WALNUT ENERGY CENTER

WATER & POWER
Serving Central California since 1887

TID'S LARGEST ENERGY GENERATION FACILITY

Since it began commercial operation in 2006, Walnut Energy Center (WEC) has proven to be an efficient, environmentally responsible source of reliable electrical energy serving the growing energy demands within TID's service area. Capable of generating 250 megawatts at any given time, WEC is the single largest power generation facility owned by TID.

WEC is comprised of two gas turbine generators and one steam turbine generator. Each gas turbine is equipped with a combustion system which minimizes the pollutants formed during the combustion process. Each gas turbine exhaust is equipped with a Heat Recovery Steam Generator (HRSG). The HRSG produces steam from the high temperature turbine exhaust. The steam is then used to drive the steam turbine generator.

The environmentally sensitive power plant was constructed as a response to rapid residential and commercial growth. In its first year of operation, WEC generated 960,900,523 kilowatt hours of electricity. On typical days during its first few years of operation, WEC generated approximately 80 percent of TID's internal energy needs.

WEC's primary source of water is the recycled water supplied from the City of Turlock's Waste Water Treatment Plant. WEC can consume up to 2,000,000 gallons of reclaimed water per day. WEC's Zero Liquid Discharge system ensures that no liquid waste is sent back to the City of Turlock.

WEC BY THE NUMBERS

250 MEGAWATTS (MW)
WEC'S maximum power generation

66,000 GALLONS PER MINUTE
The amount of recycled water being recirculated between the WEC's Cooling Tower and the Surface Condenser

85 PERCENT
Fewer emissions per megawatt hour of energy produced compared to older, similar facilities in California, thanks to highly efficient emission control technology

3.6 MILES
The length of natural gas pipeline which brings fuel to the facility

18 ACRES
The amount of land WEC occupies on a 69-acre parcel