

# DESIGNED

## ▶ FOR PERFORMANCE

### TECO SETS THE STANDARD FOR TURBINE INLET COOLING

In Houston's hot, muggy climate, meeting energy demand while boosting efficiency might sound impossible — but not for TECO. Through the team's award-winning expertise with **turbine inlet cooling** (TIC), TECO delivers more energy to customers with less strain on its systems and the grid.

#### What's TIC?

TIC is a range of techniques and technologies to cool the air entering a gas turbine. Cooler air means stronger, more efficient combustion that translates into higher capacity, lower fuel use, and predictable performance no matter the weather.

#### Measuring Success

TECO began using chilled water-based TIC in 2010, which increased hot-weather electric generation capacity by 32%. In 2024, TECO took a big step forward with the addition of Gas Turbine 2, which also uses TIC. Compared to an uncooled system, the new generator delivers 23% more output during peak summer conditions.



TECO's thermal energy storage and turbine inlet cooling are combined to enhance gas turbine performance.

PHOTO: COURTESY OF UNIVERSITY OF TEXAS MD ANDERSON CANCER CENTER

### TECO Earns Industry Recognition

In April 2025, TECO earned the Turbine Inlet Cooling Association (TICA) 2025 Award of Excellence in TIC.

Through continued innovation and expertise, TECO proves that smarter energy solutions don't just meet demand — they create a more sustainable future.



**NICK WALSH** (right), gas turbine specialist, accepted the award on TECO's behalf during the 2025 WTUI Conference.

“I commend TECO for integrating TIC into its plant, having recognized the many benefits. TECO has been using TIC and thermal energy storage since 2010, resulting in increased efficiency and hot-weather capacity, reduced carbon emissions, and increased reliability of thermal utility production. We were proud to present TECO with the 2025 TICA Excellence Award.”

— Dharam Punwani, executive director of TICA

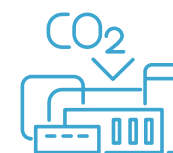
### TIC'S IMPACT ON TECO'S PERFORMANCE IS OUTSTANDING:



**More energy:** Additional 17,700 megawatt-hours per year, roughly the equivalent of powering 3,000 Houston homes for the entire summer



**Less fuel:** Saves 26,000 MMBtu\* annually, cutting energy costs and preserving natural resources



**Lower emissions:** Avoids 1,700 tons of on-site carbon dioxide emissions plus another 6,800 tons in grid emissions annually, the equivalent of planting over 8,000 acres of forest