

ENVIRONMENT MANAGEMENT



NewGenPower

Overview

NewGen Power's Neerabup Power Project consists of a 330 MW gas-fired power station located in the Neerabup Industrial Estate in the City of Wanneroo; a 30km gas pipeline from the Dampier to Bunbury Natural Gas Pipeline near Muchea and a 2km high voltage transmission line from the Estate to Western Power's Neerabup terminal substation.

The gas-fired power station will operate during periods of peak demand for power. It will utilise the best available, state-of-the-art technology, fuel and equipment to produce the most reliable, safe, clean and cost-effective electricity. Gas-fired power stations are ideally suited to peak load operations and have significant environmental benefits over coal-fired power stations, with reduced water requirements and substantially lower greenhouse emissions.

Consultation with the community and government agencies has focussed on the potential impacts and management of the following environmental factors:

- Air quality;
- Noise;
- Clearing of vegetation; and
- Water management.

These issues have been scientifically investigated with the results and management recommendations being provided to the Environmental Protection Authority for their assessment.

Air quality

The power station will burn natural gas as a fuel and will produce very low levels of air emissions such as oxides of nitrogen and sulphur dioxide.

Studies have been carried out to determine the impact of the power station on the local and regional air quality. The studies show that:

- The power station is not likely to have any adverse affects on local or regional air quality;
- Maximum concentrations of the main pollutant of interest, nitrogen dioxide, is predicted to be well below government air quality goals and standards at any location;
- The contribution of the power station to the production of smog is predicted to be negligible.

Noise

The power station has been located within the Neerabup Industrial Estate to provide a buffer to residential development. The nearest residence to the power station is over a kilometre away with the Banksia Grove residential development over 2 kilometres away.

The power station will be designed and built to minimise noise emissions.

Results from noise studies conducted show that noise expected from the power station is unlikely to be an issue even at the nearest residence and the expected noise levels comply with government regulations.

Biodiversity and clearing

Natural gas will be supplied by a 30 km long gas pipeline that connects to the Dampier to Bunbury gas pipeline near Muchea.

The gas pipeline will be located either in pine plantations near Old Yanchep Road or in the existing infrastructure corridor from near Muchea to the Pinjar Power Station.

The NewGen Gas Pipeline will be buried between the existing pipeline and the three existing power lines. This area has been previously cleared and the vegetation is considered degraded. The area will be revegetated after the pipeline is buried and impacts on plants and animals will be temporary and not significant.

Some clearing of vegetation will be required for the 2 km long transmission line that will connect the power station to Western Power's Neerabup sub-station. This will be minimised by the use of steel poles rather than towers for the transmission line. The poles will also be less visually intrusive than towers.

The power station site is an old market garden so no clearing is required.

Water management

The gas pipeline route goes across the Gnangara Mound groundwater area which supplies drinking water for Perth. To ensure construction of the pipeline poses no threat to the groundwater detailed spill prevention plans will be put in place. Also, fuel and chemical use will be restricted.

The power station will use water to humidify and cool inlet air for the gas turbines. The demand is not large and is likely to be sourced from a bore on the site. No water will be discharged from the site and a lined evaporation pond will capture any dirty water.

For further information contact:

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