Request for Proposals

Peninsula Clean Energy, a California Joint Powers Authority, is seeking proposals from interested consultants to develop a data warehouse.

Responses are due *September 4, 2020* at *5pm* Pacific Time.

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1 RFP OVERVIEW

Peninsula Clean Energy (PCE) programs include advancing transportation and building electrification, resilience and load shaping, and other clean energy initiatives. This Request for Proposals (RFP) seeks offers from qualified providers to develop and implement a data warehouse for energy data. Peninsula Clean Energy will evaluate the offers received from this RFP and plans to negotiate and execute a contract with the selected proposer.

This RFP-

- Provides general background on Peninsula Clean Energy
- Describes the service sought by Peninsula Clean Energy (scope of work)
- Provides an opportunity for Proposers to describe their qualifications and experience and explain how they can contribute to services requested.

2 ABOUT PENINSULA CLEAN ENERGY

Peninsula Clean Energy, a community choice energy aggregator, is San Mateo County's official electricity provider. Formed in February 2016, Peninsula Clean Energy is a joint powers authority, consisting of the County of San Mateo and all twenty of its towns and cities. Peninsula Clean Energy provides cleaner and greener electricity, and at lower rates, than the incumbent investor-owned utility (IOU), Pacific Gas & Electric Company (PG&E). Peninsula Clean Energy plans for and secures commitments from a diverse portfolio of energy-generating resources to reliably serve the electric energy requirements of its customers over the near-, mid-, and long-term planning horizons. Peninsula Clean Energy's programs include advancing the adoption of electric vehicles and transitioning building fossil fuel uses to low carbon electricity. For more information on Peninsula Clean Energy, please go to www.peninsulacleanenergy.com.

As part of its mission-driven, collaborative, not-for-profit, locally-focused roots, Peninsula Clean Energy is committed to the following:

Organizational Priorities

- Design a power portfolio that is sourced by 100% carbon-free energy by 2025 that aligns supply and consumer demand a 24 x 7 basis
- Contribute to San Mateo County reaching the state's goal to be 100% greenhouse gas-free by 2045

Strategic Goals

1. Secure sufficient, low-cost, clean sources of electricity that achieve Peninsula Clean Energy's priorities while ensuring reliability and meeting regulatory mandates
2. Strongly advocate for public policies that support Peninsula Clean Energy's Organizational Priorities
3. Implement robust energy programs that reduce greenhouse gas emissions, align supply and demand, and provide benefits to community stakeholder groups
4. Develop a strong brand reputation that drives participation in Peninsula Clean Energy's programs while ensuring customer satisfaction
5. Employ sound fiscal strategies to promote long-term organizational sustainability
6. Ensure organizational excellence by adhering to sustainable business practices and fostering a workplace culture of innovation, diversity, transparency, and integrity

3 RFP SCHEDULE

Event	Date
RFP issued	Thurs., August 6, 2020
Deadline for Proposers to submit questions	Fri., August 21, 2020
Responses to questions received published on PCE's website	Fri., August 28, 2020
Deadline for Proposers to submit proposals	Fri., September 4, 2020, 5pm Pacific Time
Possible interviews of top Proposers	September 21-23, 2020
Anticipated date PCE will notify awardee	Thurs., October 1, 2020
Contract execution and project start	Mon., October 26, 2020

- **Question & Answer:** Proposers may submit questions concerning the RFP at programs@peninsulacleanenergy.com on or prior to the deadline for questions specified above. All questions and answers will be shared with all Proposers and will be posted on PCE's website. Questions received in advance of the deadline will be responded to in advance of the response date where feasible.

- **Offer Review:** Peninsula Clean Energy will evaluate all Offers according to the criteria listed below.

4 PROPOSAL SUBMITTAL

Proposals must be received on or before the above deadline and submittal must be by email to programs@peninsulacleanenergy.com with the subject “Proposal - <Vendor Name> - Data Warehouse”.

