## **Energy Savings with the Use of LED Lights at the Wastewater Treatment Plant**

**Authors:** Kishen Prathivadi

**Abstract :** The Sewer Authority Mid-Coastside (SAM) is a Joint Powers Authority formed in 1976 and provides secondary wastewater treatment to an average flow of 2.0 million gallons per day. SAM owns and operates a Wastewater Treatment Plant (WWTP) and a sanitary sewage collection system that collects sewage from its three member agencies: the City of Half Moon Bay, the Granada Community Services District and Montara Water and Sanitary District. The Sewer Authority Mid-Coastside (SAM) partnered with Pacific Gas & Electric, and its contractor GEL America, to review and replace all inefficient lighting fixtures and bulbs at the SAM treatment plant and administrative office. The project focused on replacing old and inefficient lighting fixtures and bulbs, reducing annual operating and maintenance costs, and reducing SAM's carbon footprint. The project resulted in a 55% overall energy reduction, higher light quality and acuity, and a total operational savings of \$495,000 over ten years.

**Keywords:** energy savings, LED, lighting, electrical

Conference Title: ICEERET 2019: International Conference on Energy Efficiency and Renewable Energy Technologies

**Conference Location :** Barcelona, Spain **Conference Dates :** February 11-12, 2019