See the formatting recommendations in Part III, Section A.

The Project Narrative must respond to each sub-criterion below.

**Technical Merit**

1. The proposed project provides a clear and concise description of the technological, scientific knowledge advancement, and/or innovation that will overcome barriers to achieving the State’s statutory energy goals.
2. Describes the competitive advantages of the proposed technology over state-of-the-art (e.g., efficiency, emissions, durability, cost).

*In addition, provide a competition matrix to compare current and competing technologies, such as*

**Table X: Competition Matrix***:*

| **Comparable Attribute** | **Applicant’s Technology** | **Current Leading Technology** | **Competing Technology** |
| --- | --- | --- | --- |
| Example: Electrical efficiency | (1 unit) | (3 units) | (2 units) |
| Example: Temperature range | (20 units) | (10 units) | (10 units) |
|       |       |       |       |
|       |       |       |       |

1. Provides the proposed technical specifications and describe how the project will meet or exceed the technical specifications by the end of the project.
2. Describes the technology readiness level (TRL) the proposed technology has achieved and the expected TRL by the end of the project.
3. Describes at what scale the technology has been successfully demonstrated, including size or capacity, number of previous installations, location and duration, results, etc.)
4. Describes how the proposed demonstration will lead to increased adoption of the technology in California.
5. Provides information described in Section I.C

**Technical Approach**

1. The application describes the technique, approach, and methods to be used in performing the work described in the Scope of Work
2. The Scope of Work identifies goals, objectives, and deliverables, details the work to be performed, and aligns with the information presented in Project Narrative.
3. The application identifies the reliability that the project and site recommendations as described will be carried out if funds are awarded.
4. Identifies and discusses factors critical for success, in addition to risks, barriers, and limitations (e.g. loss of demonstration site, key subrecipient). Provides a plan to address them.
5. Discusses the degree to which the proposed work is technically feasible and achievable within the proposed project schedule and the key activities schedule in Section I.E.
6. Describes the technology transfer plan to assess and advance the commercial viability of the technology.
7. Provides a clear and plausible measurement and verification plan that describes how energy savings and other benefits specified in the application will be determined and measured.
8. Provides information documenting progress towards achieving compliance with the California Environmental Quality Act (CEQA) by addressing the areas in Section I.I and Section III.C.7
9. Provides information described in Section I.C

**Impacts and Benefits to California IOU Ratepayers**

1. Explains how the proposed project will benefit California Investor-Owned Utility (IOU) ratepayers and provides clear, plausible, and justifiable (quantitative preferred) potential benefits. Estimates the energy benefits including:
	* annual electricity (EPIC) and thermal savings (PIER NG) (kilowatt-hour and therms), energy cost reductions, peak load reduction and/or shifting, infrastructure resiliency, infrastructure reliability.

**In addition, estimates the non-energy benefits including:**

* greenhouse gas emission reductions, air emission reductions (e.g. NOx), water savings and cost reduction, and/or increased safety.
1. States the timeframe, assumptions with sources, and calculations for the estimated benefits, and explains their reasonableness. Include baseline or “business as usual” over timeframe.
2. Explains the path-to-market strategy including near-term (i.e. initial target markets), mid-term, and long-term markets for the technology, size and penetration or deployment rates, and underlying assumptions.
3. Identifies the expected financial performance (e.g. payback period, ROI) of the demonstration at scale.
4. Identifies the specific programs which the technology intends to leverage *(e.g. feed-in tariffs, IOU rebates, demand response, storage procurement) and extent to which technology meets program requirements.*

**Team Qualifications, Capabilities and Resources**

1. Identifies credentials of applicant and any subrecipient core personnel, including the project manager and principal investigator *(include this information in Project Team Form Attachment).*
2. Demonstrates that the project team *including Community Based Organization* has appropriate qualifications, experience, financial stability and capability to complete the project.
3. Explains the team structure and how various tasks will be managed and coordinated.

*Include an organization chart similar to the one below*

 **Figure X: Organization Chart**

1. Describes the facilities, infrastructure, and resources available that directly support the project.
2. Describes the team’s history of successfully completing projects in the past 10 years including subsequent deployments and commercialization.