By participating in Peninsula Clean Energy’s RFP process, a Proposer acknowledges that it has read, understands, and agrees to the terms and conditions set forth in these RFP Instructions. Peninsula Clean Energy reserves the right to reject any offer that does not comply with the requirements identified herein. Furthermore, Peninsula Clean Energy may, in its sole discretion and without notice, modify, suspend, or terminate the RFP without liability to any organization or individual. The RFP does not constitute an offer to buy or create an obligation for Peninsula Clean Energy to enter into an agreement with any party, and Peninsula Clean Energy shall not be bound by the terms of any offer until Peninsula Clean Energy has entered into a fully executed agreement. Only electronic submittals will be accepted.

5 CONTENT OF RESPONSE

Interested vendors must submit the following documents (except those marked "Optional") to be considered for awarding of this proposal:

1. **Cover Letter with the following elements (1 pg.):**
    - Reference to this RFP
    - Legal business name, address, telephone number, and business status (corporation, limited partnership, individual, etc.).
    - Name of vendor's representative with respect to this RFP along with telephone number and email address.
    - A signature of an authorized individual.
2. **Approach (10 pg. max):**
    - Approach and methods for achieving the Scope of Work described below (Section 11). This may include specific recommendations, if any, on scope and process.
    - Technical approach including platforms, toolsets, and standards to be used as well as justification for the approach.
    - Key challenges and resolutions.
    - Staffing plan and project team structure.
3. **Qualifications and Experience (4 pg. max):**
    - A brief summary of consultant history and background.
    - Experience with energy data.
    - A summary of similar recent projects completed or worked on.
    - Identification of relevant licenses and certifications.
4. **Proposed Schedule** (table or chart, 1 pg. max)
5. **Cost Proposal** (2 pg. max, include rate schedule)

Cost proposal must include

- Itemized labor, licenses and tools
- Ongoing maintenance costs

6. **Project staffing and credentials** (no page limit)

7. **References:** Contact information for three (3) references from work performed in the last three years. Please include scope of work, dates of contract, contract amount, contact person, telephone number, and email address.

8. **Confirmation of acceptance of contract terms** or explanation of proposed contract modifications (see Agreement terms)

9. **Certificates of Insurance for the following coverages:**

- Commercial General Liability – for bodily injury, property damage, and personal injury $1,000,000 – each occurrence $2,000,000 – in aggregate
- Business Automobile Liability – "any auto" (Company Vehicles) – At least $1,000,000
- Personal Automobile Liability – "any auto" (Personal Vehicles) – At least $500,000
- Worker's Compensation and Employer's' Liability (EPL)– injury or death,
- each accident At least $1,000,000 (EPL not required for Sole Proprietor)

10. **Supplier Diversity Questionnaire (Optional):** Peninsula Clean Energy's Supplier Diversity Questionnaire is attached to this RFP. Please note, your response (or lack thereof) will have no impact on your contract status or eligibility to work with Peninsula Clean Energy in accordance with state law.

6 REVIEW AND SELECTION PROCESS

Evaluation will be based on a combination of quantitative and qualitative criteria. Peninsula Clean Energy will evaluate each Offer against these criteria and select a subset of Offers to move to the Shortlist phase. The most qualified individual or firm will be recommended by the RFP Evaluation Committee based on the overall strength of each proposal and the evaluation is not restricted to considerations of any single factor such as cost. The criteria used as a guideline in the evaluation will include, but not be limited to, the following:

1. Completeness of the proposal, including clarity of understanding of the scope of services to be provided and appropriateness of the proposed approach/methods
2. Qualifications and experience of the firm and staff, and adequacy of the staffing plan
3. Past work experience, especially with underserved or low-income communities
4. Experience developing data warehouse systems and with energy data in particular
5. Quality of references
6. Exceptions to PCE's contract template or insurance requirements

7 AGREEMENT TERMS

Awardees will be required to enter into a contract using Peninsula Clean Energy's standard contract terms. Modification of the contract terms may be proposed by the Proposer for consideration by Peninsula Clean Energy but are not guaranteed to be accepted. Rejection of the final terms from Peninsula Clean Energy is grounds for disqualification. Shortlisted participants will be required to provide any redlines to the standard terms ahead of the interview phase.

