



Public Submission

By BHP Billiton

**In response to the ERA's invitation for
submissions on how it should derive a value for
the DRP using the ERA's bond-yield approach**

17 September 2012

Public Submission - BHP Billiton – Debt Risk Premium

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1	Background	3
2	Executive Summary	3
3	ERA Final Decision	3
4	Tribunal’s DBNGP Decision	4
5	WAGN Revised Decision	5
6	BHPB Submission	5
6.1	Overview	5
6.2	Adoption of the joint weighting system	5
6.3	Utilisation of the BBB/BBB+ Bond Sample	6

1 Background

On 31 October 2011 the Economic Regulation Authority of Western Australia (**ERA**) made a final decision¹ not to approve the revised access arrangement proposal submitted by DBNGP (WA) Transmission Pty Ltd (**DBP**) in respect of the Dampier to Bunbury Natural Gas Pipeline Access Arrangement (**DBNGP Access Arrangement**), which it amended on 22 December 2011 (**ERA Final Decision**).

On 16 January 2012 DBP applied to the Australian Competition Tribunal (**Tribunal**) in ACT No 2 of 2012, for review of the ERA Final Decision.

On 26 July 2012 the Tribunal handed down its decision (**Tribunal's DBNGP Decision**) which, among other things, required to ERA to remake its decision in respect of its determination of the Debt Risk Premium (**DRP**) in accordance with the following direction:

“The [ERA] do determine a value for the DRP using the [ERA's] bond-yield approach in accordance with Tribunal's reasons including having regard to the Tribunal's criticisms of the simple averaging process adopted in the decision.”

On 20 August 2012, the ERA published an invitation for submissions from DBP and any interested parties on how it should derive a value for the DRP using the ERA's bond-yield approach (**Consultation Paper**). In particular, the ERA sought submissions on what would be an appropriate averaging approach for the bond-yield approach to determine the DRP set out in the ERA's Final Decision that would offer the best estimate of the DRP.

This submission is made by BHP Billiton (**BHPB**) in response to the ERA's Consultation Paper.

2 Executive Summary

BHPB submits that to determine a value for the DRP using the bond-yield approach, the ERA should adopt the same approach as in its recent revised decision in respect of the Mid-West and South-West Gas Distribution System Access Arrangement² (**WAGN Revised Decision**).

Specifically in relation to the averaging approach, BHPB submits that the joint “amount issued” and “term to maturity” weighting adopted in the WAGN Revised Decision is the most appropriate method to be adopted.

BHPB submits that the approach adopted in the WAGN Revised Decision is the best approach to adopt on the basis that it has proper and full regard to the Tribunal's criticisms of the simple averaging approach adopted in the DBNGP Final Decision, and is the best method to apply the bond-yield approach to ensure an accurate estimate of the DRP.

3 ERA Final Decision

In the ERA Final Decision, the ERA adopted a bond-yield approach to estimate the DRP parameter used to determine the rate of return applicable under the DBNGP Access Arrangement.³ In adopting this approach the ERA:

¹ Final Decision on Proposed Revisions to the Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline, 31 October 2011.

² Revised decision pursuant to rule 64(4) of the National Gas Rules giving effect to the Economic Regulation Authority's proposed access arrangement revisions for the Mid-West and South-West Gas Distribution System, 25 June 2012.

- (a) selected a sample of 15 bonds issued by Australian corporations that had been assigned a credit rating by Standard & Poor's in the range of BBB-/BBB/BBB+;
- (b) then considered four scenarios in estimating the DRP using the 15 bonds:
 - (i) *Scenario 1*: a full sample of all 15 bonds;
 - (ii) *Scenario 2*: a sample excluding all bonds with BBB- credit rating;
 - (iii) *Scenario 3*: a sample excluding all bonds with a term of less than 5 years; and
 - (iv) *Scenario 4*: a sample excluding all bonds with a term of less than 5 years and all bonds with a BBB- credit rating;
- (c) calculated the term to maturity weighted average for each of the four scenarios referred to in (b); and
- (d) calculated the simple average of all four term to maturity weighted averages for each scenario, with this figure being the DRP to apply to the DBNGP Access Arrangement.

4 Tribunal's DBNGP Decision

The Tribunal's criticism of how the ERA quantified its estimates of the DRP in the ERA Final Decision were similar to its findings in *Application by WA Gas Networks Pty Ltd (No. 3) [2012] ACompT 12 (Tribunal's WAGN Decision)*, where the same bond-yield approach to the one adopted in the ERA Final Decision was considered by the Tribunal.

The Tribunal's key findings in both the Tribunal's DBNGP Decision and the Tribunal's WAGN Decision in respect of the bond-yield approach adopted by the ERA were:

- (a) the Tribunal accepted the ERA's decision to adopt a bond-yield approach to determine the DRP;⁴
- (b) the Tribunal found the four scenarios referred to in 3(b) above to each be valid possibilities to consider, noting however that Scenario 2 (which excludes all bonds with BBB- credit rating) offers the best estimate of the DRP;
- (c) the Tribunal accepted the ERA's adoption of the term to maturity weighted average approach referred to in 3(c) above, but noted that (while not finding error in the ERA's approach in this regard) it might have expected some more detailed discussion of the 'amount issued' weighted average, and that another option to consider was an average based on weights determined by both the 'amount issued' and 'term to maturity' criteria; and
- (d) the Tribunal found the ERA erred in adopting the simple average approach to convert the term to maturity weighted averages to the DRP (step 3(c) above).

