Exhibit A

SCOPE OF WORK

I. Scope of Work and Deliverables

ABOUT THIS SECTION

This section describes the contract scope of work, deliverables and due dates under the direction of the CAM.

The chosen Contractor will assist EAD by performing the tasks specified in this Scope of Work under the direction of the CEC's CAM. The CAM will oversee the management and administration of the agreement. The resulting agreement will include defined tasks for Task 1. Additionally, Work Authorizations (WAs) can be used on an as-needed basis as described below. The specific activities and the degree of effort for each activity may vary. Work assigned through WAs will depend on availability of funding as well as the CEC's demand for service as determined by the CAM.

ACRONYMS/GLOSSARY

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

Acronym	Definition
CAM	Commission Agreement Manager
CEC	California Energy Commission
CPUC	California Public Utilities Commission
EAD	Energy Assessments Division
Guidehouse	Guidehouse Inc.
IEPR	Integrated Energy Policy Report
PM	Program Manager
RNG	Renewable Natural Gas
SB 100	Senate Bill 100 – The 100 Percent Clean Energy Act of 2018
SB 423	Senate Bill 423
SB 1075	Senate Bill 1075
WA	Work Authorization

WORK AUTHORIZATIONS

The Agreement that results from this solicitation shall be conducted as a “work authorization” Agreement except for Task 1 work. For Task 2, no work shall be undertaken unless authorized by the CAM through a specific written document called a “work authorization.” The CAM will prepare and issue the written work authorizations and shall set a maximum price, budget, and schedule for the work to be performed. The CAM will work, in consultation with the Contractor, to assign work to either the Contractor or a Subcontractor.

TASK LIST

Task #	Task Name
1	Agreement Management
2	Low-Carbon Fuel Feasibility and Impacts Analysis

TECHNICAL TASKS

TASK 1- AGREEMENT MANAGEMENT

The goal of this task is to provide for overall administrative management of the contract by the Contractor. In addition to the specific tasks below, the Contractor's Program Manager (PM) is responsible for directing the work performed by the Contractor Team to meet the objectives of the contract. The PM is also responsible for ensuring the quality and timely delivery of all deliverables, both technical and administrative from the Contractor Team. The PM will be the primary point of contact for the Contractor Team and is responsible for oversight of all work under this contract. The PM is also responsible for managing all subcontractor work, including ensuring quality products, enforcing subcontractor Agreement provisions, and in the event of failure of the subcontractor to satisfactorily perform services, recommending solutions to resolve the problem.

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 and a representative of the CEC Accounting Office. The meeting will be held via Zoom or teleconference. 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 1.3). Invoices must be submitted to the CEC's Accounting Office.

Deliverables:

- Invoices

Task 1.3 Progress Reports

The goal of this task is to periodically verify that satisfactory and continued progress is 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. The CAM will provide the format for the progress reports.

Deliverables:

- Monthly Progress Reports

Task 1.4 Work Authorizations

The goal of this task is to develop and manage all technical and budgetary aspects of work authorizations (WA) in accordance with the requirements of this Agreement for work to be performed under Technical Task 2.

The Contractor shall:

- Help prepare WAs in accordance with the contract requirements.
- The WA format and content shall be specified by the CAM.
- The WA end date should be no later than 60 days prior to the term end date of the Agreement.
- Submit all required WA Documents to the CAM.
- Administer WAs.
- Establish and maintain contractual agreements with entities performing work.
- Develop project schedules.
- Manage Subcontractor activities in accordance with the Agreement terms and conditions.
- Provide oversight and first-level review of reports and documentation, and comment on the content of deliverables.

- Review and approve all WA invoices.
- Provide audit and accounting services for all WAs.
- Immediately report any significant variances affecting performance of WAs and recommend mitigation actions for consideration by the Project Manager and CAM. Examples of significant variances include the inability to submit deliverables by key WA due dates, unavailability of key personnel that will affect timely submittal of deliverables, and key technical issues that would require change in scope, redirection of the effort, or discontinuation of the project.
- Coordinate with the CAM to close out completed WAs and remaining unallocated balances.
- Monitor and track each WA and the overall agreement.
- Provide updated WA project schedules, as needed, and determine if each WA is on schedule and deliverables are satisfactory.
- Determine the fiscal status of each WA and the overall Agreement.
- Prevent cost overruns.
- Track the start, progress, and closure of each WA.

