

An Economic Assessment of NCC's Draft Recommendation not to declare the Shipping Channel at the Port of Newcastle

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1. Introduction and Executive Summary

In its draft recommendation issued on 20 July 2015, the National Competition Council ("NCC") proposes not to recommend that access to the shipping channel at the Port of Newcastle be declared. This short report, prepared at the request of external counsel acting on behalf of Glencore, provides an economic assessment of that reasoning and, in particular, discusses whether the level of access charges to the shipping channel can never have an adverse effect on competition in the related export coal market.

For reasons set out in the NCC Draft Recommendation, the shipping channel at the Port of Newcastle represents an essential facility ie without access to the shipping channel, coal mines located in the Hunter Valley would have no effective alternative method for exporting coal. However, the NCC Draft Recommendation considers that improving access does not materially affect competitive outcomes in related markets and therefore criteria (a) of Part IIIA of the Competition and Consumer Act 2010 is not met.

At the outset, it is worth noting that the competition concerns arising from claims of access to an essential facility usually arise when the owner of the essential facility is vertically integrated and competes with those non-vertically integrated third-parties. The economic concern therefore relates to how denying access (or only providing access at excessively high prices) might affect competition in a downstream market. However, as the NCC notes, the fact that the Port of Newcastle Operations ("PNO") might not be vertically integrated and therefore a competitor of Glencore and other exporters of coal does not necessarily imply that there are no competition concerns. I understand the PNO might be said to be vertically integrated due to China Merchants' shareholding in PNO and that it has shipping operations. However, the remainder of this report assumes the absence of such vertical integration.

The absence of such vertical integration does not preclude adverse competitive effects arising from the implementation of excessive access charges. Indeed, the economic concern raised in this particular matter is more straightforward and obvious; namely, is it appropriate for PNO to be permitted to freely exercise its monopoly power which it enjoys over access to the shipping channel at the Port of Newcastle? The clear answer is no.

It is a standard economic result that the exercise of monopoly power gives rise to anticompetitive outcomes ie outcomes that are adverse to end consumers. This can be true regardless of where the exercise of that monopoly power arises in the supply chain. Therefore, the fact that the central potential economic concerns are not the "standard" ones arising in access matters does not, as again the NCC correctly recognises, preclude adverse competitive effects in related markets. Indeed, the level of charges for access can be as important as the overall decision as to whether to provide access in the first place since the level of charges at which access is provided is clearly an important issue beyond merely determining whether access is or is not granted. If access is granted only at charges that are prohibitively high, this can be akin to granting no access whatsoever.¹

It is also important to note that because this issue is essentially one of constraining excessive pricing and not, as is the case in "standard" access cases, of interfering with an asset owner's property rights by mandating third party access to that asset, the threshold for declaration ought, in my view, to be subject to a lower evidentiary hurdle. This is particularly the case where the "access" problem arises due to the Government selling-off existing assets.²

The relevant economic question is therefore whether charges for access to the shipping channel levied by PNO at both *current* levels and at *potential future levels* can have the effect of lessening competition in one or more markets which are affected by access to the PNO such that access (or increased access) would materially promote competition. The strict legal provision in criterion (a) being whether access (or increased access) to the channel service would promote a material increase in at least one other market (whether or not in Australia) other than the market for the channel services.

¹ For example, consider access granted at infinite prices is equivalent to granting no access.

² In other words, this is not a case where a firm invests in an asset and competing third-parties seek to free-ride on that investment by seeking access to that asset being declared under Part IIIA.

In summary, the reasoning presented by the NCC in its Draft Recommendation incorrectly presumes that any increase in access charges merely represents a transfer of income from miners to PNO with no detrimental effects on competition in any related market. As this short report argues, that reasoning is unlikely to hold. The unfettered exercise of monopoly power is usually presumed to have adverse effects on competition. As discussed, increases in access charges will affect the shape of the supply curve both in the short run by affecting the production costs of marginal coal producers and, more importantly, in the medium to long term by dampening incentives to invest.

The remainder of this report is organised as follows.

Section 2 provides a summary of the NCC's conclusions relating to why, in its view, condition (a) is not met.

