Solar/Wind Feasibility Study at Whitewater Ranch
Agua Caliente Band of Cahuilla Indians

• Tribal ancestors resided in the area surrounding the San Jacinto Mountains in the Southern California region for centuries.

• The Agua Caliente Reservation (approximately 32,000 acres) was deeded in trust by Federal Order in 1876 to the Agua Caliente Tribe.

• The Tribe was deeded the even numbered sections as the odd numbered sections were deeded to Southern Pacific Railroad in 1860; Creating a checkerboard reservation configuration.

• Portions of the cities of Palm Springs, Cathedral City and Rancho Mirage lie within the Agua Caliente Indian Reservation.
Agua Caliente Indian Reservation

Indian Canyons

Palm Springs

Rancho Mirage
With prior DOE support the Tribe developed a Strategic Energy Plan in 2006; assessed the feasibility of solar energy at various locations on the reservation in 2009; which has led to the current feasibility study to combine wind and solar for a proposed 10 MW project at Whitewater Ranch.

The Whitewater Ranch property possesses both strong insolation and excellent wind class resources, making the property an ideal location for a combined solar/wind project.
Whitewater Ranch is an ideal location for a combined wind/solar project. The 217 acre property is the western gateway of the Coachella Valley. The San Gorgonio pass is already a prime location for wind turbines.
Thoroughly assess the wind/solar potential at the site with the intention of completing a 10 MW project.

Based upon site assessment; determine the pertinent technology options.

Select the optimal wind/solar technologies and develop viable project options.

Develop detailed economic models for the projects identified with a goal of creating project-ready plans for wind/solar renewable financing and implementation.
Project Partners

• Tribal staff worked with Red Mountain Energy Partners throughout the prior solar feasibility study and has continued work with Red Mountain throughout the current solar/wind feasibility process.
Project Status

MET Tower Install

- Karbon Zero installed the 60 meter NRG XHD MET tower on August 23rd, 2013.
- Tower was tested upon install and has been consistently receiving wind data.
- Wind resource is rather strong at this site as we expected.
- Some small engineering and permitting requirements caused slight delay in the installation timeline.
Solar Technology

- Currently assessing various technologies to determine best resource for a proposed install of 4MW to 8MW of Solar.

- Transmission/Interconnection at the site is a concern, but we continue to seek out solutions through various local utility programs in addition to PPA options within our immediate vicinity.
Other Project Activities

• **Western Area Power Administration (WAPA)** – The Tribe currently receives a 1MW annual allocation of power from the Parker/Davis Hydroelectric Dams. As part of the agreement with WAPA, the Tribe will receive this power allocation for the next 14 years.

• **Water and Energy Resource Authority (WERA)** - The goal of this entity is to manage ongoing water and energy resources in a more efficient manner. WERA has proven to be a useful coordinating entity for all Tribal energy and water related issues.

• **Desert Cities Energy Partnership (DCEP)** – The Agua Caliente Tribe continues to play a vital role in energy efficiency, conservation and renewable energy development within the Coachella Valley. A member of the WERA committee represents the Tribe on DCEP, a partnership representing the Tribe and other local municipalities, which guides policy on energy efficiency throughout the Coachella Valley.
Future Plans

• The Agua Caliente Tribe continues to assess energy options (both renewable use and manufacturing) that can be incorporated into the Tribe’s Overall Strategic Energy Plan.

• Stewardship of the land and efficient use of resources in the desert region are critical to continued prosperity of the Tribe for future generations (water rights litigation).

• As the economy strengthens in the Coachella Valley the Tribe must consider other potential development options.

• Staff in process of assessing solar shaded parking installation at one of our facilities and possible distributed generation option for several Tribal sites.

• QUESTIONS?