Deliverables:

- WA Documents

Task 2 – LOW-CARBON FUEL FEASIBILITY AND IMPACTS ANALYSIS

The goal of this task is to provide technical expertise to the CEC's EAD on low carbon fuels analysis, including clean and renewable hydrogen and fuels derived from biomass. This analysis will comply with state clean energy laws and requirements as outlined in legislation, notably SB 1075, SB 100, and SB 423.

At the direction of the CAM through a properly executed Work Authorization, the Contractor shall:

- 2.1** Provide expertise and analysis on production pathways for clean and renewable hydrogen. Analysis will include assessments of production technologies, feedstocks, system and balance of system costs, and performance. Comparisons may be made to other clean energy resources to quantitatively and qualitatively assess relative benefits and challenges of low carbon fuel production to support California's clean energy goals. Analysis of the potential for imports of low carbon fuels may also be required to assess all options of providing low carbon fuels to meet in-state demand. This analysis may consider options for generating and converting hydrogen to ammonia for transport.
- 2.2** Provide expertise and analysis on the viability of various delivery methods and storage options for clean and renewable hydrogen. This analysis will assess various delivery methods (e.g., dedicated pipelines, truck, ship,) and compare costs. Further, the assessment will compare the viability of these delivery methods to collocating the production of low carbon fuels where they are used (e.g., power plants). This analysis will also consider delivery options for out-of-state production into California. This analysis

will identify and evaluate options to store hydrogen in both gaseous and liquid form, including the use of existing underground gas storage facilities and other means. This analysis may consider options for transporting ammonia to be used for converting to clean and renewable hydrogen. The analysis may also include assessing the impacts of deploying hydrogen delivery infrastructure to disadvantaged communities.

- 2.3** Analyze hydrogen demand and use in the electricity generation (e.g., power plants) and transportation sectors, building upon previous CEC analysis of cost estimates, technology types, end uses (e.g. ammonia), and other areas as needed. The transportation analysis will include market and technological assessments for each of the transportation modes, including retail fuel prices and vehicle/vessel prices. The analysis should review findings from the CEC's SB 423 assessment report and any relevant external reports, and incorporate SB 100 2025 report's resource diversification pathway, which considers the combustion of hydrogen for electricity generation.
- 2.4** Develop methodologies to assess the air quality and greenhouse gas emissions impacts from the production, delivery, and usage of hydrogen gas, which could include analysis of regional air quality planning and monitoring (e.g., air quality districts) and disadvantaged communities. The analysis will develop estimates of leakage and the impact of the emissions from hydrogen gas into the atmosphere at each stage (e.g., production, transport, and storage), with a focus on greenhouse gas emission impacts as well as criteria air pollutants, including NO_x. The analysis may ~~examine~~ explore emission mitigation solutions from combustion at power plants.
- 2.5** Analyze financial strategies that could be utilized for the low carbon fuels industry, such as subsidies, incentives, and tax credits.
- 2.6** Provide support on analysis of other technologies, feedstocks, resources, and end uses for low carbon fuels, including hard-to-electrify sectors, as needed and compare them to other clean energy resources, either currently in deployment (e.g., solar, wind) or emerging (e.g., season energy storage).

Documentation:

Provide support in developing reports and presentations on hydrogen analyses for audiences of different technical levels. Support will also be required with the development of dashboards in Tableau for use by CEC internally or on the publicly available CEC website.

SCHEDULE OF DELIVERABLES AND DUE DATES

Note: Actual deliverables will be specified in each Work Authorization

Task Number	Deliverable	Due Date
1	Agreement Management	Ongoing
1.1	<ul style="list-style-type: none">• Draft and Final Agendas• Summary of the kickoff to be included in the monthly progress report.	Monthly
1.2	Monthly invoice (to be included with monthly progress reports)	Monthly
1.3	Monthly Progress Reports (including monthly invoice)	Monthly
1.4	WA Document	Monthly
2	Low-Carbon Fuel Feasibility and Impacts Analysis	To Be Determined in WA.