

Memorandum

To:	Gilbert + Tobin
From:	Incenta Economic Consulting
Date:	20 July 2026
Subject:	Comments re Greg Houston's report on the QCA's draft report

1. Introduction and summary

We have previously prepared an expert report in relation to the request from QCoal Pty Ltd and Byerwen Coal Pty Ltd (QCoal Users) for a recommendation to declare the coal handling service at the North Queensland Export Terminal (NQXT) (Previous Report).¹ Our Previous Report explained why, in our opinion, criterion (a) is not satisfied in respect of the coal handling service.

You have asked us to review the following economic propositions that Mr Greg Houston advanced in his report² responding to the Queensland Competition Authority's (QCA) draft recommendation regarding declaration of the coal handling service at NQXT:³

- “Real options” as a motive to reserve capacity – that the Adani Group as a seller of thermal coal may have an incentive to reserve spare capacity for its own use in order to take advantage of price spikes in thermal coal. This is described as a desire to retain the “real option” to respond to such spikes, and to provide an incentive to deny access.
- Adani's alleged incentive to deny access to third parties – that Adani may have an incentive to deny access to other producers of thermal coal in order to raise the world price of coal, and thereby generate greater profits from the sale of thermal coal. Mr Houston suggested that, even though the producers that use the NQXT are small in relation to the volume in the world market, the fact that both supply and demand for coal are price inelastic means that a reduction in production may have a disproportionate effect on price.

In our view, neither of these propositions have merit. In summary:

- *Real options incentive to reserve capacity* – first and foremost, as we observed in our first report, the reasonable use of one's own facility is protected under the *Queensland Competition Authority Act 1997* (Qld),⁴ and so if it was reasonable for the Adani Group to reserve capacity to exercise “real options” then that would not be affected by declaration. In addition, this observation ignores the fact that (i) the Adani Group's incentive is likely to be to maximise coal production whenever

¹ Incenta Economic Consulting (2025), NQXT declaration application: Do the services satisfy criterion (a)?, August.

² HoustonKemp (2026), Review of QCA draft recommendation on declaration of the coal handling service at NQXT. June.

³ QCA (2026), North Queensland Export Terminal declaration review, Draft recommendation, March.

⁴ Incenta Economic Consulting (2025), NQXT declaration application: Do the services satisfy criterion (a)?, August, para.18.

the world price is above its variable cost, and so production capacity is unlikely to be held in reserve, and (ii) as a practical matter coal mines cannot change their output quickly, and indeed this is what gives rise to the inelastic supply of coal that Mr Houston also discusses in his evidence (discussed further below).

- *Incentive to deny access to raise the world price of thermal cost* – whilst Mr Houston suggested that an incentive may exist to restrict access to influence the world price, and referenced estimates of the price elasticities of demand and supply for coal, he did not demonstrate that such an incentive was plausible (and the conditions under which it is plausible). We find that under any plausible assumptions such a strategy would not be economically rational, and further that such a strategy would be very risky (involving the sacrifice of certain revenue for an uncertain effect on the world coal price). It is therefore difficult to imagine that such a strategy would be pursued.

We elaborate on each of these issues in more detail below.

2. Real options as a motive to reserve capacity

Mr Houston considers that Adani has an incentive to capture real option value by holding a reserve of capacity in order to take advantage of spikes in the thermal coal price.⁵ However that is not how coalmines work. As noted by QCoal's consultant Wood Mackenzie:⁶

While high prices can create an incentive for producers to lift output, the short-run supply response is usually constrained because most mines are already operating close to practical capacity to minimise unit costs, contracted volumes limit discretionary sales, expansion requires planning, labour, equipment and approvals, and the producers best placed to respond may be exposed to the same weather, rail, port or regulatory disruption causing the shortage.

The very reason that price spikes last for 12 months or more in the coal market is that mines unaffected by the weather-related events causing the spikes cannot materially raise their output in the short term to meet market demand. As Wood Mackenzie notes, it is normal practice for miners to operate mines "close to practical capacity".

This reflects the economic incentive for the Carmichael mine to maximise production to the extent possible, as long as the coal price received exceeds variable cost. It would be contrary to this economic incentive for the Carmichael mine to operate well below its practical capacity and reserve capacity at NQXT in order to take advantage of price spikes.

Moreover, in our Previous Report it was noted that giving priority to one's own use of one's own terminal has never been interpreted as a nefarious or anticompetitive activity. This has been well

⁵ HoustonKemp (2026) Review of QCA draft recommendation on declaration of the coal handling service at NQXT, A report for Arnold Bloch Leibler, 12 June, section 4.1.

