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Utility San Diego Gas and Electric (SDG& E) and US-based storage provider AES Energy Storage, a subsidiary of AES Corporation, have completed what they claim to be the world’s largest lithium-ion battery energy storage facility in Escondido, California.

The 30MW/120MWh system is capable of storing enough energy for the equivalent of 20,000 customers for four hours. The two companies signed agreements to build two storage systems in August last year. The second system at El Cajon is 7.5MW in capacity. A total of 400,000 batteries were installed in nearly 20,000 modules in 24 containers.

The agreement came off the back of the California Public Utility Commission (CPUC) directing Southern California investor-owned electric utilities to fast-track additional energy storage options to enhance regional energy reliability last year in response to the Aliso Canyon gas leak.

John Zahurancik, AES Energy Storage president, said:“These two projects, including the world's largest advanced energy storage site, are the latest proof of energy storage's capacity to scale up and solve our most pressing grid issues in a short period.”

Last year, Energy-Storage.News caught up with Brian Perusse, vice president of AES Energy Storage and Jim Avery, chief development officer of SDG& E, to discuss the unique challenges of the projects and the AES Advancion 4 energy storage platforms that were used.

By 2030, SDG& E expects to develop or interconnect more than 330MW of energy storage on the system. Last week, AES Corporation and investment manager Alberta Investment Management Corporation (AIMCo) agreed to acquire major US utility-scale solar developer sPower for an estimated US$1.58 billion.

The Pacific Power Association, in consultation with The World Bank, has identified the need to assess the battery storage deployment options with mobilizing private sector funding to improve the utilization of Variable Renewable Energy (VRE) sector in the region. Special emphasis has been put on assessing battery storage implementations under a Public-Private Partnership (PPP) scheme. This report has been developed as a part of the "Assessment of Variable Renewable Energy (VRE) Grid Integration and Evaluation of SCADA and EMS system design in the Pacific Island Counties" project.

The second part of the report provides a qualitative assessment of setting up stand-alone battery storage projects under a PPP structure. The assessment is backed by the pros and cons for such an arrangement.

The third section of the report presents the methodology which has been used to assess a stand-alone battery storage project in the region. This covers the description of the working of the financial model, the main

assumptions used and the outputs and main results. Two main options have been compared: PPP arrangement vs. public procurement. In addition, several different scenarios have been also analyzed.

The fourth section of the report describes some high-level technical and commercial recommendation to be considered for a stand-alone battery storage procurement in the region. This is based on the analysis of actual procurements in other regions and recent developments of commercial terms in the advanced markets.

Fischer, Sandra; Antosik, Mate; Chown, Graeme.2019. Assessment of Battery Storage IPP-PPP Schemes for the Pacific Utilities (English). Energy Sector Management Assistance Program (ESMAP) Washington, D.C. : World Bank Group.