Section 3 then provides some economic observations relating to the potential impact of port charges on competition in related markets. As noted above, extremely high access charges can have the equivalent effect of denying access. This section addresses two questions. The first relates to a general concept of what does it mean to say that competition is materially lessened (and therefore by which "access" being granted would materially promote competition). The second addresses a question specific to this particular matter; namely, via what mechanism or mechanisms might excessive (or unconstrained) access charges adversely affect competition in a related market. In doing so, I draw a distinction between what I term "static" and "dynamic" considerations. Static considerations relate to potential adverse effects arising from changes in access charges on the operations of existing coal mines. Dynamic considerations relate to potential adverse effects arising from changes to access charges on decisions to develop new mines or to expand the capacity of existing mines ie the impact on the incentives of Hunter Valley coal producers to invest in expanding capacity at existing mines and/or developing new mines.

Against the background of the discussion of economic principles in Section 3, Section 4 then comments on the reasoning presented in NCC's draft recommendation. As explained in more detail in that section, the NCC's analysis could be improved in the following respects.

- The NCC draft recommendation presumes that because, in its view, charges for access to the shipping channel at the Port of Newcastle represent only a small proportion of total costs, that the implemented increase in charges by PNO will not have a material impact on competition in the market for coal production and export. Although in principle that might be the case, it cannot be presumed. For the reasons explained in Section 3, in principle, even small changes in marginal costs can adversely affect coal production and therefore coal prices in the circumstances described.
- The NCC draft recommendation focuses on the *current* implemented increase in access charges by PNO. However, this is to ignore the potential adverse effects arising from *future implemented increases*. Even if the current implemented increase in access charges were indeed to have no adverse effects on the production and therefore on competitive outcomes, it cannot be ruled out that future price increases would have no such effects.

- Furthermore, and likely more importantly, excessively high access charges and the essentially unfettered ability to implement them (as found by the NCC), will serve to blunt incentives of Hunter Valley coal producers for investment in new operations or expanding their existing operations. And in consequence, the lower level of investment can be expected to adversely affect competitive outcomes in the export coal market.
- The existence of channel capacity at the Port of Newcastle does not imply that there is no incentive to increase channel access charges further. It is well-known in economics that there is a trade-off between price of a product and the volumes sold of that product: an increase in price will typically be associated with a decline in volumes purchased. The less responsive the decline in volumes purchased to any given price increase (ie how inelastic is demand for access to the shipping channel), the more likely a firm will find an increase in price to be profitable. Access to the channel services would in particular have this characteristic given there is no other means of accessing the Port.

2. Summary of the NCC’s Draft Recommendation

2.1. Summary of NCC’s analytical framework

As noted in the NCC’s draft recommendation, Glencore’s primary complaint regarding access to the shipping channel service focuses on two issues:

- the excessive prices for access to the shipping channel; and
- the unconstrained nature of PNO’s ability to determine such prices in to the future and the consequent uncertainty this creates for channel service users.

Since the potential competition issues do not involve whether access is provided but rather the terms on which such access is provided, the NCC states that *“in this context increased access would involve lower prices and greater certainty as to how prices will be set into the future”*.

The NCC accepts that if the shipping channel service were to be declared, *“service prices as part of an access dispute will result in prices that are ‘reasonable’ and in greater certainty as to how prices are determined. By ‘reasonable’ prices the Council means prices consistent with those that might result from arbitration of a relevant access dispute”*.³

On considering the effect of increased access on competition, the NCC assumes – correctly in my view – a scenario where *“reasonable terms and conditions” of access entails prices that are lower than those otherwise charged by PNO and which would rise at a more predictable rate than would otherwise be the case*” (emphasis added).⁴ Indeed, access on reasonable terms might also involve an expectation prices fall as future volumes in shipping using the channel

³ See paragraph 3.13

⁴ See paragraph 3.15.

increase. PNO should be able to maintain returns to shareholders whilst lowering unit prices taking into account the volume effect. For example, I am advised that the coal terminal PWCS today charges less per tonne than it did in 1995 simply because its revenue has grown with volume, and as a relatively fixed cost business, it is able to sustain shareholder returns while lowering prices. Such outcomes are unlikely to be delivered by an unregulated monopoly.

