PG&E Poised to Expand Battery Energy Storage Capacity by More Than 420 Megawatts

Five New Energy Storage Systems to Come Online by August 2021
Providing Greater Electric System Reliability, Further Integrating Renewable Energy

Release Date: May 19, 2020
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SAN FRANCISCO, Calif. — Pacific Gas and Electric Company (PG&E) has requested approval of five energy storage projects totaling 423 megawatts (MW), in a filing with the California Public Utilities Commission (CPUC).

The projects are intended to further integrate clean energy from renewable generation sources while ensuring future reliability of the electric system.

"PG&E is deeply committed to the California vision of a sustainable energy future. As we continue to integrate large amounts of intermittent renewable energy, we are now taking advantage of advancements in energy storage technology to ensure that customers continue to receive clean and reliable power from a flexible and dependable electric grid," said Fong Wan, senior vice president, Energy Policy and Procurement, PG&E.

The agreements for the projects are a result of a competitive request for offers (RFO) PG&E launched in February following a November 2019 CPUC decision that identified potential reliability issues beginning in 2021.

The CPUC authorized utilities and other load-serving entities in California to procure resources that would address those potential future system reliability issues while building progress in meeting the state's greenhouse gas emissions reduction goals.

PG&E was authorized to procure at least 716.9 MW of system reliability resources to come online between August 1, 2021 and August 1, 2023. The five new battery energy storage projects announced today represent PG&E's first phase of procuring system reliability resources that need to come online within that timeframe.

PG&E will issue another (phase two) competitive solicitation this summer for resources to come online by August 1, 2022 and August 1, 2023.

Project Details

The five projects feature lithium-ion battery energy storage systems (BESS), each with a four-hour discharge duration.
The new systems will either be co-located with solar or geothermal plants or be built as part of new energy storage projects. The five projects are as follows:

- **Diablo Energy Storage, LLC** – The *Diablo Energy Storage Project* is comprised of three separate 15-year agreements totaling 150 MW. The three projects will be stand-alone lithium ion battery energy storage resources located in Contra Costa County. This project is an expansion of a 50 MW energy storage project under contract to PG&E in Contra Costa County, which is currently in development.

- **Dynegy Marketing and Trade, LLC** – The *Vistra Energy MOSS100 Energy Storage Project* is comprised of a 10-year agreement for 100 MW. The project is a stand-alone lithium ion battery energy storage resource located in Moss Landing, Calif. (Monterey County). This project is an expansion of a 300 MW energy storage project under contract to PG&E at the same location, which is currently in development.

- **Gateway Energy Storage, LLC** – The *Gateway Energy Storage Project* is comprised of a 15-year agreement for a 50 MW stand-alone lithium ion battery energy storage resource located in San Diego.

- **NextEra Energy Resources Development, LLC** – The *Blythe Energy Storage 110 Project* is comprised of a 15-year agreement for 63 MW. The project is a lithium ion battery energy storage resource and is co-located with an existing 110 MW solar project built in 2016 located in Blythe, Calif. (Riverside County).

- **Coso Battery Storage, LLC** – The *Coso Battery Storage Project* is comprised of a 15-year agreement for a 60 MW transmission-connected, stand-alone lithium ion battery energy storage resource and is co-located with an existing geothermal project in Little Lake, Calif. (Inyo County).

Each project is scheduled to be online by August 2021.

**Commitment to Embracing Innovation, Energy Storage Technology**

Energy storage helps to integrate renewable resources, such as wind and solar, which are intermittent or generate the most energy during times of low customer demand. Energy storage can contribute to grid efficiency and reliability, may reduce the need to build additional fossil fuel generation, and can serve as an alternative to more expensive, traditional wires solutions. Energy storage has been a part of PG&E’s power mix for decades, starting with the *Helms Hydroelectric Facility* and continuing with the deployment of BESS projects such as the 2MW battery at its Vacaville Substation and the *4 MW Yerba Buena battery* in San Jose. In February 2017, PG&E deployed its first lithium-ion energy storage system, featuring Tesla Powerpack technology, at its *Browns Valley substation* (approximately 50 miles north of Sacramento). As of May 2020, including the projects announced today, PG&E has awarded contracts for battery energy storage projects totaling more than 1,000 MWs of capacity to be deployed throughout its service area through 2023.

One megawatt equals one million watts or 1,000 kilowatts. That's roughly enough electricity for the instantaneous demand of 750 homes at once, according to the [*California Independent System Operator*](https://www.caiso.com). "PG&E is well positioned with the energy storage projects under contract today to meet the state's ambitious clean energy and storage goals while ensuring grid reliability, and we will continue to look
toward innovation, integration of new technologies, and collaboration to drive a clean energy future,” Wan added.

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<thead>
<tr>
<th>Counterparty (Project Name)</th>
<th>Technology</th>
<th>Commercial Online Date</th>
<th>Initial Delivery Date</th>
<th>Term (Years)</th>
<th>Size (MW)</th>
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