

Switching from coal must begin now

Shutting Munmorah a first step towards phasing out coal

The need for action

To avoid dangerous climate change, massive reductions in greenhouse gas emissions are needed in the next decade. The only way of achieving this is to phase out coal-fired power stations using energy efficiency and renewable energy. The next Federal Government must work with the states to develop a national plan that begins shutting the oldest and dirtiest coal plants in Australia, and introduce the necessary clean energy laws that will make this possible. Power plants like Munmorah in NSW – 40 years old and in need of refurbishment – are exactly the kinds of plants that should be shut first.

Background

Munmorah Power Station is a 600MW coal-fired power station 110km north of Sydney. It is NSW's oldest power station, built between 1967 and 1969. The station was originally 1,400 MW, but after closing the oldest two and derating the others, the plant now has a capacity of 600MW. Munmorah is owned by Delta Electricity, a state owned corporation. Delta has said that unless Munmorah is refurbished, it will close in about 2012¹.

In 2006 Munmorah generated 1,416Gwh of electricity, the most since 1994². Given that Munmorah emits 1.065 tonnes of greenhouse pollution³ for every megawatt hour of electricity generated, it would have produced about 1.5 million tonnes of CO₂ in 2006, about 1% of NSW's total.

Replacing Munmorah

Instead of refurbishing Munmorah, we could replace it with energy efficiency and renewables, thus demonstrating how Australia can begin phasing out coal plants and reducing emissions. If all households in NSW switched to solar water heating, it would save up to 4,500Gwh a year – three times Munmorah's output. And if all homes in NSW were insulated, we could save 1,000-2,000Gwh annually⁴. These two measures could save approximately four times Munmorah's annual output. Add to this the energy from new projects such as the recently proposed Epuron wind farm near Broken Hill, which would provide around 3,000Gwh of electricity a year⁵ or twice Munmorah's output, and you begin to see how Australia can begin to phase out coal plants, and reduce emissions. And that's just NSW - national application of these policies would see even greater energy savings and renewable power production, and allow even bigger coal plants to be shut down.

¹ Delta submission the the Owen Inquiry, , <http://www.premiers.nsw.gov.au>.

² Delta annual report 2006.

³ Delta submission the the Owen Inquiry, , <http://www.premiers.nsw.gov.au>.

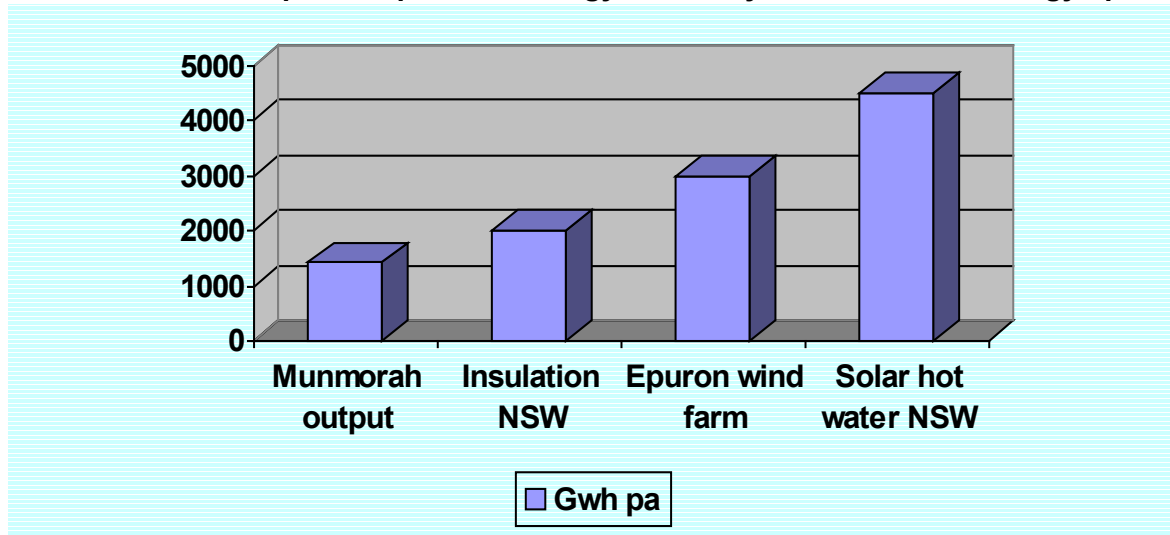
⁴ BCSE submission to the Owen Inquiry, <http://www.premiers.nsw.gov.au>.

⁵ Personal correspondence from Epuron.

Moving beyond Munmorah

There is no technical or financial barrier to policies that would allow us to start phasing out coal. All that is lacking is the political will. Australian governments have estimated that up to 10-30% of electricity demand could be eliminated with no impact on the energy services delivered and with significant financial, jobs and greenhouse benefits⁶. The current renewable energy policies of both parties will see renewables reach about 15-20% of electricity consumption at most by 2020. Yet Germany, without our solar and wind resources, has just set a target of 27% renewables by 2020 and at least 45% by 2030⁷.

Munmorah's output compared to energy efficiency and renewable energy options



What about carbon capture and storage (CCS) or so-called clean coal?

In September 2007 the NSW Government announced a \$5 million carbon capture pilot plant at Munmorah. The research scale pilot is expected to be operational by mid-2008, and in the best case scenario may lead to a larger demonstration plant by 2013⁸. Yet the lead times for even this small project reveal the main problem with CCS – even if it works it won't be ready in time to help achieve the massive reductions in emissions needed in the next decade. Instead of unproven technologies that may reduce Munmorah's emissions sometime in the future, we need a plan to close plants like Munmorah and replace them with technologies available today, such as energy efficiency and renewables.

To avoid dangerous climate change, Australia's emissions need to be reduced dramatically in the next decade. This can only happen if coal-fired power plants are phased out and replaced with energy efficiency and renewables. Shutting Munmorah would be a good start.

⁶ COAG Ministerial Council on Energy "Towards a National Framework for Energy Efficiency-issues and challenges", Discussion paper released by Ministerial Council on Energy p.3, <http://www.nfee.gov.au/public/download.jsp?id=183>.

⁷ http://www.bmu.de/english/current_press_releases/pm/39678.php.

⁸ <http://www.parliament.nsw.gov.au/prod/PARLMENT/hansArt.nsf/V3Key/LC20070927017>.