# **Modification Approval**

Section 96(2) of the Environmental Planning and Assessment Act 1979

I, the Minister for Planning, pursuant to section 96(2) of the *Environmental Planning and Assessment Act 1979*, modify the development consent referred to in Schedule 1 in the manner set out in Schedule 2.

Frank Sartor MP Minister for Planning

Sydney

File No: S90/01696

## **SCHEDULE 1**

2006

Development consent:	granted by the Minister for Planning and Environment on 1 April 1982.
In respect of:	Lot 1 DP 325532, Lot 1 DP 400022, Lot 15 DP 626299, Part Lot 191 DP 629212, Lot 2 DP 702619, Lots 362 and 366 DP 740604, Part Lot 10 and Lots 18, 59, 260 and 261 DP 751636, Part Lot 1 DP 803655, Lots 1-7 and Part Lot 13 DP 804929, Lot 1 DP 813288, Lot 1 DP 816420, Lots 40, 41 and 46-52 DP 827626, Lot 1 DP 829065, Lot 21 DP 832446 and Lot 1 DP 920999.
For the following:	The construction and operation of a power station known as the Mount Piper Power Station
Modification Application:	<ul> <li>Modification of the development consent to increase the capacity of the power station in two phases:</li> <li>initially operating the power station at a capacity factor of up to 90%, to generate up to a nominal capacity of 1400 megawatts; and</li> <li>undertaking equipment upgrade works or replacements to provide a nominal capacity of 1500 megawatts when operating at a capacity factor of up to 90%.</li> </ul>

## SCHEDULE 2

## The development consent is modified by:

### 1) inserting the following immediately after existing condition 49:

## Expansion and Upgrade of the Power Station

- 50. The Applicant is permitted to upgrade and expand the development in two stages:
  - a) stage 1 being the operation of the development at a capacity factor of up to 90%, to generate up to a nominal capacity of 1400 megawatts; and
  - b) stage 2 being the implementation of equipment upgrade works or replacements to provide a nominal capacity of 1500 megawatts when operating at a capacity factor of up to 90%.
- 51. Expansion and upgrade of the development, as defined under condition 50 of this consent shall be undertaken generally in accordance with *Statement of Environmental Effects: Mount Piper Power Station Units 1 and 2 Upgrade*, prepared by Connell Wagner PPI and dated December 2005.

#### Air Quality Impacts

52. The Applicant shall design, construct, commission, operate and maintain the expanded and upgraded development to ensure that the concentration of each pollutant listed in Table 1 does not exceed the maximum allowable discharge concentration for that pollutant when measured at discharge monitoring point 11 and 12 (as defined under the Environment Protection Licence (No. 766) for the site). For the purpose of monitoring and determining compliance with this condition, "dioxins and furans" shall be polychlorinated dibenzo-p-dioxins (PCDD) and polychlorinated dibenzofurans (PCDF), presented as 2,3,7,8-tetrachloro-dibenzo-p-dioxin (TCDD) equivalent and calculated in accordance with the procedures included in Part 4, clause 29 of the *Protection of the Environment Operations (Clean Air) Regulation 2002.* 

Pollutant	Maximum Allowable Discharge Concentration Limit	Reference Conditions
Nitrogen dioxide (NO <sub>x</sub> ) or nitric oxide (NO) or both	1500 mgm <sup>-3</sup>	dry, 273K, 101.3 kPa, 7% O₂
Sulfuric acid mist $(H_2SO_4)$ or sulfur trioxide $(SO_3)$ , or both, as $(SO_3)$	100 mgm <sup>-3</sup>	dry, 273K, 101.3 kPa, 7% O <sub>2</sub>
Solid particles	50 mgm <sup>-3</sup>	dry, 273K, 101.3 kPa, 7% O <sub>2</sub>
Total fluoride	50 mgm <sup>-3</sup>	dry, 273K, 101.3 kPa, 7% O <sub>2</sub>
Chlorine	200 mgm <sup>-3</sup>	dry, 273K, 101.3 kPa, 7% O <sub>2</sub>
Hydrogen chloride	100 mgm <sup>-3</sup>	dry, 273K, 101.3 kPa, 7% O <sub>2</sub>
Total of Sb, As, Cd, Pb, Hg, Be, Cr, Co, Mn, Ni, Se, Sn and V	1 mgm <sup>-3</sup>	dry, 273K, 101.3 kPa, 7% O <sub>2</sub>
Cadmium	0.2 mgm <sup>-3</sup>	dry, 273K, 101.3 kPa, 7% O <sub>2</sub>
Mercury	0.2 mgm <sup>-3</sup>	dry, 273K, 101.3 kPa, 7% O₂
Dioxins and furans	0.1 ngm <sup>-3</sup>	I-TEQ, dry, 273K, 101.3 kPa, 11% O₂
Total volatile organic compounds	40 mgm <sup>-3</sup> (as VOC) or 125 mgm <sup>-3</sup> (as CO)	dry, 273K, 101.3 kPa, 7% O₂

53. The Applicant shall determine the pollutant concentrations and emission parameters specified in Table 2 below, at discharge monitoring points 11 and 12 (as defined under the Environment Protection Licence (No. 766) for the site), and employing the sampling

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and analysis method specified. Monitoring shall be undertaken at the frequency specified in the Table.