⁶ Wood Mackenzie (2026), Competition Declaration – North Queensland Export Terminal Facility, Prepared for QCoal, June, p.7.

understood since the time of the Hilmer report (1993) on national competition policy.⁷ Our previous report concluded that declaration would not affect this foundation principle, and that:⁸

Indeed, to this end, the QCA Act expressly prevents the QCA (when arbitrating a dispute of making a determination in relation to an undertaking) from preventing a facility owner to have access to “its reasonably anticipated requirements”, and raises the prospect of compensation to the provider if its actual requirements (as distinct from those anticipated at the time of the access dispute)” are impeded (QCA Act, s119). This mirrors a similar provision from the national regime. Accordingly, the “with declaration” world would be no different in relation to NQXT’s parent’s own use of the facility as it is in the “without declaration” world.

Thus, even if the Adani Group decided to keep a headroom of NQXT’s capacity for its own (legitimate) use, this is not something that would be affected by declaration, and therefore cannot support a case for declaration.

3. Adani’s alleged incentive to deny access to third parties

In its draft recommendation the QCA concluded that NQXT would have an incentive to deny access to third parties:⁹

... where the benefits from denying or restricting access for the Adani Group, as a whole, exceed the loss of access revenue that NQXT might itself incur.

Mr Houston argued that the QCA assumed without establishing definitively that NQXT does not have an incentive to deny access. Mr Houston argued that, the low responsiveness of supply and demand for coal to price changes means that a small decrement in supply from a low cost supplier can have an outsized effect on the world price. He observed that, as a consequence, even though the thermal coal that is shipped through the NQXT accounts for only a small proportion of the world’s international thermal coal trade, it is plausible that a denial of access could raise the world price sufficiently that the sacrifice of access revenue would be more than offset by the increased profits from coal production.

However, whilst Mr Houston suggested that it could be plausible that the Adani Group may thereby have an incentive to deny access, he did not demonstrate that it was plausible, nor indicate the conditions under which that incentive may exist.

We have sought to test whether such an incentive is plausible by examining how the profits to the Adani Group would change from an access denial for plausible scenarios. In both cases we assume that a new access seeker that is seeking to reserve capacity of 5 mtpa, that the access price is [REDACTED]. Therefore the potential access revenue is [REDACTED] per annum, which is the cost to the Adani

⁷ (1993) National Competition Policy, Report by the Independent Committee of Inquiry, (Hilmer report), pp.252, 256.

⁸ Incenta (2025), NQXT declaration: Do the services satisfy criterion (a)? Report for Gilbert + Tobin, August, p.34.

⁹ QCA (2026), North Queensland Export Terminal declaration review, Draft recommendation, March, p.57.

Group from denying access. We further assume that a reduction in reserved capacity of 5 mtpa would imply a reduction in coal production of approximately 4.5 mtpa.¹⁰

In terms of the benefit to the Adani Group, this will depend upon the volumes of coal that the Adani Group produces and the impact of this access denial on world price. In terms of the former, we assume annual production by the Adani Group of [REDACTED]. In terms of the effect on the world price, this depends upon:

- the relationship between coal supply and the world price, which depends upon the combined effect of the price elasticities of supply and demand
- the significance of the reduction in coal supply in terms of the overall market volume, and
- the forecast world coal price in the absence of the access denial, noting that the elasticities referred to above show the relationship between the percentage change in quantities to the percentage change in price.

We have applied the elasticities that were produced by the IMF and referenced by Mr Houston,¹¹ noting that while the other source (NBER) is a recent publication, its supply elasticity estimates are drawn from a very dated publication (1979).

In terms of the significance of the access denial (4.5 mtpa) in terms of the overall market volume, this is a matter over which there is some uncertainty.

- At one bookend, the total market can be defined as the volume of coal that is shipped internationally and therefore traded directly at the world price, which the International Energy Agency (IEA) forecasted to be 1,468 mtpa in 2025.¹²
 - However, this number is likely to understate the volumes that influence the world price given that some coal from exporting provinces is used internally (and for which production could respond to changes in the world price), and likewise some coal importing areas may have domestic production (which could also respond to changes in the world price).
- At the other bookend, there is the total global consumption and production of thermal coal, which the IEA forecasted to be 8,845 mtpa in 2025.¹³
 - However, this figure will overstate the volumes of coal that influence the world price given that there is production and consumption of coal in regions that are isolated from world

¹⁰ This is based on Wood Mackenzie's modelling assumption, which is that "85% to 95% of stated nameplate capacity is reasonable for dependable annual throughput." See Wood Mackenzie (2026), Competition Declaration – North Queensland Export Terminal Facility, Prepared for QCoal, p.4.

