



**WorleyParsons**

resources & energy

**ENVESTRA LIMITED**

## **Increased AS2885.1 Code Compliance Costs**

307/09210

6-Jul-06

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## ENVESTRA LIMITED INCREASED AS2885.1 CODE COMPLIANCE COSTS

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### PROJECT 307/09210 - INCREASED AS2885.1 CODE COMPLIANCE COSTS

REV	DESCRIPTION	ORIG	REVIEW	WORLEY- PARSONS APPROVAL	DATE	CLIENT APPROVAL	DATE
A	Issued for client review	J Blain	B Davis	N/A	5-Jul-06		
0	Issued to client	J Blain	B Davis	B Davis	6-Jul-06		



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## **1. INTRODUCTION**

The Essential Service Commission of South Australia (ESCOSA) issued its final decision titled "2006 Review of Envestra Gas Access Arrangement - Final Decision" on June 30 2006. In this decision, ESCOSA rejected certain Envestra forecast costs. Envestra has requested WorleyParsons to review and comment on the ESCOSA argument (as detailed in clause 10.1.4.5 of the final decision), which rejects increased compliance costs associated with revisions to AS2885.1.



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## 2. COMMENTS ON FINAL DECISION

Clause 10.1.4.5 titled Regulatory, Governance and Service costs in its final decision states the following:<sup>1</sup>

*The Commission's Draft Decision rejected Envestra's forecast costs associated with changes in Australian Standards and increased regulatory compliance costs as there was no firm basis to support such cost increases.*

*Envestra has argued in its submission to the Draft Decision that revisions to Australian Standard AS2885 are currently being finalised and advice from the Chair of the relevant Australian Standards Committee suggests that it will come into force from July 2006.*

*The Commission has received information from the relevant Australian Standards Committee regarding the proposed revisions to AS2885, which does not support Envestra's claim for additional expenditure in relation to the proposed changes to this Standard. In contrast, the advice suggests that there may be opportunities for cost savings which potentially arise from the proposed revisions to AS 2885.1. The Commission has therefore decided that the proposed increase in costs is not prudent and efficient.*

*In response to the Commission's Draft Decision to reject increased regulatory compliance costs, Envestra has submitted that it has already recruited an additional person to work on regulatory compliance matters, and that this cost is not incorporated into baseline Non Capital Costs.*

AS2885.1 is the Design and Construction code. WorleyParsons agrees that with changes which now allow a .8 design factor in certain situations, it is possible to construct new pipelines with lower wall thicknesses and hence lower steel costs. This is however a capital saving and only applies to new pipelines. The type of pipelines Envestra is likely to be constructing however, are in built up areas where wall thicknesses will most likely increase to obtain the necessary penetration resistance. In any event, it is a capital cost issue, not a non capital cost issue.

The proposed AS2885.1 draft proposes a suit of design documentation for pipelines. The Preface of DR 04561, being the Draft for Public Comment Australian Standard issued for comment on December 2004, details the significant changes to this code. Tabulated below are significant changes considered applicable to Envestra:

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<sup>1</sup> PROPOSED REVISIONS TO THE ACCESS ARRANGEMENT FOR THE SOUTH AUSTRALIAN GAS DISTRIBUTION SYSTEM, FINAL DECISION June 2006



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**Table 1 Summary of Significant Changes to AS2885.1**

Significant change number	Clause	Detail	Significance to Envestra
4	2	Safety re-written with more explicit guidelines on assessments and integrity	Envestra will need to incorporate these provisions into the Fracture Control Plan to demonstrate compliance, including Maximum Energy Release rate and Control of Rupture provisions
6.ii	4.3	Effective marking requirements, including Danger sign in accordance with AS 1319	Envestra to confirm compliance
6.iii	4.6	A plan for Isolation of pipeline	Need isolation plan as Envestra pipeline traverses T1 and T2 locations
6.iv	4.7	Special provisions for high consequence areas, no rupture case, max of 10Gj/s discharge rate for T1/2 etc.	Envestra will need to develop documentation to confirm compliance as pipelines traverse T1/2 locations.
6.v	4.4	Revised classification definitions and additional classifications	Envestra will need to review location classes.
6.vii	4.9	Provisions for low temperature excursions	Envestra will need to develop or assemble existing documentation on low temperature excursions to ensure operating and emergency procedures reflect any low temperature limitations
6.viii	4.8.5 4.7.3 4.10	Fracture Control: Calculation of critical defect length, energy release rate and radiation contour	Fracture Control Plan to be written and/or revised to reflect latest requirements. In particular need to demonstrate no rupture case for T1/2 and special location classes, energy release rates etc



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WorleyParsons notes that while changes to design codes are not necessarily retrospective, these changes are usually made in light of current research findings. Such changes are typically designed to improve pipeline safety. WorleyParsons considers it prudent for owners of such assets to review current assets and documentation against the new code requirements and where appropriate create new documentation or amend existing documentation. While it may not be possible to re-design an existing pipeline, it is essential that the operators are aware of where the pipeline does not comply with the latest standard so that additional procedural measures can be applied.

In addition to the cost of compliance reviews, the application of AS2885 will increase the ongoing operational costs in those areas where increased signage and patrol activities are deemed necessary. This will particularly be the case in instances for example where penetration resistance cannot be demonstrated with some pre-existing pipelines in urban locations.

As discussed earlier, the new code will allow lower wall thicknesses however this will only be for rural locations and only applies to new pipelines and is of little relevance to Envestra's Access Arrangement Revision.

Failure to be able to demonstrate AS2885 compliance exposes the distribution companies to significant business risk, particularly in the event of an incident involving significant property damage, public injury or death. It would be difficult to establish good operating practice as a credible defence where code compliance cannot be demonstrated. AS2885 is the highly regarded single and sufficient code used throughout Australia for gas transmission pipelines.