

North Queensland Export Terminal Supplementary report

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1 Introduction

1. We have been engaged by Gilbert + Tobin acting for the North Queensland Export Terminal (NQXT) in relation to the proposed declaration of the terminal under the Queensland Competition Act. We have submitted a report dated 26 August 2025 that provided our opinions of whether the coal handling services provided by NQXT satisfy Criterion b of the declaration criteria.
2. We have been asked to provide a supplementary report that considers the new information in the submission of Aurizon Networks dated 28 August 2025 regarding market definition.
3. Our supplementary report is structured as follows:
 - Section 2 summarises that our approach to market definition is supported by the facts in the submission of Aurizon Networks. The facts demonstrated [REDACTED]
[REDACTED]; and
 - Section 3 illustrates that if the facts in the Aurizon Networks are adopted Houston Kemp has understated the geographic scope of the market using its (flawed) approach and when adjusted for these facts would include [REDACTED].

2 Summary of opinions

4. In the following two sections we summarise the opinions set out in this report.

2.1 Our approach to market definition is supported by the facts in the Aurizon submission

5. In our first report we explained that there would be cost savings by staggering port and rail expansions,¹ as [REDACTED]
[REDACTED].²
6. The submission of Aurizon Networks illustrates that there are cost savings from mine customers using excess capacity at NQXT relative to incurring a high-cost expansion at DBCT. Our analysis indicates that it [REDACTED]
[REDACTED]
[REDACTED] That is, [REDACTED]
[REDACTED]
7. This observation is consistent with our view that the relevant market for coal handling services in central Queensland displays the characteristics of a market that is most efficiently served by multiple facilities, including NQXT and DBCT. That is, mines on the Goonyella system [REDACTED]. [REDACTED]
[REDACTED]
[REDACTED] to conclude our view that the market NQXT operates in extends to include mines in the Goonyella system, the fact that [REDACTED]
[REDACTED] confirms our view that the market extends to those mines.
8. It is therefore more aligned with the intent of Criterion b to determine whether, from a societal cost perspective, NQXT is least cost to serve this demand. This reflects socially efficient decision making, that is, whether it is more efficient for society to delay an expansion of DBCT (or any other port for that matter) and instead utilise excess capacity at NQXT.
9. Our view on the appropriate approach to market definition is unchanged after reviewing the 28 August 2025 submission of Aurizon Networks. That is, our view remains that it is most appropriate to define “foreseeable demand in the market in which NQXT operates

¹ CEG report, Section 3.4.

² Subject to the transportation costs not exceeding the deferred expansion cost savings.

[as] simply the sum of all coal volumes where a miner's willingness to pay exceeds NQXT's costs of serving that miner's demand".³

10. Notably, our approach to defining the market is correctly based on miners' willingness to pay the cost of using NQXT and is independent of the price that NQXT (or DBCT) may charge for coal handling. This is appropriate as Criterion b seeks to assess the geographic scope of the market for which NQXT is least cost to serve, from the perspective of the overall costs of exporting coal from the mines rather than the costs to the miners as reflected in the prices they may have to pay for rail and port access.
11. Our first report indicated that we "conservatively estimate foreseeable demand in the market in which NQXT operates to be [REDACTED] contracted capacity over [REDACTED] [REDACTED]".⁴

2.2 Applying cost-based prices within the Houston Kemp approach would significantly expand the geographic scope of the market

12. In our first report we identified serious flaws in the SSNIP adopted by Houston Kemp and its approach to market definition generally. Notwithstanding those flaws, we conclude in this report that if we were to adopt the approach set out by Houston Kemp we would materially expand the foreseeable demand in the market based on the facts set out in the Aurizon submission. Specifically, when we:
 - a. Compare the relative cost to miners of using NQXT and DBCT by comparing prices that reflect the incremental cost of using unutilised capacity at NQXT ([REDACTED], which is [REDACTED]) with the average incremental cost of expanding capacity at DBCT through the 8X expansion (\$15.95 as provided by Aurizon Networks); or
 - b. Compare the relative incremental cost to miners of using NQXT and DBCT (as above) in addition to assuming that the below rail costs of the Goonyella system (\$3.75 per 200 km as provided by Aurizon Networks) are all incremental and that they are an approximation of the incremental costs of the Newlands/GAPE systems. That is, we are assuming that the incremental below rail costs of these systems are the same on the basis that each tonne km has the same "wear and tear" impact on the rail that it is travelling on;we find that

³ CEG report, paragraph 177.