The NCC notes that Part IIIA is only concerned with issues where “*excessive*” access charges have an adverse effect on competition in another, related market”.⁵ In other words, if a change in the level of access charges results in a mere transfer of income from one party to the other with no concomitant adverse effects on competitive outcomes in related markets, there can be no grounds for declaring an access service. However, the NCC states further that “[s]ome disputes that are essentially price disputes will arise in situations where the declaration criteria can be satisfied”.⁶ I would agree with both these statements in appropriate context.

2.2. NCC reasoning with respect to criteria (a)

Given its analytical framework, the NCC states that the “*issue is whether access (or increased access) would improve the opportunities and environment for competition in a dependent market such as to promote materially more competitive outcomes*” (para 4.2).

The NCC, correctly in my view, notes that “*it is conceivable that, in the absence of declared access, the pricing increases imposed by PNO, and the largely unfettered ability of PNO to impose future price increases, will impact competition in a number of markets associated with the production and sale of coal for export from the Port of Newcastle*” (para 4.21). The NCC continues to explain how it sees such adverse effects might arise.

Although the NCC acknowledges that the current regulatory constraints on charges imposed by PNO are not a substitute for the access arrangements contemplated by the National Access Regime, in the NCC’s view, such adverse effects are unlikely. Its reasoning can be summarised as follows.

- Charges for access to shipping channel represent only a very small component of the overall cost of the production and sale of coal for export from the Hunter Valley and therefore, in the NCC’s view, it is unlikely that changes to those charges would have a material impact on competition.
- It is also unlikely that the level of port access charges would have a material impact on whether to cease mining operations.
- The shipping channel is not capacity constrained. However, the NCC does not articulate fully why this consideration implies that PNO would not have incentives to impose excessive access charges now or in the future.

⁵ See paragraph 3.16.

⁶ See paragraph 3.21

The following two sections explain why I disagree with the NCC's conclusion.

3. Some Economic Observations

In this section, I address the following issues.

- When can competition be said to be adversely affected?
- In this specific matter, how might an increase in charges for access to the shipping channel at the Port of Newcastle lead to adverse competitive effects?

3.1. When can access charges be said to adversely affect competition?

A change in access charges can adversely affect competition if and only if it has a detrimental impact on one or more related markets. In my view, a detriment to competition should be viewed in terms of outcomes in those related markets and in particular with reference to pricing outcomes for end consumers. For example, if an increase in port access charges were to lead to an increase in the price of coal in export markets then that would constitute an adverse impact on competition; in other words, a lessening of competition.

This view appears to be consistent with that of the NCC. As the NCC notes, if a change in port access charges merely results in a transfer of income between parties such that there were no consequent effects on related markets, there would be no adverse effects on competition. The relevant question is then does this occur in this situation? As explained below, the answer is almost certainly no.

3.2. How Might Changes in Port Access Charges Adversely Affect Competition?

When considering how a change in access charges to shipping services provided by PNO might, at least in principle, adversely affect competitive outcomes in coal production and associated markets, it is important to draw a distinction between what might be termed "static" and "dynamic" considerations.

- Static considerations relate to potential adverse effects arising from changes in port access charges on the current operating assets of Hunter Valley coal producers.
- Dynamic considerations relate to potential adverse effects arising from changes to port access charges on decisions to expand the capacity of existing coal mines in the Hunter Valley or by developing new mines in the region.

I consider the possible mechanisms for adverse effects in turn.

3.2.1. Potential “static” adverse competitive effects

The fundamental determinant of price in the export coal industry – as in all non-regulated markets – is driven by prevailing supply and demand conditions. Taking as given available capacity of all coal mines that compete on the export market, it is possible to rank those mines in terms of cost efficiency.⁷ The prevailing market price will therefore be determined by the intersection of demand with that supply curve, where effectively the marginal cost of production of the marginal coal mine determines the prevailing price.

In such a setting, it can be seen that to the extent that coal mines in the Hunter Valley either currently represent marginal suppliers on the supply curve or would likely do so at future expected levels of demand, then an increase in the marginal costs of those mines would lead to an increase in the price of export coal. At prevailing contract prices in 2015, many Australian mines can be considered to be marginal suppliers - see report by the Reserve Bank of Australia, *Developments in Thermal Coal Markets*, Graph 16.

The magnitude of any such price increase is an empirical question and will be affected by the following factors.

