



**CALIFORNIA
ENERGY COMMISSION**



**California Energy Commission
August 09, 2023 Business Meeting
Backup Materials for Agenda Item No 03a:
The Board of Trustees of the Leland Stanford Junior University**

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

STATE OF CALIFORNIA
STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

RESOLUTION: The Board of Trustees of the Leland Stanford Junior University

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 800-23-001 with The Board of Trustees of the Leland Stanford Junior University for a \$25,000 one-year contract for the CEC to continue to be a member of the Energy Modeling Forum (EMF) Affiliates Program. The purpose of the membership is to participate in an energy-environmental network of experts and modelers currently working on the EMF 37 Deep Decarbonization & High Electrification Scenarios for North America study, which seeks to explore the opportunities, limitations, trade-offs, and robustness of results associated with high electrification in North America; 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 August 09, 2023.

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: 800-23-001

B. Division Information

1. Division Name: **Energy Assessments Division**
2. Agreement Manager: **Nicholas Janusch**
3. MS-22
4. Phone Number: 916-891-8519

C. Recipient's Information

1. Recipient's Legal Name: **The Board of Trustees of the Leland Stanford Junior University**

D. Federal ID Number: 94-1156365

Title of project: **Energy Modeling Forum Affiliates Program**

E. Term and Amount

1. Start Date: August 10, 2023
2. End Date: June 30, 2024
3. Amount: \$25,000

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: August 9, 2023
4. Consent or Discussion? Consent
5. Business Meeting Presenter Name: Nicholas Janusch
6. Time Needed for Business Meeting: NA
7. The email subscription topic is: NA

Agenda Item Subject and Description:

The Board of Trustees of the Leland Stanford Junior University. Proposed resolution approving Agreement 800-23-001 with The Board of Trustees of the Leland Stanford Junior University for a \$25,000 one-year contract for the CEC to continue to be a member of the Energy Modeling Forum (EMF) Affiliates Program. The purpose of the membership is to participate in an energy-environmental network of experts and modelers currently working on the EMF 37 Deep Decarbonization & High Electrification Scenarios for North American study, which seeks to explore the opportunities, limitations, trade-offs, and robustness of results associated with high electrification in North America. (ERPA funding). Contact: Nicholas Janusch

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: it is only a membership agreement.

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

a) Agreement **IS** exempt?

NA

Statutory Exemption?

NA

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: NA

CCR section number: NA

Categorical Exemption?

NA

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: CCR section number 1, CCR section number 2. Or, "None"

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

NA

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

H. Subcontractors- None

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
NA	\$ Budget or "0"
NA	\$ Budget 2 or "0"

I. Key Partners- None

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
NA
NA

J. 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
ERPA	2023-24	100.022	\$25,000

TOTAL Amount: \$25,000

R&D Program Area: NA

Explanation for "Other" selection NA

Reimbursement Contract #: NA

Federal Agreement #: NA

K. Contractor's Contact Information

1. Contractor's Administrator/Officer

Name: Pamela McCroskey

Address: Energy Modeling Forum

P.O. Box 20466

Stanford, CA 94309-0466

Phone: (650) 723-0645

E-Mail: pamelam@stanford.edu

2. Contractor's Project Manager

Name: John P. Weyant



Address: Huang Engineering Center, Room 260
475 Via Ortega, Second Floor
Stanford University
City, State, Zip: Stanford, CA 94305-4121
Phone: (650) 723-0645
E-Mail: weyant@stanford.edu

L. Selection Process Used

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

Selection Process	Additional Information
Competitive Solicitation #	N/A
Non Competitive Bid (<i>Attach DGS-GSPD-09-007</i> https://www.dgs.ca.gov/PD/Forms)	N/A
Exempt	This is a membership agreement, SCM V.1, 5.80.B.2.m

M. 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

N. Is Contractor a certified Small Business (SB), Micro Business (MB) or Disabled Veterans Business Enterprise (DVBE)? No

The contractor is a certified: No.

O. Civil Service Considerations

- a. Not Applicable (Agreement is with a CA State Entity or a membership/co-sponsorship)? **Yes**
- b. Public Resources Code 25620, et seq., authorizes the Commission to contract for the subject work. (PIER)
- c. The Services Contracted:

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:

- 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?

Membership agreement; not applicable

Justification:

The purpose of the membership is for CEC technical staff to understand the potential role for electrification under economy-wide decarbonization pathways in important economic sectors—transportation, buildings, and industry. This current study on “Deep Decarbonization & High Electrification Scenarios for North America” is designed to explore the opportunities and robustness of results associated with high electrification in North America.

