

Meefog™ Project Profile

Gas Turbine Inlet Air Fogging

1 x LM-2500 Gas Turbine - Castaic, California



Project Summary:

Pitchess Detention Center (PDC) runs a cogeneration plant that produces all the electricity and steam needed to operate all the PDC facilities. During the hot months in California high temperatures were affecting power generation. PDC decided to install a MeeFog™ system to cool the inlet air and increase power. The system has been operating since 2009 with no negative impact on the gas turbine. The generator cooling air is also cooled with fog.

Project Conditions:

- Location: Castaic, California
- Hot day conditions: 102°F and 13% RH (66°F wet bulb)
- Model: LM-2500 Gas Turbine
- Elevation: 1,170 feet
- Mee's scope of work: Equipment & supervision
- Max power boost per GT: 8.6 MW

Fog System Design:

- Evaporative cooling system
- Cooling stages: 16
- Operating pressure: 2,000 psi
- MeeFog™ Nozzle Count: 224
- Max. Water Flow: 10 gpm
- Max. Power Requirement: 30 HP