- **The magnitude of the increase in the marginal production cost of those marginal suppliers.** The greater the increase, then all else equal, the greater the impact on price.
- **The shape of the price setting segment of the cost curve.** If the supply curve is rising sharply at the intersection with demand this will imply a larger impact of any increase in marginal cost than if the supply curve is relatively flat at the intersection with demand.

The answer as to whether an increase in access charges at the Port of Newcastle will give rise to adverse competitive effects in the related export coal market therefore requires a detailed assessment of likely supply-demand conditions. However, it would appear likely that increases in port access charges would be associated with adverse effects on competitive outcomes. The fact that approximately a third of the affected mines are currently cash negative indicates that the closure of mines cannot be discounted. Indeed, I understand that some mines are already closing and it is likely that further increases in access charges would lead to more closures. It would therefore seem implausible that an increase in port charges would not have a material impact on competitive outcomes for exported coal.

3.2.2. Potential “dynamic” adverse competitive effects

An alternative, and, in this case, more likely mechanism via which excessive access charges could lead to adverse competitive outcomes in related markets is through the blunting of the incentives of Hunter Valley producers to invest in expanding capacity in the region whether at existing mines or in developing new mines.

⁷ This is true even if as is likely different coal mines produce coal of differing quality. Those quality differences can be taken into account to provide a price-quality equivalence. See for example, cost curves produced by AME.

That this is a genuine concern ought to be self-evident. Whenever a firm is deciding whether to undertake an investment, it will take into account the expected returns. The lower those returns, the lower the incentives to undertake any given investment. At some point, expected returns may become so low that the investment does not take place.

Importantly, where investments involve sunk costs – as is the case here – absent long term contracts or some certainty over future prices, firms can find themselves subject to the risk of *ex post* hold up. *Ex post* hold up arises when the investing firm is required to enter into an agreement with a firm holding significant market power. It is clear that this case represents such a situation. The expropriation of some or all of the expected returns to investment through the exercise of market power over access to the shipping channel would therefore serve to reduce the incentives to invest in the Hunter Valley with potential consequent serious adverse effects on dynamic efficiency.

The detrimental effects of owners of essential facilities being able to engage in such *ex post* opportunism has been recognised by the Rod Sims, the Chairman of the ACCC.

What miner would invest in reducing its extraction costs if it knew that the lower extraction costs would simply be met by higher transportation charges? More generally, what miner would invest in its mines knowing that the benefits of that investment could be expropriated by a monopoly somewhere else in the supply chain?

The lower level of investment that takes place in the face of expected expropriation can lead to adverse effects in the related export coal market if it results in less capacity or even less efficient capacity being brought to the market. Such effects would lead to higher prices and therefore would have adverse effects on competition.⁸ This could arise even if it were to be said that ordinarily coal producers in the Hunter Valley are "price takers" in global commodity markets. The magnitude of such price effects would again require some detailed analysis of the interaction between future supply and future demand, including the likely impact on investment undertaken by coal producers in the Hunter Valley relative to the counterfactual and what impact that change in investment would have on the shape of the supply curve.

4. Comments on NCC's Economic Reasoning

This section provides a commentary on the NCC economic reasoning as to why excessive access charges would not, in its view, give rise to adverse competitive outcomes in related markets, most notably the export coal market.

4.1. NCC focuses solely on the recent increase in access charges

Even if it can be assumed that the increase in marginal costs would be small, this does not rule out adverse effects in the form of higher prices. As noted above, some Australian coal producers represent marginal producing mines. Therefore affecting the production costs of

⁸ *Note bene*, this can be the case even if with respect to existing mining assets any increase in access charges would only result in a transfer of income and with no adverse consequences on prices of exported coal.

those mines, perhaps even forcing their closure would likely adversely affect competitive outcomes.

Furthermore, and importantly, the NCC appears to focus only on the most recent price increases and gives little or no regard for future price increases. The NCC acknowledges that charges are not subject to effective regulation of the sort provided by the National Access Regulation. In such circumstances, it is to be expected that since it enjoys an effective monopoly, further increases will be imposed by PNO. I am informed that PNO paid a price of \$1.75 billion for the lease of the assets, representing a multiple of 27 times earnings. As noted in the Synergies report, PNO can only generate a commercial return to its investors by imposing significant price increases into the future.