⁴ CEG report, paragraph 185.

- c. The number of mines for which the relative cost of using either NQXT or DBCT are within [REDACTED] of each other [REDACTED]
[REDACTED] We understand that it would follow from adopting the (flawed) Houston Kemp approach that the demand from these mines would be included in the foreseeable demand for NQXT within the market defined in accordance with Criterion b.
13. We consider that the comparison at a. is the most appropriate (or least inappropriate) application of Houston Kemp's flawed approach to market definition. It is superior to Houston Kemp's approach as it compares forward-looking costs for miners of using each of the coal handing facilities.
14. This comparison reflects the extent to which mines would consider each terminal as substitutes, assuming that each charges prices which reflect the forward-looking incremental cost of handling additional tonnes of coal. That is, this analysis assumes that NQXT would be willing to price down to its incremental cost (which we assume to be [REDACTED]) when it has unutilised capacity, [REDACTED]
[REDACTED]
15. It is therefore more aligned with the intent of Criterion b to determine whether, from a societal or system cost perspective, NQXT is least cost to serve demand from mines in the Goonyella system. This reflects socially efficient decision making, that is, whether it is more efficient for society to delay an expansion of DBCT and instead utilise excess capacity at NQXT.
16. We note that similar issues arise on the GAPE which we address in our comparison at b. which is conceptually preferred to a. but should be interpreted with caution due to the uncertainty around our assumptions of incremental below rail costs. This sensitivity nonetheless provides an indication of the plausible direction and magnitude of undertaking Houston Kemp's (flawed) approach to market definition when adopting incremental below rail costs in addition to incremental port costs.
17. Adopting the least flawed application of a SSNIP test, as per a. above, we find that the peak concurrent demand in the market for coal handling services at NQXT is [REDACTED] (which occurs in [REDACTED] which is similar to our first report.
18. Finally, we note that consistent with above, the QCA Price Ruling decision to socialise the expansion costs at DBCT should not impact on the assessment of Criterion b. Whilst there may be reasons to socialise the cost of expanding capacity at DBCT, it should not affect the application of Criterion b for NQXT, in particular whether it is *least cost* for NQXT to serve some demand relative to DBCT.

3 Implications of Aurizon submission for assessing Criterion b

3.1 Support conclusion that it is lower cost to operate the CQCN as a system, staggering expansions at NQXT and DBCT

19. In our first report we explained that [REDACTED]
[REDACTED].⁵ This is because [REDACTED]
[REDACTED].⁶
20. The submission of Aurizon Networks illustrates that [REDACTED]
[REDACTED]. Our analysis makes clear that [REDACTED]
[REDACTED]. Therefore, if the ports are operated as one system, [REDACTED]
[REDACTED]
21. This analysis reinforces our position set out in our first report that miners on the Goonyella railway system paying to expand NQXT and the railway system that connects to it is evidence of substitution between capacity at NQXT and expanded capacity at DBCT:⁷

[t]he fact that Goonyella miners have paid to expand NQXT and the GAPE/Newlands system demonstrates that the perceived cost of using DBCT has exceeded the perceived cost of using NQXT for those contracted volumes.
22. That is, if it was the case that “mines switching from one port to another was inefficient (e.g. there was a natural monopoly) then we would expect to see no rail connections between the ports”.⁸
23. The QCA Price Ruling decision to socialise the expansion costs at DBCT should not impact the analysis of minimising the resource cost to society. This was identified by

⁵ CEG report, Section 3.4.

⁶ Subject to the transportation costs not exceeding the deferred expansion cost savings.

⁷ CEG report, paragraph 216.

⁸ CEG report, paragraph 66.

