



CITY OF CALISTOGA

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STAFF REPORT

TO: Honorable Mayor and City Council
FROM: Dylan Feik, City Manager
DATE: April 2, 2019
SUBJECT: Presentation from Clean Coalition Regarding Calistoga Community Microgrid Concept and Consideration of a Professional Services Agreement to Perform a Microgrid Assessment

SIGNATURE:

DYLAN FEIK, City Manager

DESCRIPTION: Hear a presentation from Clean Coalition regarding Calistoga Community Microgrid concept and consider adopting a resolution approving a Professional Services Agreement to Perform a Microgrid Assessment.

RECOMMENDATION: Consideration to adopt resolution and provide direction to staff.

SUMMARY:

During the City Council meeting on January 15th, the City Council received a presentation from the Clean Coalition which is working to implement alternative energy solutions for communities in relationship to climate change and its effects on Calistoga. Specifically, there is great concern that Pacific Gas & Electric Company (PG&E) is seeking a Wildfire Mitigation Plan which includes Public Safety Power Shutdown (PSPS) as a primary consideration to make when wildfire conditions are present. During a PSPS, PG&E plans to “switch off” transmission and distribution power in High Fire Hazard Areas known as Tier 3 Zones (it is also being discussed whether to include Tier 2 Zones in the PSPS plans). One possible solution and/or response to preemptive power shutdowns is a community microgrid. During that meeting on 1/15, Council heard a presentation from the Clean Coalition and provided direction to the City Manager to return to Council with a

Professional Services Agreement which would allow for a feasibility assessment of a Calistoga Community Microgrid.

Staff has prepared this draft Professional Services Agreement (PSA) for Council discussion and consideration. The agreement is structured as follows –

- The Clean Coalition will undertake the study to determine the feasibility of establishing a local, community microgrid in the City of Calistoga.
- The Clean Coalition will commence their study immediately which will be completed no later than July 16, 2019.
- The City has structured this PSA into 3 phases, each of which is a “task” that is to be completed before being authorized to move onto the next task.
- All other language of the PSA is standard language used for PSAs including insurance, ownership of documents, etc.

The Scope of Work is shown as “Exhibit A” of the PSA. Each Phase has a defined scope of work and key deliverables.

Phase 1: Calistoga Community Microgrid Feasibility Assessment (\$25,290)

Objective: Define project goals, engage the key stakeholders, and determine high-level project scope, costs and benefits. Assess the project area for critical facilities, solar generation potential, storage siting opportunities, and technical design constraints and produce a functional design for the entire City of Calistoga (maximum configuration), as well as 5 target sites for near-term deployment. Develop a basic technical and economic analysis using 15-minute interval data to provide cost estimates within 70% of the final cost. Assemble key collateral materials and use them to engage key stakeholders and secure buy-in to move on to Phase 2, Planning and Engineering. If consensus cannot be achieved on moving forward with the selected sites, Clean Coalition will work to develop a staging deliverable that secures consensus.

Key Deliverables:

- Kick-off meeting.
- Executed contractual / SOW agreement for consulting services.
- Executed City of Calistoga Work Authorization.
- Calistoga Community Microgrid Overview presentation which includes: General information regarding the background and potential for community microgrids, site overview map with Solar Siting Survey, detailed site map graphics, 5 target deployment sites, hosting capacity details, functional block diagram, summary of loads and equipment, and 70% cost estimates. All aforementioned collateral material will be included in this presentation deck with speaker notes.
- Preliminary design review with 5 target deployment sites and City staff.

Phase 2: Calistoga Community Microgrid Planning and Engineering (\$29,660)

Objective: Obtain detailed site information, understand any technical and economic design constraints, and develop a feasibility assessment which includes preliminary

engineering design and economic analysis, including 90% cost estimates. Engage an EPC to produce key engineering deliverables and develop key collateral materials. Meet with utility to share project plans, confirm interconnection type, and confirm availability of incentives. Secure buy-in to proceed with developing RFP specifications.

Scope of Work:

- Secure all relevant site information for 5 target sites- see exhibit B for a detailed list.
- Site walk to obtain site-specific information and any design restrictions including an assessment of load-shedding capabilities and assessment of monitoring, communications, and control equipment required for the site.
- Develop site conceptual drawing indicating key features e.g. existing and new equipment and construction impacts.
- Finance meeting with relevant stakeholders to determine financing requirements and ownership models.
- Initial discussion of O&M and responsible parties.
- Establish stakeholder consensus on definition of Tier 1, Tier 2, and Tier 3 loads, business value of resilience, and community value of resilience.
- Evaluate relevant distribution grid and site circuit layouts, plot circuits on map and determine if there is adequate hosting capacity.
- Determine site-specific interconnection options, available utility programs, and available incentives.
- Produce the preliminary engineering design and economic analysis and share results with site stakeholders and City staff. Secure buy-in to proceed with developing engineering deliverables.
- Engage EPC to do key engineering work:
 - Verify interconnection details and availability of incentives.
 - Develop conceptual single line drawings/ block diagrams for each site and for the overall Community Microgrid.
 - Develop civil site plans with locations of equipment and trenching paths.
 - Determine 90% cost estimates and provide detailed project economics including total project cost, applicable incentives, IRR and cost of resilience.
- Update the collateral material with preliminary engineering design and associated economics and share results with site stakeholders and City staff.
- Meet with utility regarding conceptual design and single line diagram/ block diagram, verify interconnection options and verify availability of any utility incentives.
- Identify any likely economic gaps and investigate grant funding opportunities or other funding (e.g. Foundations or Public-Private partnerships to close any such gaps).
- Secure buy-in and proceed to Deployment Preparation.

