

Green Square North Tower, Queensland

DEVELOPER:	Leighton Properties
LOCATION:	St Paul's Terrace, Fortitude Valley Brisbane, Queensland
DESCRIPTION:	Gas powered cogeneration plant
OPERATIONAL DATE:	February 2009



An MTU Onsite Energy GR 772N5 natural gas generator is the power behind the award winning cogeneration plant at Brisbane's Green Square North Tower. The Green Square development is one of the largest mixed-use corporate office parks in Brisbane and features a gas-powered cogeneration plant that produces electricity and useful thermal energy from a low CO2 emission fuel source.

CONFIGURATION

Penske Power Systems supplied Leighton Properties with an MTU Onsite Energy solution to power the building's cogeneration plant.

The generator set comprises an MTU Onsite Energy GR 772N5 natural gas engine and a synchronous generator, coupled to a heat exchanger system. The heat recovered using this system fires an absorption chiller for the production of the air conditioning's chilled water. An engine management system completes the generator set and provides comprehensive monitoring of the engine's temperature, pressure and speed.

Connected parallel to the grid, the generator set runs in continuous operation and can act as emergency backup in the event of power loss to the site.

FEATURES

With over 23,270 square metres of office, retail and parking space, Green Square North Tower required an onsite energy solution that provided reliable, fuel efficient and environmentally conscious power generation. The cogeneration plant, featuring an MTU Onsite Energy generator set, is a major contributor to the building's 6 Star Green Star rating.

In 2009 Floth Sustainable, who commissioned the plant, received a Gold Award at the annual Association of Consulting Engineers Australia for engineering excellence and innovation.

The MTU Onsite Energy GR 772N5 natural gas engine's low consumption rates, high capacity and efficiency provides optimal economical operation and a long service life.

SPECIFICATION

Model: MTU Onsite Energy GR 772N5 – natural gas

Total output: 960 kVA

Applications: Emergency power, continuous operation, peak loads

For more information contact our Power Generation team on 1300 688 338.