# **RAAF Base Williamtown**, **New South Wales**

#### **CUSTOMER**

LOCATION DESCRIPTION

**Downer EDI Engineering Power** Pty Ltd RAAF Base Williamtown NSW Supply and installation of MTU **Onsite Energy diesel gensets OPERATIONAL DATE** December 2017



Australia's primary fighter base, RAAF Base Williamtown houses a range of fighter aircraft and around 3,000 military and civilian personnel.

With both operational and training squadrons, RAAF Base Williamtown is an important part of Australia's security and Defence mission.

As part of the new air combat capability (NACC) facility being constructed at the base, Penske Power Systems supplied and managed the installation of MTU Onsite Energy 20V4000 DS2650 diesel gensets delivering emergency power to RAAF Base Williamtown.

Due to the technical and logistical requirements of the project Penske Power Systems assigned a full time site manager, and provided complete engineering and project management expertise to Downer EDI Engineering Power.

## CONFIGURATION

Together with Downer EDI Engineering Power, Penske Power Systems supplied and installed two 20V4000 DS2650 generators that will be critical in delivering standby power to the defence base.

The generators are installed complete with exhaust systems, pneumatic start systems, neutral earthing contactors, and remote radiators.

In addition Penske Power Systems has installed a complex PLC-based control system that includes six load shedding modes and multiple operating modes including automatic, isochronous mode with load sharing between multiple generator sets operating in parallel with each other or in parallel with the mains supply, mains failure (black start) mode, peak lopping mode, and manual mode on each generator set to enable manual operation of the individual set while the rest of the station is in automatic control.

The control system allows the generators to synchronise at multiple 33/11kV step-down transformers, feeding multiple rings and substations.

The generators are also required to interface to the substation automation system and to the power control and monitoring system.

#### **FEATURES**

With the engine's high displacement and low brake mean effective pressure the 20V4000 DS2650 is well suited to the application and allows the user to apply large block loads to the diesel generating sets.

## **MODEL SPECIFICATION**

2 x MTU Onsite Energy 20V4000 DS2650 diesel generators

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