Peninsula Clean Energy will retain ownership of all custom software code, licenses, design documents and other work products developed as part of this project unless otherwise determined. If a proposer intends to supply pre-existing intellectual property, that must be specified in the proposal. In addition, use of preexisting intellectual property must be accompanied with granting an unlimited license to Peninsula Clean Energy and approach to business continuity in the event it should be necessary for Peninsula Clean Energy to assume direct management of the code base.

Peninsula Clean Energy's standard contract terms are available for review here (subject to change): https://www.peninsulacleanenergy.com/current-rfp-rfo/

8 SUPPLIER DIVERSITY

Consistent with its strategic goals, Peninsula Clean Energy has a strong commitment to foster a work environment that espouses sustainable business practices and cultivates a culture of innovation, diversity, transparency, integrity, and commitment to the organization's mission and the communities it serves. As part of that goal, Peninsula Clean Energy strives to ensure its use of vendors and suppliers who share its commitment to sustainable business and inclusionary practices.

To help ensure an inclusive set of vendors and suppliers, Peninsula Clean Energy's policy requires it to:

1. Strive to use local businesses and provide fair compensation in the purchase of services and supplies;
2. Proactively seek services from local businesses and from businesses that have been Green Business certified and/or are taking steps to protect the environment; and
3. Engage in efforts to reach diverse communities to ensure an inclusive pool of potential suppliers.

General Order 156 (GO 156) is a California Public Utilities Commission ruling that requires utility entities to procure at least 21.5% of their contracts with majority women-owned, minority-owned, disabled veteran-owned and LGBT-owned business enterprises' (WMDVLGBTBEs) in all categories. Qualified businesses become GO 156 certified through the CPUC and are then added to the GO 156 Clearinghouse database.

The CPUC Clearinghouse can be found here: www.thesupplierclearinghouse.com. While Peninsula Clean Energy is not legally-required to comply with GO 156, Peninsula Clean Energy's policies and commitment to diversity are consistent with the principles of GO 156, and, therefore, respondents to this RFP are asked to voluntarily disclose their GO 156 certification status as well as their efforts to work with diverse business enterprises, including those owned or operated by women (WBE), minorities (MBE), disabled veterans (DVBE), and lesbian, gay, bisexual, or transgender people (LGBTBE).

As a public agency and consistent with state law, Peninsula Clean Energy will not use any such provided information in any part of its decision-making or selection process. Rather, Peninsula Clean Energy will use that information solely to help evaluate how well it is conforming to its own policies and goals. Pursuant to California Proposition 209, Peninsula Clean Energy does not give preferential treatment based on race, sex, color, ethnicity, or national origin.

9 LEGAL OBLIGATIONS

Peninsula Clean Energy is not obligated to respond to any offer submitted as part of the RFP. All parties acknowledge that Peninsula Clean Energy is a public agency subject to the requirements of the California Public Records Act, Cal. Gov. Code section 6250 et seq. Peninsula Clean Energy acknowledges that another party may submit information to Peninsula Clean Energy that the other party 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) (“Confidential Information”). Any such other party acknowledges that Peninsula Clean Energy may submit to the other party Confidential Information. Upon request or demand of any third person or entity not a party to this RFP ("Requestor") for production, inspection and/or copying of information designated as Confidential Information by a party disclosing such information (“Disclosing Party”), the party receiving such information (“Receiving Party”), as soon as practical but within three (3) business days of receipt of the request, shall notify the Disclosing Party that such request has been made, by telephone call, letter sent via email and/or by US Mail to the address or email address listed on the cover page of the RFP. The Disclosing Party shall be solely responsible for taking whatever legal steps are necessary to protect information deemed by it to be Confidential Information and to prevent release of information to the Requestor by the Receiving Party. If the Disclosing Party takes no such action, after receiving the foregoing notice from the Receiving Party, the Receiving Party shall be permitted to comply with the Requestor's demand and is not required to defend against it.

