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Ref: D2011/057311

Mr Richard Whyte  
Regional Manager, Bathurst  
Environment Protection Authority  
PO Box 1388  
Bathurst NSW 2795

Dear Mr Whyte

**Subject: Licence Variation Request  
Licence No 766: Delta Electricity – Wallerawang Power Station**

Thank you for giving the Sydney Catchment Authority (SCA) the opportunity to provide input into the a variation of licence requirements for Licence No 766 (Delta Electricity) for the discharge of blowdown water from Wallerawang Power Station to the Coxs River. The SCA understands that the application for a licence variation is an outcome of a recent Land & Environment Court matter between Delta Electricity and the Blue Mountains Conservation Society.

It is noted that the Wallerawang Power Station is located in the Coxs River catchment, which is part of the Sydney drinking water catchment. The Coxs River is one of two major rivers that feed into Warragamba Dam, Sydney's principal water supply reservoir.

The SCA welcomes the fact that a number of pollutants that currently are not subject to licence limits are now proposed to be added to Licence 766, however, it notes that:

- The proposed pollutant limits in the licence variation application (July 2010) appear almost without exception to be greater than concentrations currently being discharged at discharge point 4 below Lake Wallace (Delta EPL Annual returns 2005-2010).
- Some key pollutants that have the potential to impact on water quality and ecosystem health are not included in the list of additions, such as selenium and molybdenum.
- There is reference to monitoring of discharge volumes so as to enable gross quantities of pollutants to be assessed, but no commentary about changes to maximum total annual pollutant loads of the existing licence.
- There is reference in the application to the recent installation of a reverse osmosis plant at Wallerawang – however, there is no evidence of its impact on pollutant levels at the main discharge point.
- A pollution reduction program is proposed to involve the full treatment of cooling tower blowdown water by December 2015, with discharge only required during the unavailability of the plant.

The protection of water quality and aquatic ecosystem health of the Coxs River, and the ecosystem services that it provides, is vital both for the river itself and also for protection of the quality of water flowing into Warragamba Dam. It is noted that current discharges dramatically change the character of the aquatic chemistry of the river, with unknown impacts on aquatic ecology and ecosystem health. The SCA believes that the issue of pollutant discharge which has a major impact on receiving water quality should be addressed progressively, and not merely at the end of a specified time period.

In consideration of the above, and taking into account the key objective of *State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011*, which seeks to ensure that developments have a neutral or beneficial effect on water quality, the SCA provides the following comments and recommendations.

The SCA is satisfied with the pollutants that have been included in the list, but considers that a number of additional key pollutants should be included in the licence variation such as Selenium with limit of 10 ug/L; and Molybdenum with a limit of 100 ug/L; should be added to the list. Possibly silica and uranium might also be considered, possibly initially as elements to be monitored.

Regular monitoring should include ICP-MS screening for all heavy metals, not just those with licence limits.

The SCA considers that the proposed rolling average pollutant concentration levels are too high, and would actually permit an increase in pollutant concentrations in any discharge. It considers that these pollutant levels should all be halved, and that every year following the issuance of the revised licence these levels be reduced by a further 20 percent, until the levels either meet the ANZECC (2000) water quality guidelines for aquatic ecosystems (where relevant), or full treatment or zero discharge is achieved.

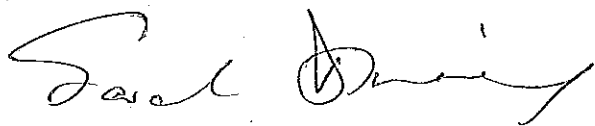
While pollutant loads are not part of this licence variation, the SCA considers that there should be an equivalent reduction in maximum total annual pollutant load, given that the bulk of any load is related to electrical conductivity, which is defined in this licence variation application.

It is understood that a four year period to achieve full treatment of blowdown water was negotiated as part of the Court settlement, however, the SCA considers that this too long, and suggests that one and a half to two year timeframe (following the issue of a revised licence) is more than sufficient for the design and installation of a full blowdown treatment plant.

It further considers that once the plant for full treatment of blowdown is installed, there should be no further discharge to the Cocks River, and that during any plant unavailability, such as for servicing, untreated blowdown should be temporarily stored for later treatment.

If you wish to discuss this matter further please contact Dr Bob Banens on 47242458.

Yours sincerely



**SARAH DINNING** 15.12.11  
**Group General Manager Corporate Development**