

Request for Proposals for System Modeling Services

June 2021



Project Overview

The California Community Choice Association (CalCCA) is requesting proposals from qualified consultants or firms to provide system modeling and technical support that will be used in various CalCCA regulatory filings, including but not limited to the Integrated Resource Planning (IRP) process at the California Public Utilities Commission (CPUC). The next cycle of IRP is likely to begin in 2022.

The successful proposal submittal must demonstrate that the Consultant has the appropriate professional and technical background to fulfill the scope of work. The consultant must have expertise in electric system modeling and a proven ability to update, maintain, and run such models.

The chief use of this production cost modeling is in the context of the CPUC's Integrated Resource Planning (IRP) proceeding, although CalCCA reserves the right to request modeling for other proceedings where modeling is relevant, such as Resource Adequacy (RA).

Preliminary Scope of Work

- **Compile and maintain** electric system model database from public sources where possible, including:
 - Generator list and specifications, including heat rates, outages, retirement dates, etc.
 - Transmission constraints
 - Load Data
 - Weather Data
- **Provide and update** written documentation of model assumptions and logic as requested
- **Integrate** CPUC's Reference System Plan (IRP output) into system model
- **Integrate** Load-Serving Entity (LSE) new build portfolios into system model
- **Run system model** to develop reliability assessment, decarbonization metrics, and cost analysis
 - Compare reference system plan to LSE new build portfolios
 - Perform sensitivities and scenario analysis to identify possible emissions or cost savings
- **Ground Truth** model versus real grid operations to measure accuracy and any possible bias
- **Validate** work of CPUC and other stakeholders, ensuring that results are reasonable
- **Assist** with technical aspects of regulatory filings and other advocacy, supporting policy staff in drafting comments, briefs, and testimony
- **Provide** relevant data cleaning and analysis scripts to CalCCA staff as requested for review
- **Train** CalCCA staff in use of the model
- **Develop** charts and graphs summarizing outputs.

Fee Schedule

Consultant should propose a time and materials and/or a fixed fee option for the services above. This fee schedule should include likely staffing on this project, their background and expertise, and their hourly rate. It should also include a not-to-exceed amount.

Proposal Requirements

In order to be considered, all proposals must be submitted by the deadlines listed in the RFP schedule included herein. When completing the Consultant's RFP response, Consultant must include the following detail:

- Background and experience of all staff involved in modeling, including:
 - Name, position, and short biography of employee(s) responsible for providing this service
 - Hourly rate
 - Modeling / quantitative analysis expertise
 - Programming languages known (R, Python, C, etc)
 - Sample scripts in those programming languages.
- Description of the modeling tools used, including:
 - Scope (CAISO/California/WECC)
 - Time horizon (full year, multiple years, etc).
 - Granularity (daily, hourly, subhourly)
 - Runtime (hours per model run, including min/max ranges depending on number of scenarios and any performance improvements that can be realized through running multiple scenarios in parallel)
 - Any data or cloud services (AWS, etc) used for storing data or improving performance.
 - List and detailed description of model outputs (cost, emissions, reliability metrics, etc), providing samples where relevant
 - Granularity of outputs (generator level / balancing authority level)
 - System requirements for the model (Mac / Windows, which OS, RAM, etc)
 - A description of how the model stores data for, and handles analysis of, multiple scenarios—i.e. how a user can run different scenarios without having to manually change the database every time
- A description of any ground-truthing exercise that the consultant has already done to benchmark model predictions against real world grid operations, attaching relevant reports if necessary.
- Reports or presentations summarizing model results
- Experience with CPUC proceedings, especially an understanding of CPUC-jurisdictional load-serving entity IRP requirements, familiarity with the RESOLVE model, and the Clean System Power (CSP) tool developed by E3
- The consultant should affirm whether the model's database is already "in-model," or would have to be purchased separately, and provide relevant pricing data for access and maintenance.
- Describe how the Consultant will adhere to anti-trust and collusion laws while providing this service to CalCCA members
- Describe how the Consultant will avoid conflicts of interest with other power providers and/or regulatory bodies while providing this service to CalCCA