10 GENERAL TERMS AND CONDITIONS

1. **Peninsula Clean Energy's Reserved Rights:** Peninsula Clean Energy may, at its sole discretion: withdraw this Request for Proposal at any time, and/or reject any or all materials submitted. Respondents are solely responsible for any costs or expenses incurred in connection with the preparation and submittal of the materials for this RFP.

2. **Public Records:** All documents submitted in response to this RFP will become the property of Peninsula Clean Energy upon submittal and will be subject to the provisions of the California Public Records Act and any other applicable disclosure laws.

3. **No Guarantee of Contract:** Peninsula Clean Energy makes no guarantee that a contractor and/ or firm added to the qualified vendor list will result in a contract.

4. **Response is Genuine:** By submitting a response pursuant to this RFP, Respondent certifies that this submission is genuine, and not sham or collusive, nor made in the interest or on behalf of any person not named therein; the submitting firm has not directly or indirectly induced or solicited any other submitting firm to put in a sham bid, or any other person, firm or corporation to refrain from submitting a submission, and the submitting firm has not in any manner sought by collusion to secure for themselves an advantage over any other submitting firm.

11 DETAILED PROJECT DESCRIPTION AND SCOPE

1. Project Overview

Peninsula Clean Energy's (PCE) mission is to reduce greenhouse gas (GHG) emissions and reinvest in the San Mateo County community. To support the mission PCE aims to develop a data warehouse to support rapid, accurate, secure and flexible analysis of large volumes of energy data and associated attributes. The data warehouse is intended to be developed in phases initially centered on interval energy data with future phases addressing supply-side energy data. It is expected that the final architecture would include data pipes to data sources, import and cleaning functions within the data warehouse and linkage to a suite of analysis tools including but not limited to Excel, Tableau, specialized analysis systems or custom built analysis tools.

The project is intended to address Phase 1 and put in place the framework for subsequent phases which may be addressed under an ongoing maintenance agreement.

PCE utilizes Calpine for billing data management services and has a Salesforce-based CRM called PowerPath for all programs and marketing management.

2. Phase 1 Overview

2.1. Objectives

The data system must provide:

1. Secure data storage and interchange at utility-industry standard level or better
2. Rapid serving of data resulting in no more than 5 second response time in client tools
3. Ease of operation including:
    a. Core administration tasks such as defined imports, transformations, and user updates may be learned by an experienced administrator with an hour of training and available documentation
    b. User analytics tasks may be executed by users with experience in relevant client tools with an hour of training and available documentation

2.2. Use Cases

It is expected that the data warehouse will support these use cases but that the core analytic functionality may reside in specialized tools to which the data warehouse provides data. Phase 1 data storage and analysis needs focus on the following data sets: metered interval data, weather, rate class, and customer attributes.

The following use cases are intended to be implemented in Phase 1:

Use Case	Users
Load shapes by segments: Generate historical shapes by segments that may include rate schedules or other acquired attributes (income, home ownership, etc). with flexible timeframes and aggregation and optional weather normalization.	For Program and Power Resources staff to evaluate energy usage patterns in specified market segments.
Forecasting: Generate projected load shapes based on selected, weather normalized historical usage and user specified growth factors.	For Power Resources to forecast energy utilization.
Targeting: Utilizing selected historical load shapes identify specific accounts for marketing outreach.	For Marketing staff to identify relevant customers for specific programs.
Scenario Comparison: Retain analysis scenarios and enable comparison between load shapes.	For Program and Power Resources staff to evaluate forecast scenarios and/or program performance.
Tool Integration: Export data via download and direct data transfers to other data tools or services.	Various

