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Australian Competition and Consumer Commission Attention: Joshua Runciman & Brendan Staun Via email **Incitec Pivot Limited**

INNOVATION ON THE GROUND

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Re: ACCC review of LNG netback series

Please find enclosed Incited Pivot Limited's submission to the ACCC's review of the LNG netback series.

As our response notes, IPL believes the review provides a vital opportunity, a once in a decade opportunity, to 'internationalise' and help reset the dysfunctional east coast gas market given the significant market power of the integrated gas producers and LNG exporters.

The ACCC is to be commended for the quality of its export parity pricing work. The current ACCC netback series remains a guide on domestic pricing but it is not used by the market either for spot gas sales or longer-term Gas Sale Agreements (GSAs).

The review provides an opportunity to evolve the netback series and make it "fit for purpose" and "fit for the future" to deliver a number of important public policy outcomes. A new netback series, an Australian Domestic Netback Price (ADNP) is needed as;

- the centrepiece of a gas industry Code of Conduct
- · a reference price to level the playing field during GSA negotiations
- a marker to enable the fair sale and purchase of excess LNG as agreed in the January 2021 Heads of Agreement between the Commonwealth Government and the east coast LNG exporters, and
- a price series so traders and market-makers can create the derivative and hedging products to better manage international and domestic gas price risks.

Three key improvements could be made:

First is to use an exchange-traded global gas price marker / proxy, the USA's Henry Hub price series, as the starting point for the calculation in establishing an internationally competitive gas price. The ACCC's current netback series is derived as a ratio of spot LNG sales into Asia and then removing key netback components such shipping, liquefaction costs and pipeline transport. A new Australian Domestic Netback Price methodology could easily be derived from Henry Hub after similarly adjusting for transport costs into Asia and removing all LNG and pipeline capital and fixed costs.

Second is to remove all sunk LNG capital and fixed costs, not just short term or marginal cost from the netback methodology as the ACCC currently does. Doing so would better align the netback price series to a true long-term export parity price so domestic consumers do not cover the cost of export capital – a service they neither use nor require for domestic gas.

Third, is to update all cost and transport assumptions with more recently published data where possible.

The goal should be to create the most effective Australian Domestic Netback Price series that would;

- create a truly live 24/7 reference price calculated against a live exchange,
- · is capable of being used by traders and market participants to manage price exposure, and
- remove the onerous and complex tasks the ACCC undertakes in publishing its current series

We would welcome the opportunity to discuss any aspect of our response with you.

Your sincerely,

Uri Gordon

Vice President Strategic Projects

Incitec Pivot Limited





INNOVATION ON THE GROUND

Incitec Pivot Limited response to ACCC review of LNG Netback Price Series

About Incitec Pivot

Incitec Pivot Limited (IPL) has a century of heritage in Australia and is the largest supplier of fertilisers to east coast Australia with key operations at Phosphate Hill near Mt Isa and Australia's only urea manufacturing plant at Gibson Island in Brisbane. In central Queensland at Moranbah, IPL produces ammonia nitrate used for explosives by the mining and resources sector. IPL is a Top 100 publicly listed company on the Australian Securities Exchange (ASX) with more than 44,000 shareholders as at November 2020.

IPL is east coast Australia's largest industrial user of natural gas using ~35 petajoules per annum of natural gas as feedstock to produce ammonia used to manufacture fertilisers and explosives. Natural gas can account for between 40-70 per cent of our production costs.

Our products play a critical role in the agriculture and mining sectors and form an important part of Australia's manufacturing supply chain. As a trade-exposed manufacturer IPL has during the past decade faced significant challenges sourcing internationally-competitive and internationally-priced domestic gas. These challenges continue today across the manufacturing sector.

Summary Comments

The ACCC's current LNG netback series serves as a guide as to what domestic gas prices could or should be at Wallumbilla in Queensland. The fortnightly price series however is not widely or effectively used by gas producers or customers as a reference price either for spot gas sales or longer-term Gas Sale Agreements (GSAs) on the east coast of Australia.

