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Quality Assurance of Pricing Model (Stage 3)

The Queensland Competition Authority

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1. Introduction

This report has been prepared at the request of the Queensland Competition Authority (QCA). Its subject is the revised 2015-2018 Seqwater bulk water pricing model provided to us by the QCA on 10 November 2014 (revised Seqwater model).

This report pertains to stage 3 of the project, which involves reviewing the revised Seqwater model, which incorporates a number of revisions, as compared with the Seqwater bulk pricing model reviewed as part of Stage 2 of this project.

The Seqwater model was constructed by the Queensland Bulk Water Supply Authority (Seqwater) and will be used by Seqwater to calculate the bulk water prices for 2015 to 2018 that it will use in its submission to the QCA.

For stage 3 of this assignment we have undertaken the following checks:

- reviewed the correctness of the inputs into the Seqwater model including the consistency of the opex inputs to the opex model entitled, *(QCA efficiency savings) OPEX model 2014-09-25 Q1 FY15 (788581_1) – Excel*;
- undertaken a sense check of the inputs;
- confirmed that suggested changes contained in our Stage 2 review have been correctly incorporated; and
- ensured that all macros in the model operate correctly.

We find that the economic, financial and computational integrity of the revised Seqwater revenue model is generally sound. Although we note that the QCA has decided not to incorporate our recommendation to use forecast, rather than outturn, inflation to calculate depreciation in the asset roll forward in 2012, 2013 and 2014.

2. Review

In this section we set out the comments arising from our review of the revised Seqwater model.

2.1 Incorporating recommended changes

In stage 2 of this project we identified methodological errors in the calculation of depreciation in 2012, 2013 and 2014 and the inflation adjustment in the final year of an assets life.

Our review of the revised Seqwater model confirms that the methodological error in the calculation of inflation in the final year of an assets life has been corrected. However, there still exists a methodological error in the calculation of depreciation in 2012, 2013 and 2014.

Specifically, the calculation of depreciation in 2012, 2013 and 2014 still uses outturn inflation, whereas we recommend that forecast inflation is used for those years to align with the ex-ante revenue requirement that would have been allowed for those years.¹ Using outturn inflation to calculate depreciation will not protect the business from the risk of inflation forecasting errors.

However, we have discussed this matter in detail with the QCA and understand that an internal decision has been made not to incorporate our recommended change to the calculation of depreciation allowance in the asset roll forward calculation in 2012, 2013 and 2014.

2.2 Price paths

For completeness, we note that the SeqWater model only works correctly when the LGA with the lowest price in 2014/15, is used to determine the annual common price increment (with the dummy Ipswich LGA had the lowest price in 2014/15). However, the SeqWater model does not set the price paths in accordance with the Gazetted referral (5 May 2014)² when a different LGA is selected for the purpose of determining the annual common price increment.

2.3 Operating expenditure inputs

We undertook a high-level review of the operating expenditure model provided by the QCA on 12 November 2014 entitled, *(QCA efficiency savings) OPEX model 2014-09-25 Q1 FY15 (788581_1) – Excel*. While we did not review the operating expenditure model in detail, we note that the fixed operating costs and variable operating costs related to electricity in the operating expenditure model differ to those in the revised Seqwater model. Other than these identified changes the opex inputs in the Seqwater pricing model is consistent with the opex set out in the operating expenditure model provided to use by the QCA on 12 November 2014.

2.4 Other changes

We note that the revised Seqwater model incorporates a number of changes where Seqwater, DEWS, QCA, CH2M and/or Kobby is referenced as the source of the change. These changes are detailed in the 'Log of changes' sheet and our review indicates that they changes have been implemented correctly.

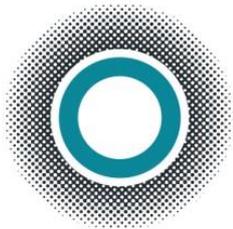
¹ HoustonKemp Report, Quality Assurance of Pricing Model (Stage 2), 28 August 2014, pages 4 and 5.

² Queensland Government Gazette, vol.366, 5 May 2014.



3. Conclusion

We find that the economic, financial and computational integrity of the revised Seqwater revenue model is generally sound. Although we note that the QCA has decided not to incorporate our recommendation to use forecast, rather than outturn, inflation to calculate depreciation in the asset roll forward in 2012, 2013 and 2014.



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