¹¹ We apply Wood Mackenzie's maximum forecast Carmichael mine (Bravus Mining) production volume post - 2030 (27.5 mtpa); demand and supply elasticities for the IMF's Horizon 5. See Christian Bogmans, Andrea Pescatory, Ivan Petrella, Ervin Priifti and Martin Stuermer (2024), *The Power of Prices: How Fast Do Commodity Markets Adjust to Shocks?*, International Monetary Fund Working Paper WP/24/77, p.5, which cites IEA (2024), Energy balances database. Date of Access (by IMF) 11 January, 2024.

¹² See <https://www.iea.org/reports/coal-2025/demand>

¹³ See <https://www.iea.org/reports/coal-2025/trade>

markets (i.e., where import / export is infeasible, and so consumption and production cannot affect the world price).

Accordingly, we report the benefit to the Adani Group for both of the bookends, and note that the correct answer is somewhere between the two, but is ultimately uncertain.

- Having said that, our reading of IMF publication from which we have drawn the elasticity estimates is that the IMF estimated the responsiveness of the total world consumption / production (i.e., equivalent to the 8,579 mtpa) to the world price.
- This would suggest that the correct measure of the total coal market volumes when applying these elasticity estimates is the total world consumption / production, even though not all of the volumes can influence the world price.¹⁴ Notwithstanding, we report both bookends for completeness.

In terms of the coal price in the counterfactual case, we apply the current medium term forecast of \$A184 per tonne, which reflects the average price of high quality Newcastle coal over the 3 year period to 2029.¹⁵ [REDACTED]

[REDACTED].¹⁷ We note that the counterfactual coal price should reflect the average value that is expected over the duration of the access that the new miner is seeking.

The results in the last line of Table 1 show that under neither scenario would it be in the economic interest of Adani to deny access to a shipper. With the long run price of Carmichael thermal coal forecast at [REDACTED], Adani's net position is approximately [REDACTED] per annum if the world price for coal is assumed to be determined only by the volumes of coal that are traded internationally, and approximately [REDACTED] per annum if the world coal price is assumed to be influenced by the total world production/consumption of thermal coal.

¹⁴ See Christian Bogmans, Andrea Pescatory, Ivan Petrella, Ervin Prifti and Martin Stuermer (2024), The Power of Prices: How Fast Do Commodity Markets Adjust to Shocks?, International Monetary Fund Working Paper WP/24/77, p.5, which cites IEA (2024), Energy balances database. Date of Access (by IMF) 11 January, 2024.

¹⁵ Average of 2027 to 2029 contract values for the 6,000 kcal/kg FOB Newcastle Financial Future Fair Value Curve (Bloomberg ticker XWN6 Comdty) converted to AUD.

¹⁶ This estimate is based on relative historical values for Benchmark thermal coal price and the Benchmark high ash thermal coal price for the 2019 to 2028 period reported by Wood Mackenzie (2024), Carmichael coal mine, Asset Report, May, p.13.

¹⁷ Wood Mackenzie (2024), Carmichael coal mine, Asset Report, May, p.12.

[REDACTED]

[REDACTED]

Source: IEA (2025), Wood Mackenzie (June 2026), IMF (2024), Bloomberg and Incenta analysis.

Note: All values in millions of AUD.

Accordingly, we find under these plausible assumptions that the Adani Group would make [REDACTED], irrespective of how the coal market volume is defined (although noting that the higher loss is, in our view, more consistent with the price elasticity numbers that we have applied).

In addition, we note that the denial of access that Mr Houston postulated would involve the substitution of a low risk revenue stream (fixed at [REDACTED] per annum, likely under a long term contract with a credit-worthy counterparty) for additional coal revenue that is subject to substantial uncertainty. We have already remarked above that the significance of any given reduction of production (via an access denial) is unknown, but in addition the estimated demand and supplier responses to price changes are also essentially unknown – whilst we have applied the price elasticity figures that Mr Houston has cited, the estimates in question all have very large standard errors. This uncertainty of outcome would further militate against any potential for the Adani Group to have an incentive to deny access.

Hence, our analysis supports the conclusion reached by the QCA in its draft decision, which is that Adani has an incentive to provide access to third party shippers at NQXT.