P. Payment Method

1. Is the payment method Reimbursement, Advanced Payment, or Other?

Reimbursement.

If Other, explain:

2. If Reimbursement, is it in arrears based on Itemized Monthly, Itemized Quarterly, Flat Rate, or One-time?

One time.

Q. Retention

Is Agreement subject to retention? **No.**

If Yes, Will retention be released prior to Agreement termination?

R. Justification of Rates

Membership dues are set by Stanford University- Energy Modeling Forum. This was the same amount as last year's. Dues are consistent with entities at this membership level.

S. Disabled Veteran Business Enterprise Program (DVBE)

Provide requested additional information.

1. Exempt (Interagency/Other Government Entity) **No.**
2. Meets DVBE Requirements DVBE .NA
Amount: \$ 0 DVBE %:
3. Is the Contractor Certified DVBE or Subcontracting with a DVBE? If subcontracting with a DVBE, provide the name of the DVBE company. If none applies, enter “Not Applicable”.

Not Applicable

4. Contractor selected through CMAS or MSA with no DVBE participation- NA.
5. Requesting DVBE Exemption (attach CEC 95) -**Yes.**



T. Miscellaneous Agreement Information

1. Will there be Work Authorizations? No.
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. **None required**
5. Will a final report be required? No.
6. Is the Agreement, with amendments, longer than three years? No. If yes, why?

U. 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 -- Invoice	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: Nicholas Janusch

Approval Date: 4/12/2023

Branch Manager: for Quentin Gee- Aida Escala

Approval Date: 4/17/2023

Director: Aleecia Gutierrez

Approval Date: Director’s Approval Date: 4/18/2023

EXHIBIT A

SCOPE OF WORK

PURPOSE

The purpose of this Agreement is for the Energy Commission to be a member of the Energy Modeling Forum (EMF) Affiliates Program. The Stanford EMF brings together leading experts and decisionmakers from government, industry, universities, and other research organizations to study important energy and environmental issues. Each EMF forum provides a non-partisan platform for leading experts and advisors.

The EMF aims to understand the potential role for electrification under economy-wide decarbonization pathways in important economic sectors—transportation, buildings, and industry. Much of the deep decarbonization literature points to the decarbonization of the power sector followed by the electrification of the economy, but there is a lack of consensus on the ultimate potential for electrification, and rate at which it can be implemented given technical, behavioral, and economic limits – and competition from other promising emission mitigation options. This study is designed to explore the opportunities, limitations, trade-offs, and robustness of results associated with high electrification in North America. Since the initial launch of the study, net-zero emissions targets have gained significant policy relevance. A major motivation for this study is to improve the modeling community’s ability to analyze net-zero pathways.

Major issues and questions for this EMF include:

- What roles do the transportation, buildings, and industry sectors play in reaching economy-wide net-zero emissions goals?
 - How do differing pathways for technology, behavioral change, and complimentary policies impact sectoral pathways in deep decarbonization scenarios?
 - How do carbon management technologies impact net-zero scenarios?
 - Can we improve how economy-wide and energy system models represent these deep decarbonization pathways through exchanges between modeling groups and sectoral experts?
- To what extent can the transportation, buildings, and industrial sectors be electrified, particularly in the context of policies to achieve deep decarbonization and “net-zero” emissions? How might technological and behavioral change, decarbonization efforts alter the extent of electrification?
 - Beyond decarbonization efforts, what are the key drivers of electrification in the transportation, buildings, and industrial sectors?
 - How might the availability of other decarbonization options such as carbon management and low-carbon fuel sources (e.g., biofuels or hydrogen in various forms) compete with electricity to moderate the extent of electrification?
- What are the implications of high electrification scenarios on the energy system and economic and environmental outcomes in North America in reference projections and across a range of decarbonization scenarios?
- How does technological change in the power sector shape electrification pathways?

The study is designed to engage all energy and economy-wide models as well as sectoral and technology experts forming study groups focused on transportation, industry, buildings, and carbon management.

The study description and design are presented in four sections below:

- Study Structure and Process i.e., types of models and rounds of the study
- Overview of the Scenarios i.e., scenario matrices and illustrative sensitivity examples
- Scenario Details and Discussion i.e., detailed specifications
- Reporting and Submissions i.e., reporting template development and submission process

The Energy Assessments Division will benefit from this membership through discussions with leading experts in the field, knowledge of a range of different models to help with forecasts and energy planning, and policy-evaluation frameworks meant to improve public policy. Other benefits include an annual conference, access to a broad range of contacts, professional interactions with Stanford faculty, staff, and students, access to research results, and feedback on modeling assumptions.