

CITY OF LOMPOC ELECTRIC

2014 Adopted Energy Storage Targets & Policies

In 2014, the City of Lompoc staff studied the impact of installing an energy storage system capable of delivering 2.8% of its peak summer demand (2014 summer peak was 18.2 MW). After careful consideration, it was determined that the most viable form of energy storage would be a battery energy storage system (BESS). Of the BESS considered, lead-acid was deemed the most feasible and mature technology available at that time. To install a BESS and add it to the City of Lompoc distribution system, staff determined that the city would need to acquire additional land and provide new facilities. Furthermore, to install a 500kW BESS, the City of Lompoc would require new infrastructure to provide interconnection and hire at least one more full time employee with the expertise required to oversee the correct operation of a BESS making the project financially and operationally unfeasible at the time of the study. Due to these constraints, no direct policy was implemented to acquire a BESS for the City of Lompoc.

Overview of Energy Storage Portfolio

The City of Lompoc currently has no energy storage projects and is participating in a study performed by a contractor to determine the feasibility of future plans to install energy storage in the city which is expected to be completed in 2017.

Key Factors Impacting Energy Storage Procurement

In 2014, after staff reviewed several Department of Energy and Electrical Power Research Institute white papers, documents and reports, the City of Lompoc Electric staff determined that the only viable funding source for an energy storage project would be a rate increase to its ratepayers. The City of Lompoc strives to provide reliable, efficient and cost effective power to our citizens and a rate increase to subsidize a BESS would place additional burden on our ratepayers. This made any energy storage program financially unattainable at that time. However, staff determined that in the future, an energy storage system would be reconsidered after technological advances lower the cost of energy storage systems, and make it financially feasible. To that end, the City of Lompoc, through the Northern California Power Association (NCPA), has entered a joint contract with DNV-GL to provide an updated evaluation of energy storage technologies. Based on the findings that DNV-GL will deliver, the City of Lompoc will reevaluate the installation and feasibility of an energy storage system.