3. Subsequent Phases

The following use cases are envisioned for future phases (in rough priority):

1. **Renewable Projects**: Store data related to forecast and actual generation, pricing at relevant nodes, evaluate impact of weather on generation
2. **Net Open Position Analysis**: Produce net open position by using load, renewable, and hedge data
3. **Hourly Cost of Power**: Store data related to different buckets such as PPAs, hedges, CAISO charges, and Resource Adequacy
4. **Risk Analysis**: Calculate forecast and actual congestion, project contract costs and CAISO settlements
5. **Regulatory Reporting**: Inform regulatory reporting and data requests
6. **Load Disaggregation**: Detailed load component analysis
7. **Measure Outcomes**: Build portfolios and monitor load changes compared to baselines
8. **Natural Gas Load Shapes**: Produce load shapes for natural gas usage
9. **Individual and Collections of Load Shapes**: Viewing individual accounts, collections of accounts, comparisons between accounts or collections, comparisons

of different timeframes within collections, and storage of collections into sets for later recall and analysis

4. Term and Budget Range

The development of the data warehouse and associated integrations is conceived as a multi-phase project. Phase 1 is envisioned as under a year and under $100,000 and proposals should separately identify costs for ongoing maintenance and enhancement for subsequent phases. Proposer may recommend alternative budget and timeframes.

5. Consultant Tasks

5.1. Program Administration

1. Provide monthly progress reports
2. Participate in regular meetings and calls with PCE as mutually determined
3. Provide budget reporting
4. Provide invoices for all major supplies and licenses purchased
5. Document and provide additional information as determined by PCE

5.2. Phase 1 Requirements

1. Define process for requirements gathering including functional use cases as well as performance, security and technical requirements
2. Facilitate and document requirements
3. Facilitate prioritization of the requirements

5.3. Architecture Design and Roadmap

1. Develop an overall architectural design for the system including data structures, security schemes, interfaces, transformations, and other relevant needs
2. Determine relationship of the data warehouse to other PCE data systems such as PCE's customer relationship management (CRM) system
3. Establish a phased roadmap for system development
4. Facilitate a review process to refine the architecture and roadmap

5.4. Establish Management Environment

1. Establish an environment for ongoing tracking of bugs and enhancement needs
2. Define protocols for version control of code
3. Establish a test environment for ongoing use

5.5. Phase 1 Development

1. Utilize rapid prototyping methodology to iteratively develop the Phase 1 system
2. Implement methodologies such as naming conventions and comments which provide an easy to understand "self-documenting" system

3. Develop testing plan and facilitate user acceptance testing
4. Correct all major bugs and address enhancements needed for robust Phase 1 operations

5.6. Data Integration and Population

1. Establish “data pipes” to phase 1 data sources for initial and ongoing automated data transfers including but not limited to interval meter data and PCE’s Salesforce CRM
2. Implement procedures to “clean” the data using industry-standard methodologies
3. Implement procedures for data preprocessing to create an “understandable” format and enable further analysis
4. Implement processes to provide weather normalized views of the interval meter data
5. Establish procedures and implement structures or scripts to support future data import processes for data sets not included in Phase 1
6. Populate the test environment for testing purposes
7. Populate the production environment for ongoing operations

5.7. Tools Integration

1. Integrate Phase 1 tools for data analysis including but not limited to Tableau, Excel, Ascend, custom Python applications, and other tools identified in the requirements use cases

5.8. Training and Documentation

1. Provide training on user operations and administration, including license management, security protocols, and recurring processes
2. Provide training on basic technical methods for customization, including new tables, queries, data pipes, and transformations
3. Document the system architecture, summarize major algorithm methods, and core operating needs

5.9. Phase 2 Scoping and Management

1. Work with PCE to scope the next phase in development
2. Determine costs including labor, additional licenses, or other needs, if any
3. Recommend methodology for ongoing security and data integrity testing