Aurizon Networks which states that “competition for this demand is distorted by the Ruling which does not promote the efficient utilisation of supply chain infrastructure”.⁹

24. Whilst there may be reasons to socialise the cost of expanding capacity at DBCT, it should not affect the application of Criterion b for NQXT, in particular whether it is *least cost* for NQXT to serve some demand relative to DBCT.
25. It is therefore more aligned with the intent of Criterion b to determine whether, from a societal cost perspective, NQXT is least cost to serve this demand. This reflects socially efficient decision making, that is, whether it is more efficient for society to delay an expansion of DBCT (or any other port for that matter) and instead utilise excess capacity at NQXT.

3.2 Consequences for Houston Kemp market definition

26. Houston Kemp’s analysis of Criterion b follows a (flawed) SSNIP test which is not based on an accepted approach to market definition.¹⁰ Rather than consider a hypothetical merger between NQXT and its closest substitute (DBCT) and ask whether a hypothetical monopolist could profitably raise prices, Houston Kemp purports to ask whether NQXT could apply a SSNIP to those mines that most prefer to use NQXT.
27. As discussed in our first report, this approach is fundamentally flawed as it identifies NQXT’s market share with the market rather than the mines that are in its market.¹¹ That is, it identifies mines that would consider substituting between NQXT and DBCT with relatively small changes in prices for using coal handling facilities at each port (i.e., those that are with 5-10% of each other) as well as those that have strong preferences for NQXT.
28. The submission of Aurizon Networks summarises that “Houston Kemp defines the market as those mines for which there is no close substitute for NQXT for coal handling services (the Northern Mines)”.¹² Houston Kemp undertakes the assessment of what mines are close to substituting by comparing the relative prices that mines presently pay for using NQXT and DBCT. We do not consider this to be the appropriate approach to identifying demand in the market under Criterion b.¹³

⁹ Aurizon Networks submission, page 6.

¹⁰ CEG report, Section 9.2.

¹¹ CEG report, Section 9.2.

¹² Aurizon Networks submission, page 4.

¹³ CEG report, Section 9.

29. Notwithstanding this, Aurizon Networks' submission provides an estimate of the coal handling charge at DBCT with (\$8.37) and without (\$15.95) the QCA's decision to socialise the costs of Phase 1 of the DBCT 8X expansion. We can use this information to ask:

What would be the implications for Houston Kemp's market definition if prices were set at the competitive level for the both DBCT and NQXT? That is, if prices set at DBCT reflect the forward-looking incremental cost of additional capacity at the terminal, and if NQXT set prices that reflect its forward-looking incremental cost of using unutilised capacity at its terminal?

30. This question is answered in the following section.

3.2.1 Quantifying the relative incremental "cost" of using NQXT or DBCT

31. In this section, we adopt Houston Kemp's (flawed) approach to market definition and quantify the relative cost of using NQXT and DBCT assuming each sets prices at the competitive level. From this we can determine, consistent with Houston Kemp's approach, for what mines the relative costs are within 5-10% and hence should be included in its market definition.
32. For DBCT, we adopt an estimate from the submission of Aurizon Networks of the non socialised coal handling charge at DBCT as a result of Phase 1 of the DBCT 8X expansion. We present the with and without socialised costs below for completeness:¹⁴
- DBCT coal handling charge of \$8.37 with socialisation of the expansion; and
 - DBCT coal handling charge of \$15.95 without any socialisation of the expansion.
33. The estimates from Aurizon Networks submission indicates that the non-cost reflective coal handling charges, due to the socialisation of costs in the QCA Price Ruling, would [REDACTED]. That is, [REDACTED]
[REDACTED]
[REDACTED]
34. When combining Aurizon Networks estimate of the unsocialised, or incremental, cost (not price) for expanding DBCT of \$15.95 with our assumption that the incremental cost (not price) of coal handling services at NQXT is [REDACTED] (e.g. [REDACTED]), we are able to contrast the impact of adjusting the approach adopted Houston Kemp to reflect what would be the relative cost to customers of using NQXT or

¹⁴ Aurizon Networks submission, Table 2 and 3.