Pollutant/ Parameter	Units of Measure	Frequency	Method
Nitrogen oxides	gm <sup>-3</sup>	continuously	CEM-2
Sulfur dioxide	mgm⁻³		CEM-2
Solid particles	mgm <sup>-3</sup>		TM-15
Sulfuric acid mist and sulfur trioxide (as $SO_3$ )	mgm <sup>-3</sup>		TM-3
Chlorine	mgm <sup>-3</sup>		TM-7 & TM-8
Total fluoride	mgm <sup>-3</sup>		TM-9
Hydrogen chloride	mgm <sup>-3</sup>		TM-7 & TM-8
Total of Sb, As, Cd, Pb, Hg, Be, Cr, Co, Mn, Ni, Se, Sn and V	mgm <sup>-3</sup>	quarterly during the first 12 months following commissioning of Stage 1 and Stage 2, then annually or as otherwise specified by Environment Protection	TM-12, TM-13 & TM-14
Cadmium	mgm <sup>-3</sup>		
Mercury	mgm <sup>-3</sup>		TM-12, TM-13 & TM-14
Copper	mgm <sup>-3</sup>		TM-12, TM-13 & TM-14
Dioxins and furans	ngm <sup>-3</sup>		TM-18
Carbon dioxide	%		TM-24
Oxygen	%		CEM-3
Dry gas density	kgm <sup>-3</sup>		TM-23
Moisture content	%	Licence	TM-22
Molecular weight of stack gases	gmol <sup>1</sup>	conditions thereafter	TM-23
Temperature	°C		TM-2
Velocity	ms <sup>-1</sup>		TM-2
Volumetric flowrate	m <sup>3</sup> s <sup>-1</sup>		TM-2

Table 2 – Pollutant and Parameter Monitoring (Air)

54. Notwithstanding conditions 52 and 53, nothing in this consent relieves the Applicant from the requirement to comply with the Environment Protection Licence for the site issued under the *Protection of the Environment Operations Act 1997*. In the event that the Environment Protection Licence for the site is modified from time to time to be inconsistent with or more stringent than the requirements of this consent, the requirements of the Licence shall prevail over this consent to the extent of any such inconsistency.

## Air Quality Performance Verification

- 55. Within 90 days of commissioning Stage 2 of the expanded and upgraded development, or as may be directed by the Director-General, and during a period in which the upgraded and expanded development is operating under design loads and normal operating conditions, the Applicant shall undertake a program to confirm the air emission performance of the development and update air quality modelling. The program shall include, but not necessarily be limited to:
  - a) point source emission sampling and analysis subject to the requirements listed under condition 54;
  - b) an update of the air quality impact assessment presented in *Statement of Environmental Effects: Mount Piper Power Station Units 1 and 2 Upgrade*, prepared by Connell Wagner PPI and dated December 2005, using actual air emission data collected under a). The assessment shall be undertaken strictly in accordance with the methods outlined in *Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in New South Wales* (DEC, 2005) and to meet the requirements of the DEC with respect to updating the air quality impact assessment;

- c) a comparison of the results of the air quality impact assessment required under b) above, and the predicted air quality impacts detailed in *Statement of Environmental Effects: Mount Piper Power Station Units 1 and 2 Upgrade*, prepared by Connell Wagner PPI and dated December 2005; and
- d) a comparison of the results of the air quality impact assessment required under b) above, and the impact assessment criteria detailed in *Approved Methods and Guidance for the Sampling and Analysis of Air Pollutants in New South Wales* (EPA, 2005).

A report providing the results of the program shall be submitted to the Director-General and the DEC with 28 days of completion of the testing required under a).

#### **Construction Environmental Management**

56. Prior to the commencement of construction of each Stage of the expanded and upgraded development, the Applicant shall prepare and implement a Construction Environmental Management Protocol to outline environmental management practices and procedures to be followed during the construction of the development. The Protocol(s) shall be prepared in accordance with *Guideline for the Preparation of Environmental Management Plans* (DIPNR 2004) and shall focus on the management of erosion and sedimentation, dust, heavy vehicle movements and noise during the construction works.