4.2. Dynamic incentives

Expected increases in access charges to the shipping channel at the Port of Newcastle will adversely affect the incentives to invest in expanding capacity at existing mines or developing new mines. As noted above, the coal mining industry – in common with all mining industries - requires major, upfront, sunk capital investment prior to earning any returns.⁹ PNO by virtue of the fact that it enjoys an effective monopoly position vis-à-vis coal mining assets located in the Hunter Valley would be able to adjust its access charges to expropriate some or all of profits arising from that investment. For example, if coal prices were to increase by more than initially expected, there would be nothing to prevent an unregulated PNO from increasing access charges to take a share of those profits. In effect, those producers would be exposing themselves to downside risk with a lower prospect of benefiting from the upside since it can be expected that PNO can increase access charges further. The expectation that PNO would be permitted to engage in such pricing behaviour – which is to be expected in the absence of effective regulation - would therefore severely dampen if not remove the incentives for those miners to continue investing.

The impact of such a reduction in investment in the Hunter Valley would have a direct and adverse impact on competitive outcomes in export coal markets. A comparison of cost curves over time illustrates how the dynamics of the global seaborne market have changed (See report from Reserve Bank of Australia, Graph 13 and Reserve Bank of Australia Box B: Iron Ore and Coal Cost Curves', Statement on Monetary Policy, August, pp 18–19). Increases in supply from lower-cost producers have resulted in the thermal coal cost curves shifting outward in recent years.¹⁰ Clearly, if the pace of expansion of those lower-cost producers is reduced going forward in response to a dampening of the incentives to invest, the extent to which the cost curve shifts outwards and flattens will be less pronounced than would otherwise be the case. In consequence, competitive outcomes in the export coal market would be adversely affected.

⁹ Indeed, consideration of the impact of higher access charges on these dynamic incentives to invest demonstrates why the NCC's focus on access charges as a proportion of total production costs is misplaced. Such a view fails to take into account the impact on cashflow and overall profitability.

¹⁰ The cost curves have also flattened, due to both the expansions to low-cost supply and a fall in production costs at existing mines.

Finally, it is worth noting that this type of adverse effect on dynamic incentives to invest are likely to have similar effects on investment in other industries in Australia that would be affected by the sale of other Government assets which are part of export supply chains, such as ARTC .

4.3. Existence of Spare Capacity Does not Imply No Incentives to Implement Excessive Access Charges

The existence of channel capacity at the Port of Newcastle (if that is the case), does not imply that there is no incentive for PNO to increase access charges further. It is well-known in economics that there is a trade-off between price of a product and the volumes sold of that product: an increase in price will typically be associated with a decline in volumes purchased. The less responsive the decline in volumes purchased to any given price increase (ie how inelastic is demand for access to the shipping channel), the more likely a firm will find an increase in price to be profitable.

Although I have not undertaken any detailed analysis of this issue, it appears likely that the demand for access to the shipping channel is reasonably inelastic, especially in light of the existence of take-or-pay contracts in the coal export supply chain.

5. Conclusions

Neither the fact that Glencore and other coal producers in the Hunter Valley currently have access to the shipping channel at the Port of Newcastle nor the assumption that PNO is not a vertically-integrated competitor to the Hunter Valley coal producers or industry participants (eg shipping lines), precludes adverse competitive effects arising in related markets, most notably the market for exported coal.

Furthermore, for the reasons set out in Section 4, the reasoning presented by the NCC in its Draft Recommendation incorrectly presumes that any increase in access charges merely represents a transfer of income from miners to PNO with no detrimental effects on competition in any related market. As this short report has shown, that reasoning by the NCC is unlikely to hold. The unfettered exercise of monopoly power is usually presumed to have adverse effects on competition. As discussed, increases in access charges will affect the shape of the supply curve both in the short run by affecting the production costs of marginal coal producers, possibly leading to the closure of some mines, and, more importantly, in the medium and long term by dampening incentives to invest.

Accordingly, in my view, the NCC's preliminary analysis that there is unlikely to be a material negative impact on related markets is unlikely to hold, particularly in relation to PNO's essentially unfettered ability to implement future price increases in channel services to appropriate the returns on any investments (past and future) in Hunter Valley mining operations.