RE: Hunter Power Project (Kurri Kurri Power station) Modification 3

I object to modification 3 as use of deisel could produce emissions of Polycyclic Aromatic Hydrocarbons (PAHs) which will increase the incidence of cancer in nearby residents. The Air Quality Impact Assessment for the original project is unsubstantiated with regard to PAH emissions, and does not have any data on deisel emissions.

There is no monitoring of PAH, PM10 and PM25 emissions in the vicinity of the stacks. This should be mandatory.

The project will also produce greenhouse gasses, and a battery bank would be a better alternative to reduce Climate Change.

The EIS (Hunter Power Project Appendix K, Air Quality Impact Assessment) does not indicate which types of filters, if any, will be used for PAH, PM10 and PM25 emissions. Modeling is done for the proposed "two industrial frame heavy duty F-Class gas turbine units in open cycle gas turbine configuration ", and this may change for the final plant. No modelling has been done for deisel oeration. So there is no guarantee that PAH, PM10 and PM25 emissions will be less than NEPN standards.

Based on US EPA figures for gas turbines, PAH emissions from the flues are likely to be 0.4ng/cum for distillate, and a factor of 20 fold lower for gas. The level for distillate is above the Air Toxics NEPM monitoring investigation level (MIL) of 0.3ng/cum. Although low, these levels are high enough to cause a significant increase in cancer cases in the surrounding populations, and with the right wind conditions could add to the PAH and PM25 levels in Sydney. PAH levels are increasing worldwide in air and watercourses, and are considered by many scientists to be the major environmental carcinogen causing tracheal, lung, oesophageal, breast, kidney, liver and bladder cancer (see <u>pahs-and-cancer.org</u>).

The EIS does not show the type of gas or diesel distillate used, the level of purification, or assay results for fuel PAH's. There are no test results for PAHs and PM25 particle emissions when burning specified gas and diesel, or details of filters to remove PAHs.

I feel it is wrong to allow increased use of deisel, when air emissions are unknown, and when people's lives and future cancer cases are at stake.

Effie Ablett* Phd, Bsc(Hons)

pah_info@yahoo.com

www. pahs-and-cancer.org

*Effie has spent over 30 years working as a molecular biologist in Cancer Research at University of Qld and Qld Institute of Medical Research, studying the effects of chemical carcinogens on cultured human cells. Her publications include papers in Nature, the Lancet, New England Journal of Medicine, Mutation Research, Neurology, Oncogene, Biochemical Pharmacology and Plant Science. Invited speaker at the Dibble Cancer Research Centre, UDMS, London, and the International Congress for In Vitro Biology, Portland, OR, USA.