1 May 2014

Attention; Director of Operations

Queensland Resources Council 133 Mary Street Brisbane Queensland 4000. Australia. From ; Ian Wollff Member of AIG & AusIMM.

SUBJECT: **SECOND** COMMENT ON "Exposure draft: Australian Guidelines for Estimation and Classification of Coal Resources"

Introduction

I previously submitted a comment on the Draft guideline on coal resources [australian_coal_guidelines_draft_march_18032014.pdf], dated 4 April 2014. I have since discussed the matter with some AIG members in Jakarta and herein submit a second comment for your kind consideration.

Comments

1. Broad representation of the coal professionals.

The draft guidelines are prepared by industry bodies from NSW & Queensland that represents a large portion of Australia's coal resources. To avoid bias and to gain wide acceptance I recommend the drafting committee include formal representation from the other states and territories that have coal resources. Consideration may also be given to including New Zealand.

A number of AIG geologists work in the international coal sector. Their participation is vital, as professional industry advances and issues that are developing off shore shall impact on the future Australian coal resource industry.

The participation of AIG geologists in contributing to the draft guidelines can be made more transparent through emphasizing publication of comments on the AIG web site, and to allow geologists to interact through the web site.

2. Relevance of Guidelines.

The JORC code is a recognized Australasian "brand" accepted by Australian and international investors. There are competing "brands" (eg Canadian) in the international sector. It is understood the JORC code makes reference to the Australian Guidelines. Should the present draft of the Australian guidelines be approved, then it is possible that the JORC committee may be asked to protect its brand through an exclusion of the reference to the Australian Guidelines.

3. Scope to combine Resources and Reserves.

The draft guidelines (48-50) are now combining Reserves into Resources. I strongly urge that Resources and Reserves remain clearly separated concepts, with separate criteria. The JORC recognized stages of project development [Exploration Target, Resources, Reserves] is practical for the professional geologists to undertake staged development, for financiers supporting exploration, and for governments to account for the confidence levels in their national assets.

I would appreciate to understand the drafting committees' rationale behind this radical proposal to merge Resources and reserves.

4. Scope - eventual economic extraction.

(Line 39-40)The traditional concept of "Resource" coal is an estimate of the coal in the ground, without any economic or extraction criteria. This will allow potential miners or governments to understand the "starting point" for future development, or for sedimentologists to understand the depositional / paleoclimate conditions etc . Keep in mind that coal Resources may now be exploited through coal seam gas and new technology may change our present concepts of eventual economic extraction.

I agree that the first point of the scope "guidance reflecting good practice" (37-38) should also contain an element of avoiding fraud or miss understanding from the users of such Resource reports. Therein, providing a detailed estimate for eventual economic extraction (for Resource as separated from Reserve) may itself be "poor practice". A typical issue of trying to predict coal costs and prices some 20 or more years into the future may be considered as misguiding people's confidence in the science.

5. Scope – assessment tools, rather than radius of influence.

(Line 41-44) I agree that providing a simple radius of influence is of limited good. Variograms may be suited in some cases, but may also misguide users of such reports towards over confidence in the science, particularly where the data set is limited.

A commonly used consideration for selecting the radius of influence is to apply modifications to the radius based on a generalized concept of stratigraphic and structural complexity. This has merit, particularly as many coal mines are now working in increasingly complex geological settings.

Most resource estimates are also classified by depth range. This provides a good presentation of resources for professionals and users, however the selection of the depth range is arbitrary, and excessive depths can potentially be misleading to some report users. I herein suggest that the selection of depth ranges should reflect a ratio of the present / stated open pit strip ratio, or multiple of underground depth. In established commercial coal districts, the commonly used strip ratio (for each type of coal) may be nominated as the resource depth factor, and the report may then estimate coal with variable factors. For example if the present SR is 10:1, then the resources may be estimated for a factor of 0.8, 1, 1.5, 2 or 3 times, being 8:1, 10:1, 15:1, 20:1 30:1 etc. In new coal basins the industry average SR may be broadly estimated based on comparable settings in other basins.

6. General.

• There are many good aspects to the draft guidelines, and I encourage the further development of the guidelines.

- The guidelines are somewhat prescriptive, and could be complimented in each section with an introduction that briefly explains the underlying concepts and relevance to the scope of "reflecting good practice".
- There are a number of technical aspects (in addition to my first comment) that I, and others, have issues with.
- I apologize should my comments cause offence or are inappropriate.

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Ian Wollff