The current LNG netback series is derived from spot LNG gas sales into Asia and accounting for (or subtracting) LNG transport costs, the marginal short-run costs of LNG liquefaction at Gladstone and gas pipeline transport costs from Wallumbilla to Gladstone.

In the same manner, a new series – the Australian Domestic Netback Price series - could easily be created using Henry Hub as the global gas proxy into Asia and removing all LNG and pipeline capital and fixed costs.

Detailed work by EY Port Jackson Partners, which we support, shared with the ACCC, highlights three important changes that should be made to the netback series.

First is to use an exchange-traded global gas price proxy, the USA's Henry Hub price series, as the starting point for the calculation. Compared with the Japan Korean Marker (JKM) gas marker, Henry Hub has deep liquidity, is set by actual trades not a relatively shallow market survey, is easy to access for all participants, and can be easily created and monitored by the ACCC rather than a private survey company.

Second is to remove all LNG-related capital and fixed costs not just short term or marginal costs from the netback methodology. Moving to a long-run netback methodology could remove ~\$2.70 GJ (industry source) in capital charges and costs which domestic gas users neither need nor use. Doing so would better align the netback price series to a true export parity price so domestic consumers never cover the costs associated with exporting of natural gas.

Third, is to update production cost and transport assumptions with more recent published data.

The ACCC has the opportunity to evolve its netback series and create a new price series - the Australian Domestic Netback Price (ADNP) as the:

- centrepiece of a new gas industry Code of Conduct
- reference price to level the playing field during GSA negotiations
- marker to enable the fair sale and purchase of excess LNG as agreed in the January 2021 Heads of Agreement between the Commonwealth Government and the east coast LNG exporters, and
- price series so traders and market-makers can create the derivative and hedging products to better manage international and domestic gas price risks.

Much like it does now, the ACCC could publish the price series fortnightly or weekly.

This would help the Gas Supply Hub (GSH) at Wallumbilla evolve, and as liquidity grows and market familiarity with the ADNP increases, participants and traders could easily reference or calculate daily price data.

Specific Responses to ACCC's 27 LNG Netback Review Questions

(A) The length of the forward LNG netback price series

QUESTION	RESPONSE
Whether there would be merit in the ACCC publishing a longer-term LNG netback price series.	Yes. Creating an Australian Domestic Netback Price (ADNP) aligned to a global gas marker such as the USA's Henry Hub, would enable market participants to derive longer-term forward curve from the longer-dated Henry Hub forward curves. This will support the producers and users long term planning as capital intensive businesses.
2. The most appropriate period, or periods, over which to publish forward LNG netback prices, based on market trends in LNG markets and the east coast gas market.	Ideally, extending the forward series beyond its current 2 years to 3,4,5 and 10 year forward views. This could be done by aligning the netback series to a liquid global marker such as the Henry Hub forward curves.
3. Whether the ACCC should publish multiple forward LNG netback prices, based on different periods (to inform pricing for different GSA terms).	Yes, same answer as above.
4. How important it is that the length of the forward LNG netback price series is consistent with the duration of domestic GSAs.	Important. The solution is to align an Australian Domestic Netback Price (ADNP) to Henry Hub which has longer-dated forward curves than the JKM marker.
5. Whether there are relevant market benchmarks for a longer forward LNG netback price series, or methods/approaches to	The most relevant price benchmark to consider as the starting point for the LNG netback is a deep, liquid, continuously traded gas market. The USA's Henry Hub has all those characteristics which would allow gas market participants (gas producers, LNG exporters, trade

deriving such market benchmarks.

exposed manufacturers) to trade, balance and hedge their Australian gas exposures and the Australian Domestic Netback Price (ADNP) aligned to global gas trends.

US LNG exporters are also the marginal supplier into the Asian spot market and, therefore, increasingly the price setter.

Exchange-based or markets-based approaches such as Henry Hub, would after a period of transition, help free the ACCC from the onerous and complex task of creating daily, weekly, fortnightly price series and forward curves.