**Budget and Cost Effectiveness**

1. Budget forms are complete for the applicant and all subrecipients, as instructed in Budget Attachment.

*Provide a budget by tasks, such as:*

**Table X: Task Budget**

| **Task (by major task)** | **Energy Commission Funds** | **Match Share** | **Total** |
| --- | --- | --- | --- |
| Task 1: General Project Tasks |       |       |       |
| Task 2: |       |       |       |
| Task [TBD-1]: Evaluation of Project Benefits |       |       |       |
| Task [TBD-2]: Technology/ Knowledge Transfer Activities \* |       |       |       |

\* **Requires 5% of total CEC funds**

1. Justifies the reasonableness of the requested funds relative to the project goals, objectives, and tasks.
2. Justifies the reasonableness of direct costs (e.g., labor, fringe benefits, equipment, materials & misc. travel, and subrecipients).
3. Justifies the reasonableness of indirect costs (e.g., overhead, facility charges (e.g., rent, utilities), burdens, subrecipient profit, and other like costs).

**Funds Spent in California**

This project proposes to spend $\_\_\_\_\_\_\_\_\_ of Energy Commission funds in California.

**Benefits to Disadvantaged/Low-Income Communities and Localized Health Impacts (Group 1 Projects – Mandatory Response)**

*Applications should include evaluation and performance measures that the CEC can use to ensure short- and long-term delivery of identified health and environmental benefits and prevention of negative environmental and health outcomes, and respond to each sub-criterion below.*

Benefits to Disadvantaged/Low-Income Communities

1. Identifies the energy and economic needs of the community based on project location, what steps the applicant has taken to identify those needs, and how the community input was solicited and considered in the design of the project.
2. Identifies how the project will increase access to clean energy or sustainability technologies for the local community.
3. Identifies how the proposed project will improve opportunities for economic impact including customer bill savings, job creation, collaborating and contracting with micro-,local, and small-businesses, economic development, and expanding community investment.
4. Identifies how the projects’ primary beneficiaries are residents of the identified disadvantaged/low-income community (ies).

Community Engagement Efforts

1. Identifies how community input was solicited and considered in the design of the project.
2. Identifies and describes how the impacted community will be engaged in project implementation.
3. Identifies and describes how the applicant will disseminate educational materials and career information to best support community understanding and engagement as applicable (e.g., culturally appropriate and translated materials, translation services, and considerate scheduling of stakeholder events as needed).
4. Identifies how the project, if successful, will build community capacity.

Localized Health Impacts

1. Summarizes the potential localized health benefits and impacts of the proposed project and provides reasonable analysis and assumptions.
2. Identifies how the proposed project will reduce or not otherwise impact the community’s exposure to pollutants and the adverse environmental conditions caused by pollution. If projects have no impacts in this criterion, provide justification for why impacts are neutral.
3. Identifies health-related Energy Equity indicators and/or health-related factors in CalEnviroscreen that most impact the community and describes how the project will reduce or not otherwise impact the indicators or factors. If projects have no impacts in this criterion, provide justification for why impacts are neutral.

Technology Replicability

1. Identifies how the project, if successful, will lead to increased deployment of the technology or strategy in other disadvantaged or low-income communities.

Project Support Letters

1. Includes letters of support from technology partners, community based organizations, environmental justice organizations, or other partners that demonstrate equity, feasibility, and commercial viability in low-income and disadvantaged communities.

**Disadvantaged Communities** **(Group 2 Projects – Optional Response)**

1. The application identifies how the target market(s) will benefit disadvantaged and low-income communities.
2. Identifies economic impact on low-income and disadvantaged communities including customer bill savings, job creation, partnering and contracting with micro- and small-businesses, and economic development.
3. Describes how the project will increase access to clean energy or sustainability technologies within disadvantaged or low-income communities and how the development will benefit the communities.
4. Applicants have letters of support from technology partners, community based organizations, environmental justice organizations, or other partners that demonstrate equity, feasibility, and commercial viability in low-income and disadvantaged communities.