DBCT, but for the QCA Price Ruling and when only considering the incremental port costs.¹⁵

35. Aurizon Networks' estimate of the incremental coal handling charge at DBCT (but for the QCA price ruling to socialise costs) includes a capital allocation for the 8X expansion, however, our assumption is that the incremental cost at NQXT has no allocation for fixed costs because:
 - Our analysis of incremental costs is modelling which port has the lowest cost to society of handling one additional tonne of coal. That is, we have modelled the competitive forward looking cost that each port would incur by handling an additional tonne of coal;
 - As DBCT is capacity constrained, the fixed costs of expanding its capacity must be considered; however
 - As NQXT has idle capacity, the fixed costs of NQXT are sunk such that it would only be relevant to consider the incremental costs.
36. As a sensitivity to our primary results, we present an analysis which assumes the incremental below rail costs across the Goonyella, Newlands and GAPE systems are \$3.75 per 200km, which is based on the following:
 - Aurizon Networks submission estimates the below rail costs for the Goonyella system to be \$3.75 per 200km, which we have assumed to be entirely incremental costs (e.g. no fixed costs); and
 - We have assumed that the Newlands/GAPE systems have the same incremental costs as the Goonyella system (which we assume to be \$3.75 per 200km) on the basis that each tonne km has the same "wear and tear" impact on the rail that it is travelling on.
37. The following table sets out our calculation of the relative costs of each mine accessing NQXT or DBCT under three scenarios of coal handling and below rail charges:¹⁶
 - The first column adopts the approach of comparing relative cost to the customer adopted by Houston Kemp (e.g. with coal handling charges of \$9.32 and \$8.94 for

¹⁵ We note that the true comparison of the relative costs of each port should use an estimate of the incremental costs of any underutilised capacity on the below rail network (and the opportunity cost of utilised capacity, e.g., prices in secondary markets if they exist). For example, if the GAPE is underutilised (which according to Houston Kemp it would be), determining the relative cost of a customer using the GAPE should be based on the incremental cost of the system. In this analysis we conservatively use the below rail charges adopted by Houston Kemp and separately present a sensitivity of an estimate of incremental below rail costs.

¹⁶ Our primary analysis only varies the coal handling charge. That is, the above and below rail costs are unchanged. In our sensitivity we adopt a different below rail cost estimate.

DBCT and NQXT respectively and the QCA/Houston Kemp upper bound method of below rail costs);

- The second column holds the below rail cost constant (e.g. continues to use the QCA/Houston Kemp upper bound method) but adopts the incremental costs for both DBCT (\$15.95) and NQXT. The incremental costs for NQXT are assumed to be equal to the coal handling charges of [REDACTED]; and
- As a sensitivity, the third column adopts our assumption of the incremental below rail costs of \$3.75 per 200km and adopts the incremental costs for both DBCT (\$15.95) and NQXT ([REDACTED]).

Table 3-1: Relative cost of mine accessing NQXT or DBCT

	Houston Kemp approach	DBCT expansion incremental costs (not socialised) and NQXT incremental cost	Sensitivity of DBCT expansion incremental costs (not socialised) and NQXT incremental cost and assumed below rail incremental cost
DBCT	\$9.32	\$15.95	\$15.95
NQXT	\$8.94		
Below Rail	QCA/Houston kemp upper bound	QCA/Houston kemp upper bound	\$3.75 per 200km
Mines			
Collinsville	-99.7%		
Drake	-95.0%		
Jax	-95.0%		
Carmichael	-66.3%		
Byerwen	-24.0%		
Centurion	25.9%		
Goonyella Riverside	37.9%		
Moranbah North	38.4%		
Grosvenor	39.8%		
Caval Ridge	39.7%		
Isaac Plains	40.0%		
Ironbark	40.2%		
Burton	40.2%		
Carborough Downs	40.9%		
Blair Athol	39.5%		
Clermont	39.5%		
Coppabella	42.1%		
Moorvale	42.1%		
Millennium	42.0%		
Poitrel	42.0%		
Daunia	42.0%		
Olive Downs	42.0%		
Eagle Downs	42.0%		
Peak Downs	41.9%		
Saraji	41.8%		
Lake Vermont	41.6%		
Middlemount	41.5%		
South Walker Creek	43.3%		
Hail Creek	43.1%		