Evaluation of Proposals

CalCCA will evaluate all proposals based on the following criteria:

- Experience with production cost models
- Staff qualifications
- Model specs
- Fee Schedule

CalCCA may, or may not, negotiate contract terms with selected Consultant(s) prior to award, and expressly reserves the right to negotiate with several Consultants simultaneously and, thereafter, to award a contract to the Consultant(s) offering the most favorable terms. Proposals submitted, therefore, should contain the Consultant's most favorable terms and conditions, as the selection and tentative award may be made without further discussion with any Consultant.

CalCCA reserves the right to accept or reject any and all submitted proposals, to waive minor irregularities, modify services, and to request additional information or revisions to offers, and to negotiate with any or all Consultants at any stage of the evaluation.

CalCCA will not make a final contract award unless it is approved by its Board of Directors.

RFP Timeline

Consultants must submit an electronic copy of their proposal **by 7/20/2021, at 5:00 p.m. Pacific Time**. Proposals must be emailed to fred@cal-cca.org with the subject line: "System Modeling Consulting Services".

Any proposal received after the due date and time will be rejected. The due date is subject to change. If the due date is changed, all known recipients of the original RFP will be notified via email of the new date.

Questions about the RFP must be submitted by email only to the following email address: fred@cal-cca.org. Deadline to submit questions is **7/7/2021, at 5:00 p.m. Pacific Time**. All potential Consultants are responsible for checking the CalCCA website (<https://cal-cca.org/opportunities/#toggle-id-2>) and LinkedIn page (<https://www.linkedin.com/company/california-community-choice-association/>) for any addenda or written responses to questions received. Potential Consultants may only rely on written responses to questions; no oral representations shall be binding on CalCCA.

Timeline	
Issuance of RFP	Tue 6/29/2021
Deadline to submit questions	Wed 7/7/2021
Deadline to submit proposals	Tue 7/20/2021
Award of agreement	Q3 2021

CalCCA Legal Obligations

CalCCA is not obligated to respond to any proposal submitted as part of the RFP.

Respondents to this RFP acknowledge that CalCCA represents public agencies subject to the requirements of the California Public Records Act set forth at Cal. Gov. Code section 6250 et seq. CalCCA acknowledges that a Consultant may submit information to CalCCA that the Consultant considers confidential, proprietary, or trade secret information pursuant the Uniform Trade Secrets Act (Cal. Civ. Code section 3426 et seq.), or otherwise protected from disclosure pursuant to an exemption to the California Public Records Act (Government Code sections 6254 and 6255).

Any page of the proposal package that is deemed by Consultant to be confidential or contain trade secrets by the Consultant shall be clearly marked "CONFIDENTIAL INFORMATION" or "PROPRIETARY INFORMATION" at the top of the page. CalCCA will not disclose confidential or proprietary information to third parties, unless required by law; however, the CalCCA cannot guarantee that such information will be held confidential.

No proposal shall be binding upon CalCCA except pursuant to a written agreement signed by CalCCA and the Consultant. CalCCA will not be liable at any time for any costs the Consultant may incur in preparing or submitting its response to this RFP.

Unless a page is otherwise marked confidential, proposals submitted in response to this RFP are public documents. With the exception of any Confidential Information that is legally exempt from disclosure, CalCCA is obligated to disclose such proposals if requested (including by competitors). CalCCA will also disclose any winning proposal at a public meeting of CalCCA's Board of Directors.

About CalCCA

The California Community Choice Association (CalCCA) represents the interests of California's community choice electricity providers in the legislature and at state regulatory agencies, including the California Public Utilities Commission, California Energy Commission and California Air Resources Board. CalCCA's voting membership is comprised of operating CCA programs in California that are serving load or about to launch (implementation plan has been submitted and CEO appointed). Local governments interested in community choice may join as affiliate members.

More information is available at the website here: <https://cal-cca.org/>