



UNIDEL

INFRASTRUCTURE PROJECT MANAGERS

DAWSON VALLEY PIPELINE

Supplement to the Access Arrangement Review

0	Issued to AER	GH	CG	GH	9 May 07
Rev	Description	Originator	Reviewed	Approved	Date

TABLE OF CONTENTS

1.0 BACKGROUND..... 3

2.0 COMPARISON OF THE UNIDEL AND GHD ESTIMATES 3

3.0 ESTIMATE ACCURACY 3

4.0 PIPELINE COST TRENDS 3

DISCLAIMER

This document may only be used for the purposes for which it was commissioned and only in accordance with the Terms of Business which govern Unidel’s engagement. Unauthorised use of this document in any form whatsoever is prohibited and Unidel accepts no responsibility for reliance on the information contained herein.

1.0 BACKGROUND

The Australian Energy Regulator (AER) has requested that Unidel report further on the change in pipeline construction costs over the last five years where Unidel has indicated cost increases of around 80% and in particular the increase since the GHD estimate and the Unidel estimated higher cost. This supplement provides the Unidel response in three parts.

2.0 COMPARISON OF THE UNIDEL AND GHD ESTIMATES

GHD had provided a cost estimate of \$9.169M (Q3 2006 A\$) with an accuracy of +/- 25%.

Unidel suggested an estimate of \$11.3M (Q2 2007 A\$) with an accuracy of +/- 25%. The reasons given for the increase were additional approval costs (initial and compliance) of around \$1M and a suggested increase in construction costs of around \$1.1M. In comparing the cost difference it needs to be recognised there are different drivers for these three components.

1. For approvals the difference is essentially a reflection of adopting a stand alone pipeline project whereas for the GHD estimate it appears the approvals have been incremental to another aspect of the project, assumed to be the CSG development.
2. The construction cost increase is a continuing reflection of the cost increases resulting from the high demand on labour and equipment from the resource sector activity. Labour costs have increased substantially though not uniformly. Key specialist supplies have also increased, particularly camp supply which is a significant proportion of the overall construction cost.
3. Steel cost increases have been far less rampant in the last 1-2 years compared to the previous early growth demand from China. Nevertheless there have been increases.

3.0 ESTIMATE ACCURACY

The Unidel and GHD estimates should not be seen as conflicting. After deducting the \$1M for approvals the Unidel estimate is \$10.3M \pm 25%¹ or in the range \$7.7M to \$12.9M. The GHD estimate is \$9.2M or in the range \$6.9M to \$11.5M. In other words the estimates overlap in the range \$7.7M to \$11.5M. It is therefore not possible to draw any firm conclusions that there is a fundamental difference in the estimates.

4.0 PIPELINE COST TRENDS

The Australian Pipeline Industry has been attempting to benchmark pipeline costs for many years. Whilst there are significant differences depending on the type of project and what is included in the baseline cost, there has been a broad indicator used being \$/in/km or more recently \$/mm/m. However it should be noted that within the industry there is continued debate on the veracity of published figures due to inconsistency as to the inclusion or treatment of costs such as pipeline compression, corporate overheads, insurance etc.

¹ The accuracy of \pm 25% was not stated in the initial report.

In the absence of reliable industry data, it is difficult to validate cost trends other than in broad terms as follows. Around mid to late 1980's costs were around \$15k/in/km. There appears to have been little increase over the period to the mid 1990's except some adjustment for the higher cost for the trend from 10 MPag systems to 15 MPag systems, but costs were usually still considered to be less than \$20k/in/km. By the early 2000's costs appear to have increased to typically around \$25k/in/km. The recent increases in steel, approvals, labour and specialist sub-contracts since that time indicate that it is unlikely any pipeline projects would now cost less than \$40k/in/km and in some cases may exceed \$45k/in/km. As noted, however, comparing projects on this basis is inherently unreliable and should be considered a guide only.