The basis for the Tribunal finding error in the simple average approach referred to in (d) was that it resulted in double and quadruple counting of certain bonds (i.e. those that were included in more than one of the Scenarios referred to in 3(b) above), with the result being that the bonds that were counted more than once received a greater weighting than others.

³ ERA Final Decision, [551] – [570].

⁴ Tribunal's DBNGP Decision, [290] and [311].

5 WAGN Revised Decision

In the Tribunal's WAGN Decision, the Tribunal ordered that the ERA re-make its decision in respect of the Mid-West and South-West Gas Distribution System Access Arrangement and in doing so (amongst other things) reconsider the proper application of the bond yield approach, in deciding upon the debt risk premium to allow, having regard to the Tribunal's criticisms of the simple averaging process adopted.

The ERA undertook this task in the WAGN Revised Decision.

In the WAGN Revised Decision, the ERA adopted a bond-yield approach, estimating the DRP by:

- (a) selecting a sample of 13 bonds issued by Australian corporations that had been assigned a credit rating by Standard & Poor's in the range of BBB-/BBB/BBB+;
- (b) removing all BBB- bonds to create a shortened sample (i.e. the same as "Scenario 2" adopted in 3(b)(ii) above); and
- (c) applying a joint weighting system to each of the bonds which applies an "amount issued" weighting and a "term to maturity" weighting to the Sample Bonds and using a multiplicative rule to account for the compounding effect of this approach.

6 BHPB Submission

6.1 Overview

BHPB submits that, in deriving a value for the DRP using a bond-yield approach for the DBNGP Access Arrangement the ERA should adopt the same approach it adopted in the WAGN Revised Decision on the basis that the approach adopted by the ERA in the WAGN Revised Decision:

- (a) is consistent with the Tribunal's WAGN Decision; and
- (b) is the best approach to most accurately estimate the DRP.

In the WAGN Revised Decision the ERA made two adjustments to the approach it adopted in the WAGN Final Decision to calculate the DRP:

- (c) it utilised one sample of bonds (**BBB/BBB+ Bond Sample**) (rather than 4 samples), with the sample being all bonds other than BBB- bonds; and
- (d) it adopted a joint weighting system to each of the Sample Bonds which applies an "amount issued" weighting and a "term to maturity" weighting.

The above two adjustments correct the error identified by the Tribunal, as well as incorporate the Tribunal's key comments, in relation to the ERA's bond-yield approach adopted in the WAGN Access Arrangement and the ERA Final Decision.

6.2 Adoption of the joint weighting system

As noted in paragraph 4(d) above, the error identified by the Tribunal in respect of the ERA's application of the bond-yield approach in the ERA Final Decision was the use of the simple averaging approach referred to in paragraph 3(d) above, on the basis that it results in multiple counting of certain bonds.

The approach adopted by the ERA in the WAGN Revised Decision ensures bonds are not counted multiple times by utilising only one ‘scenario’ of bonds (the BBB/BBB+ Bond Sample) and applying a multiplicative rule.

In addition, the joint weighting system is consistent with the Tribunal’s acceptance of the ERA’s inclination to favour the “term to maturity” average,⁵ and the following comments of the Tribunal in support of adopting a joint weighting system:⁶

“...another option that the ERA could have considered was an average based on weights determined by [both the term to maturity weighted average and the amount issued weighted average]. It is statistically possible to combine weights so that two or more characteristics can be assigned their due importance. While the differences between these two weighted averages that the ERA has calculated are not large, a joint weighting system might have been more reflective of all the relevant conditions including risk in the market for debt.”

BHPB agrees with the comments of the Tribunal and that the joint weighting approach adopted by the ERA in the WAGN Revised Decision is more reflective of all the relevant risks in the market for debt, and is therefore an effective mechanism for determining the DRP to be applied under the DBNGP Access Arrangement.

6.3 Utilisation of the BBB/BBB+ Bond Sample

While the Tribunal found no error in relation to the use by the ERA of the four scenarios developed by the ERA referred to in paragraph 4(b) above, in order to avoid multiple counting of bonds the ERA adopted only one “scenario” – the BBB/BBB+ Bond Sample.

Adopting the BBB/BBB+ Bond Sample is consistent with the Tribunal’s view that this sample of bonds is preferable in terms of the reliability of its estimates,⁷ and offers the best estimate of the DRP.⁸

⁵ Tribunal’s WAGN Decision, [176].

⁶ Tribunal’s WAGN Decision, [176].

⁷ Tribunal’s WAGN Decision, [171].

⁸ Tribunal’s WAGN Decision, [187].