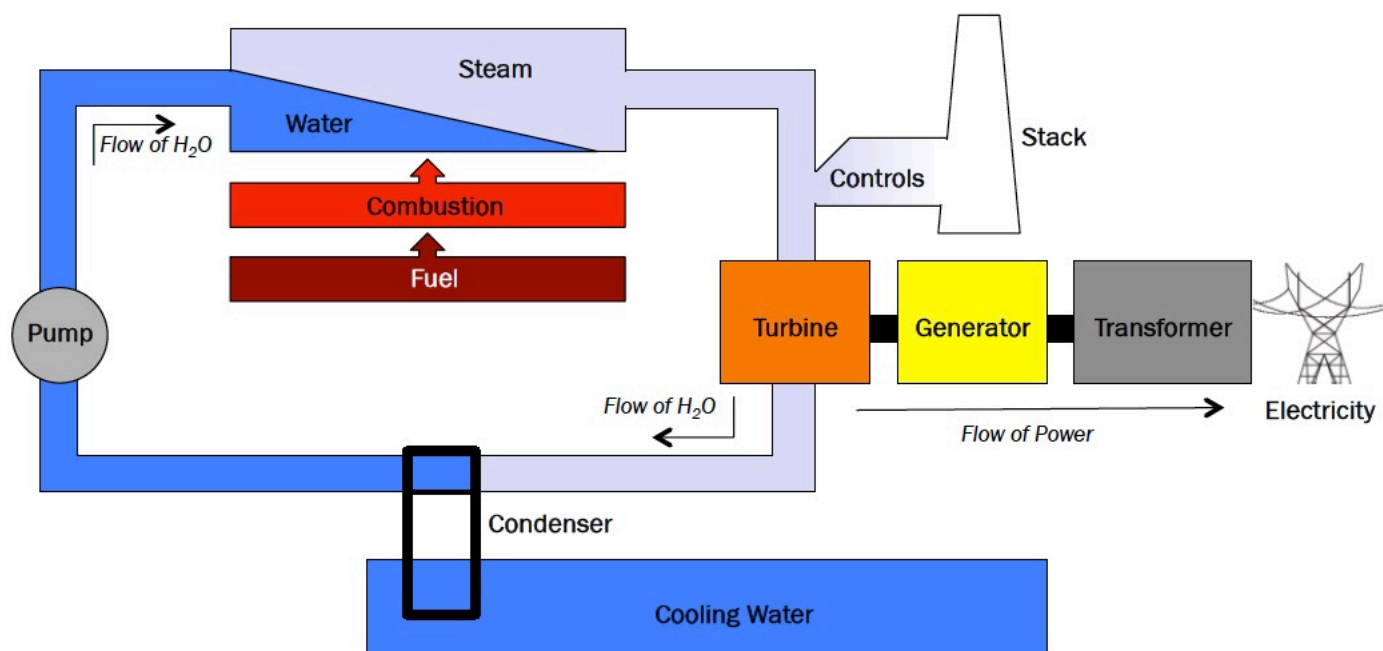


Water & Electricity

The reliable generation of electricity is critical for pumping water to cities and farms, and for water treatment and sewage treatment – among other necessities. And conversely water supply is essential to the reliable generation of electricity. The graphic below is a simplified example of a fossil fuel-fired power plant's use of water.



Most power plants heat water until it becomes steam, then pressurize that steam to turn a generating turbine. The steam is then routed to a condenser, where the water is condensed and reused in the steam cycle. Water from one or more reservoirs or cooling towers is used to cool the condenser, making it possible to recycle the water to make steam.

How do Texas Power Plants Use Water?

- AECT member companies have an outstanding record of water regulation compliance, and conduct rigorous biological monitoring tests at generating facilities.
- In addition to surface water use permits and groundwater permits in Groundwater Conservation Districts, electric generating companies in Texas are required to have permits for their wastewater discharge.
- In addition to complying with state and federal water regulations, AECT member companies are committed to practicing sound water conservation. We:
 - Clean and reuse water whenever possible
 - Capture storm water runoff
 - Restore aquatic habitats
 - Preserve ecosystems
 - Enhance and create valuable wetlands
- Reservoirs created by electric generating companies are used for recreational purposes, including camping, boating, fishing and swimming.