

MeeFog™ Project Profile

Gas Turbine Inlet Air Fogging

2 x GE 7FB.04 Gas Turbines - Wisconsin



New MeeFog™ Skid



Typical OEM-supplied fog skid

Project Summary:

Two existing OEM-supplied fog systems were replaced with MeeFog™ systems. The original systems had five pumps that required excessive maintenance and a winterization procedure that took days to accomplish. The MeeFog™ system has one water lubricated pump located inside a heated pump shelter. Staging valves provide 16 cooling stages. A VFD slows the pump down as staging valves close to maintain 2,000 psi discharge pressure. Winterization is automatic, drain valves open when the ambient temperature falls below a setpoint. The fog controls were integrated into the Ovation DCS.

Project Conditions:

- Location: Wisconsin
- Hot day conditions: 89 °F and 52% RH
- Model: GE 7FB.04
- Elevation: 658 feet
- Mee's scope of work: Turnkey including installation
- Max power boost per GT: 14.50 MW

Fog System Design:

- Cooling Stages: 16
- Operating Pressure: 2,000 psi
- Fog Droplet Size: 19 microns (Dv90)
- MeeFog™ Nozzle Count: 780
- Nozzle Flow Rate: 0.045 gpm
- Max. Skid Water Flow: 35 gpm
- Max. Power Requirement: 60 HP