38. The parameters in the first column reflect the approach and application of a SSNIP by Houston Kemp, which results in NQXT being the lowest cost port to serve mines until Byerwen, which Houston Kemp estimates to have a contracted capacity of 47.6 mtpa (from FY31 to FY37, which will peak at 49.2 mtpa in FY38).¹⁷
39. When we model all coal handling charges to be incremental in the second column, using Aurizon Networks estimate for DBCT (\$15.95) and our assumption for NQXT ([REDACTED]), we identify that [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED].¹⁸
40. Our sensitivity in the third column, which uses incremental coal handling coal charges for DBCT (\$15.95) and NQXT ([REDACTED] in addition to an estimate of incremental below rail costs of \$3.75 per 200km, suggests that [REDACTED]
[REDACTED]
[REDACTED].
41. As shown in the table, using cost-based prices has significant implications for Houston Kemp's approach to market definition:
- Houston Kemp's flawed application of a SSNIP test to Criterion b suggests that foreseeable demand in the market for coal handling services at NQXT is 47.6 mtpa;
 - Adopting both Aurizon Networks estimate of the incremental costs of access to DBCT (\$15.95) and our assumed incremental cost of access to NQXT ([REDACTED]), suggests that [REDACTED]
[REDACTED]
[REDACTED] This comparison reflects the extent to which mines would consider each terminal as substitutes, assuming each port charges cost-reflective prices. That is, this analysis assumes that DBCT sets non socialised costs of its expanded capacity and that NQXT would be willing to price down to its incremental cost (which we assume to be [REDACTED]) when it has unutilised capacity, [REDACTED]
[REDACTED];¹⁹ and

¹⁷ Houston Kemp, paragraph 202.

¹⁸ We have added Wood Mackenzie estimates for additional mines to the estimate from Houston Kemp.
[REDACTED]

¹⁹ If we only adopt the \$15.95 incremental coal handling charge at DBCT (e.g. the coal handling charge at NQXT remains at \$8.94) [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED].

- Our sensitivity using our assumption that the incremental below rail costs of the Goonyella, Newlands and GAPE systems are \$3.75 per 200km, in addition to the incremental costs of access to DBCT (\$15.95) and NQXT ([REDACTED]), suggests that [REDACTED]
[REDACTED]. These are the same mines as identified above with [REDACTED] mtpa of peak concurrent contracted capacity.

42. Under Houston Kemp's approach to market definition, the potential for the market to broaden, absent the QCA Price Ruling (to socialise DBCT expansion costs), was anticipated in the submission by Aurizon Networks:²⁰

Aurizon Network considers that the current level of excess demand for DBCT, and the material incremental costs of expanding capacity to meet that demand through the 8X expansion phases, indicates that the total foreseeable demand for NQXT may include demand from mines other than the Northern Mines.

43. Our analysis, which adopts Houston Kemp's flawed approach to market definition for the purpose of assessing Criterion b but appropriately considers the incremental costs of using NQXT and DBCT indicates that the market becomes much broader. That is, when modelling that NQXT and DBCT charge cost reflective prices we find that NQXT and DBCT would be considered close substitutes (based on the SSNIP test) for a large number of mines in the Goonyella system. Our sensitivity which adopts an estimate of incremental below rail costs indicates that NQXT could be lower cost to serve all mines, which reaffirms our primary analysis.
44. The consequence of the broadening of the market under Houston Kemp's approach to market definition is that foreseeable demand in the market for coal handling services at NQXT far exceeds the 50 mtpa nameplate capacity of NQXT.

3.2.2 Applying a SSNIP to administratively set prices that are above cost is fundamentally flawed

45. A flaw of Houston Kemp's approach to market definition is that it identifies ports to be substitutes based on the prices, not costs, of NQXT and DBCT. This is not an appropriate basis to undertake a SSNIP analysis for the purpose of Criterion b, which is about identifying the facility that has the least economic (or resource) cost, rather than the cost to the customer.
46. A further flaw of Houston Kemp's approach is that it is based on prices that are being administratively set at levels that are not cost reflective. This is fundamentally inconsistent with Criterion b, which asks whether it is least cost NQXT to serve the demand in the market.

²⁰

Aurizon Networks submission, page 5.

47. That is, while we do not consider Houston Kemp’s approach to market definition (e.g. a SSNIP) to be appropriate for the purpose of assessing Criterion b, it would even more erroneous for the boundary of that market to be driven by a regulator’s administrative decision to set non-cost reflective prices at a different port.