Key Deliverables:

- Meetings:

- Engineering site walk for 5 target deployment sites.
- Project team meetings.
- Finance meeting.
- Intermediate design review with 5 target deployment sites and City staff.
- Meeting with Utility/ Load Serving Entity (LSE).
- Final design review with 5 target deployment sites and City staff.
- Draft Calistoga Community Microgrid design and economics presentation: a presentation specific to the project at hand with narrative about the community being served and project benefits. The presentation will build upon the Calistoga Community Microgrid Overview presentation and will include an electric load analysis, utility bill analysis, system sizing analysis, and economics overview for each of the 5 target deployment sites.
- Final Community Microgrid design and economics presentation.
- Project Description document: a 2 to 3-page overview of the project that includes a map showing location of CM resources, system sizing details, and a narrative about the benefits of the project. Artist renderings will be included as available.
- Technical Work Products (models, system sizing, etc.) can be provided upon request.

Key Deliverables from EPC:

- Interconnection details summary.
- Single line drawings.
- Civil site drawings (Civil drawings- PV layouts and trenching path diagram).

Phase 3: Develop Request for Proposal (RFP) Specifications (\$14,050)

Objective: Develop the technical specifications for a Calistoga Community Microgrid RFP. Integrating the technical specifications into the boilerplate language of the City/ other entity is outside of the scope of this project.

Scope of Work:

- Develop an RFP from the preliminary engineering design so that there can be a competitive bid process among EPCs for deploying the project.
- Proposals should discuss solutions for financing, ownership and O&M of the project.

Key Deliverables:

- RFP technical specifications relating to clean energy, clean transportation and resilience solutions.

CONSISTENCY WITH CITY COUNCIL GOALS AND OBJECTIVES:

The recommended action supports Council Goal No. 7: Enhance Calistoga's small-town character by making it safe and attractive; Objective No. 1: Enhance community disaster preparation, including wildfires.

ALTERNATIVES: The Council may choose to modify the PSA to provide different information; provide direction to staff on additional requests or information needed; continue this item for future discussion; or determine not to enter into a PSA for a microgrid assessment.

FINANCIAL IMPACT:

The maximum financial impact of this item is \$69,000 and will be budgeted under Calistoga Community Microgrid Feasibility Assessment CIP, Account No. 01-5584-4901 which is a General Fund CIP item. The full amount will only be realized if the City determines to proceed with all three (3) phases of the assessment. Staff will begin by authorizing Phase One in an amount not to exceed \$25,290.

ATTACHMENTS:

1. Resolution
2. Clean Coalition Microgrid Assessment Professional Services Agreement
3. Calistoga Community Microgrid Proposal Letter to Dylan Feik, dated March 20, 2019
4. Calistoga Community Microgrid Presentation, dated March 20, 2019

RESOLUTION NO. 2019-XXX**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CALISTOGA,
COUNTY OF NAPA, STATE OF CALIFORNIA, AUTHORIZING A
PROFESSIONAL SERVICES AGREEMENT WITH CLEAN COALITION FOR
AN AMOUNT NOT TO EXCEED \$69,000 FOR PROFESSIONAL SERVICES
RELATED TO PREPARATION OF A FEASIBILITY STUDY FOR A
CALISTOGA COMMUNITY MICROGRID AND AUTHORIZING THE CITY
MANAGER TO EXECUTE THE AGREEMENT**

WHEREAS, the City desires to conduct a feasibility assessment for a community microgrid project which will assist in long-term efforts to respond and mitigate Pacific Gas & Electricity's Public Safety Power Shutdown impacts on businesses, residents, public facilities and first responders; and

WHEREAS, City staff requested proposal for professional services for a microgrid project and received a proposal from Clean Coalition which has expertise in community microgrids; and

WHEREAS, staff has negotiated a Scope of Work with Clean Coalition and recommends that a Professional Services Agreement (PSA) for completion of three (3) tasks are to be completed for an amount not to exceed \$69,000; and

WHEREAS, each task is to be completed before Clean Coalition proceeds to the next task; and

WHEREAS, a budget amendment is required as this PSA was not included in the Fiscal Year 2019-20 Budget.

NOW, THEREFORE BE IT RESOLVED by the City Council of the City of Calistoga as follows:

1. A PSA is authorized with Clean Coalition to provide professional services to prepare a feasibility assessment for a Calistoga Community Microgrid project for a total amount not to exceed \$69,000.
2. Authorizes a budget adjustment for expenditures in the amount of up to \$69,000 from the Calistoga Community Microgrid Feasibility Assessment CIP, Account No. 01-5584-4901 to fund anticipated expenses associated with the PSA.
3. The City Manager is hereby authorized to execute the PSA on behalf of the City of Calistoga, subject to receipt of required documents from Clean Coalition.

PASSED, APPROVED, AND ADOPTED by the City Council of the City of Calistoga at a regular meeting held this **2nd day of April 2019**, by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

CHRIS CANNING, Mayor

ATTEST:

IRENE CAMACHO-WERBY, City Clerk