

9 August 2005

Mr Greg Watkinson
Acting Director Projects - References and Research
Economic Regulation Authority
197 St Georges Tce
PERTH WA 6000

Dear Sir,

Re: Draft Report on the Inquiry into the Cost of Supplying Bulk Potable Water to Kalgoorlie-Boulder

Technical Issues

1 Incremental Extension of GAWS

UUA wishes to place on record its concern with respect to an assumption made on page 22 of the draft report, specifically

“..the ability to make incremental extensions without significant cost penalties...”

The issue has significance in that the Water Corporation has advanced capital cost estimates for incremental extension of the Goldfields and Agricultural Water Supply (GAWS) System by upgrading of pump stations, replacement, duplication and/or refurbishment of the pipeline. UUA has detailed its concerns to the ERA, and to the Water Corporation at a meeting held in Perth between UUA, the ERA and Water Corporation officers held on 22 July 2005. Following the meeting, Water Corporation forwarded more detailed information on Zones 5 and 6 (Ghooli/ Dedari/Kalgoorlie) to enable UUA to engage Arup Water to specifically review the assumption.

Arup Water has reviewed the material as requested and has found, contrary to the ERA assumption, that incremental extension of the GAWS will result in increased unit costs because of the impact of capital and energy costs (copy of Arup letter attached).

UUA is of the view that the total net present value of Water Corporation's avoided costs in the economic analysis (Savings in Water Corporation Growth Expenditure in Fig 7.1 of the Draft Report) is therefore understated.

2 Water Quality in the Agricultural Areas of the GAWS

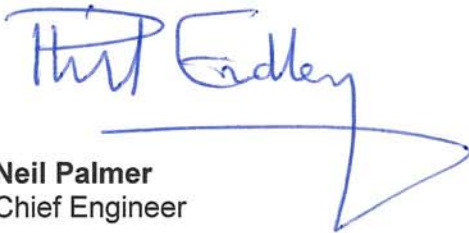
One of the third party submissions from Specialist Water Services (the author is a former Water Corporation Water Quality expert) raises the long standing issue of poor water quality supplied to the agricultural areas in the Goldfields and Agricultural Water Supply System.

The problem is that water disinfection residuals are very difficult to maintain in pipelines with long detention times, where the water contains dissolved natural organic matter. Natural organic matter reacts with the disinfectant (in this case, chloramine) causing chloramine decay. The limiting detention time for maintenance of a reasonable disinfection residual is stated by Water Corporation to be of the order of 8 days (Draft Report, p 26).

The Specialist Water Services report proposes that, if the GAWS were retained, supply of desalinated water (which is free of organic matter) west of Kalgoorlie would overcome problem for the Water Corporation. Such a proposal would entail some capital costs to reverse the flow direction and also ongoing maintenance costs. The reduced flows would minimise the need for capital upgrade of the pipeline, but more importantly would avoid significant costs associated with water treatment, rechloramination and pipe replacement required for maintenance of water quality in the truncated GAWS (Draft Report, p 26).

Of additional significance would be the increase in demand through the Esperance-Kalgoorlie Pipeline in the early stages of the project's life which would further reduce unit costs and improve the net benefits for the EKP.

Yours sincerely,



Neil Palmer
Chief Engineer

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