



TRIBAL GOVERNMENT CHALLENGE PLANNING GRANT PROGRAM



BIG VALLEY BAND OF POMO INDIANS OF THE BIG VALLEY RANCHERIA

PLANNING STUDY FOR A RENEWABLE ENERGY BASED MICRO-GRID TO POWER THE BIG VALLEY RANCHERIA

Project Manager: **Jim Yockey**

Award Amount: **\$249,997**

The Big Valley Band of Pomo Indians of the Big Valley Rancheria (BVR), with support from consultants with expertise in the energy field, will analyze and model the current state of energy consumption on Tribal lands. This planning study will assess the available renewable energy resource options, and identify and report on strategies for meeting the Tribe's goals and objectives for energy self-determination through renewable and reliable power. These efforts will bring heightened awareness about BVR's current dependencies and vulnerabilities generated by unsustainable and unreliable power sources, and convey how a renewable micro-grid can significantly reduce external energy dependence and increase reliability.

The study focuses on three areas within the Rancheria: 1) a new planned commercial center, and 2) existing and planned housing developments, with both projects being integrated into 3) the Konocti Vista Casino complex - designated by BVR and Lake County as an emergency operations center in the event of disaster.

This study will inform the Tribe about how best to convert the existing electric infrastructure into an island capable micro-grid utilizing the maximum amount of renewable generation and energy storage strategies. The project will apply eight energy goals to reduce fossil fuel dependence while increasing reliability.

Creating a Rancheria-wide, island capable, micro-grid to provide a secure, reliable, and sustainable power supply to its community members and enterprises will result in energy sovereignty and self-determination, which will facilitate a path to implementing the Tribe's adopted energy and climate goals. It is consistent with Big Valley Rancheria's emergency plan and environmental protection plan, while its design advances the Tribe's multi-year effort to develop a Tribal Electric Utility Authority within the trust boundaries of the Rancheria. Importantly, these activities are aligned with the Tribal values of the people who have inhabited this area for the last several thousand years.