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Bright Canyon Energy Comments Clean Energy Alternatives for Reliability; CEC Docket 21-ESR-01

Additional submitted attachment is included below.



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Submitted Via CEC efiling portal

November 10, 2022

California Energy Commission Docket 21-ESR-01 Energy System Reliability

Re: Bright Canyon Energy Comments: Clean Energy Alternatives for Reliability; CEC Docket 21-ESR-01

Bright Canyon Energy (BCE) commends the CEC on their bold approach and leadership efforts in developing a clear path to energy reliability and security with clean energy alternatives. The Public Workshop on October 28, 2022, was timely and informative on sharing a vision to further accelerate California's leadership in addressing reliability and climate change issues concurrently. BCE is encouraged by the CEC's process and inclusion of opportunities to develop grid enhancing microgrids for critical infrastructure customers to rapidly increase reliability in California. Our comments below provide feedback related to the materials presented and questions provided during the workshop.

BCE is partnering with the military to develop mission critical microgrids that can meet California's reliability needs while simultaneously offering energy resilience to keep our Country safe. Our projects are comprised of renewable energy resources and energy storage that can be phased into service to quickly meet California's reliability needs for summer peaking resources. The technology is proven and integrates solar, batteries and renewable fuels to provide long-duration peaking solutions during the transition to a net-zero carbon future.

The key principles that BCE would like to encourage through the clean energy alternative program development are:

- Including microgrids in the Clean Energy Alternatives for Reliability programs allows for rapid reliable capacity additions to meet immediate reliability needs
- Microgrids are unique in providing grid reliability and resiliency as both supply <u>and</u> demand side resources
- Renewable fuels are critical to near-term reliability, long-term renewable integration and provide dispatch certainty in meeting peak demands as the grid transitions to renewable energy
- Partnerships that offer enhanced reliability/resiliency benefits to public health, safety, and critical infrastructure customers create significant value for the state of California

Bright Canyon Energy Comments: Clean Energy Alternatives for Reliability CEC Docket 21-ESR-01 November 10, 2022 Page 2 of 3

Including microgrids in the clean alternative program allows rapid reliability additions to meet immediate reliability needs.

A confluence of events over the past few years has created a number of challenges in meeting the state's peak electric needs. For example, increased load growth, supply chain disruptions, and extreme weather have added uncertainty to keeping the grid reliable. **Microgrids as a solution can be phased in and brought online much more rapidly than most other resource alternatives and can be aggregated to provide the same benefits as larger resources.**Aggregation of microgrids at key military installations in California can be phased into service and quickly scaled up in size to the equivalent of traditional centrally located power plants. Further this renewable, reliable, and dispatchable capacity can be brought online in a fraction of the time that is typically required to develop new resources by operating behind the meter as demand response in an initial phase. And upon interconnection of the resource, a second phase of development can expand the project to export energy to the broader electric grid. The combination of speed to service, renewable energy, aggregation, and long-duration dispatchability provide genuine opportunities for California to transition the electric grid.

Microgrids are unique in providing grid reliability and resiliency as both supply <u>and</u> demand side resources.

Including microgrids in the CEC program increases renewable energy on the grid both in front of the meter and behind the meter and offers the opportunity to provide relief to the grid under emergency operating conditions. Microgrids offer the opportunity to both serve the grid with clean energy under normal grid operations and can offer islanding or demand response options when the grid is stressed or experiencing an outage. This enhanced functionality provides flexibility to the grid operator and offers much needed long-duration capacity resources that can supply the grid even in instances with the sun is no longer shining and the batteries are at a low state of charge.

Renewable fuels are critical to near-term reliability, long-term renewable integration and provide dispatch certainty in meeting peak demands as the grid transitions to renewable energy.

A broad focus on resource options in the CEC programs allows renewable energy and storage to be the primary focus of microgrid resource additions with the added security of renewable fuel backup under stressed grid conditions. BCE microgrids are well aligned with the direction of the strategic reliability reserve and only are expected to operate on renewable fuel should the grid experience adverse conditions with solar and storage options being exhausted. Including renewable fueled microgrids offers an opportunity to quickly add incremental reliable capacity that is less exposed to recent supply chain events. In short, microgrids offer near-term certainty of peak resources, fuel diversity to keep customer costs low, and a smooth transition to the clean energy grid of the future.

Partnerships that offer enhanced reliability/resiliency benefits to public health, safety, and critical infrastructure customers create significant value for the State of California.

Electric reliability is critical to California from a health and public safety perspective and resources that are callable in critical periods with long-duration dispatch capabilities are

Bright Canyon Energy Comments: Clean Energy Alternatives for Reliability CEC Docket 21-ESR-01
November 10, 2022
Page 3 of 3

essential to providing necessary electric services. Like California, the military is seeking the addition of renewable energy to the local grid along with resiliency that keeps mission critical infrastructure online and our Country safe. BCE has developed its' approach to microgrids to meet both the military's resilience requirements and California's clean energy and reliability needs. The dual benefit of these military microgrids cannot be understated as they are purposefully built to enhance grid operations in challenging times.

The CEC has an opportunity to provide a clear path for rapid, reliable, and incremental capacity additions by including microgrids in the Clean Energy Alternative for Reliability Process. Many military installation microgrid projects are in advanced stages of development and can be moved to market quickly under the identified CEC funding timeline. BCE appreciates the opportunity to participate in the CEC program development and looks forward to the next steps.

Sincerely, Bright Canyon Energy

/s/ Jeff Burke

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