6. Issues that should be considered in calculating a longer-term LNG netback price series.

The ACCC should also consider important public policy areas such as:

- i) HoA The need for an effective mechanism by which the domestic market could fairly bid for the spot or excess cargoes the LNG exporters have undertaken to provide through the January 2021 Heads of Agreement with the Commonwealth Government.
- ii) Internationalising the domestic gas market and allowing trade exposed industries to better manage their gas price risk.
- iii) Market development of the Wallumbilla hub and the skills and ability of traders and financial derivative providers to create products to help manage price risk.

LNG price

7. The influence of international gas markets on pricing in the east coast gas market.

As evidenced in 2020 with the collapse, and then recovery in international oil, gas and LNG prices, global gas prices can have a short-term impact on the east coast gas market in AEMO's Short Term Trading Markets (STTMs) and Victoria's Declared Wholesale Gas Market (DWGM).

However, these short-term prices do not assist Australian industry looking to secure longer-term gas supplies. Unfortunately for gas consumers and trade exposed industries, access to internationally-priced gas is not available over 1-3-5-10 year terms given the market power gas producers have in Australia.

An Australian Domestic Netback Price is needed to bridge such a disconnect. It would internationalise Australian gas prices providing a reference price to link four important market components:

- a marker for spot/excess LNG production offered domestically as agreed in the 2021 HoA, which would thereby,
- (ii) help inject more physical liquidity into local shortterm markets and gas hubs, and

	 (iii) aid price discovery and transparency for longer term GSAs, and (iv) enable market traders to create or derive forward curves and hedging products allowing all participants to manage local and international price exposures.
8. The relevance of different international LNG and gas price markers for LNG pricing in key LNG export markets and the east coast gas market.	The most relevant international gas benchmark is the USA Henry Hub, given its role as global gas price proxy and its increasing importance as more US LNG moves into the Asia Pacific to compete with Australian LNG. Rather than have a price marker aligned to a proprietary survey such as JKM, a deeper, more liquid market exchange such as Henry Hub can be used and is more relevant.
9. Whether the relevance of different LNG and gas price markers is different for short term versus long-term LNG netback prices.	Global gas markets have converged over the past decade. The pricing mechanism a decade ago, when Australian east coast LNG was in its infancy, was dominated with oil-linked LNG contracts to underpin capital investments.
	Gas markets have evolved with ~50% of world gas trade and 40% of LNG trade now 'gas-on-gas.'1
	It is likely future LNG project development and economics will be run against the marginal-cost or swing-producer which is most likely to be US LNG from Henry Hub.
	In other words, the short-term marker is likely to be Henry Hub spot, and the long-term marker the Henry Hub forward curves. Having the short and long-term markers consistent will ensure the appropriate allocation of future capital.
10. Whether the relevance of different LNG and gas price markers, for the LNG netback price series, is likely to change over time.	As mentioned above, the USA's importance in global and Asia LNG is going to increase in the years ahead and Henry Hub pricing is likely to play an increasing key role in Asia LNG markets.
	The USA is already a significant participant in the Asia-Pacific market. As US Department of Energy data ² shows for the 5 years to January 2021, 45% of US LNG exports ~2992 Bcf (~3150 PJ) went to south east Asia and Pacific.
	As the ACCC notes in its Netback Issues Paper (page 22) the USA is expected to be largest LNG exporter by 2025 at over 38 Mtpa (~1850 PJ pa).

Research by the EIA³ indicates USA LNG exports by 2030 could reach ~13.7 Bcf per day (~5000 PJ per annum)

Source: IGU - https://igu.org/resources/wholesale-price-survey-2020-edition/
 Source: DOE - https://www.energy.gov/sites/default/files/2021/02/f83/LNG%20Annual%20Report%20-%202020.pdf
 Source: EIA - https://www.eia.gov/todayinenergy/detail.php?id=47236

	The size of these US volumes, ~4 times Queensland's current LNG exports, will have a major impact on global, Asian and Australian LNG price formation and competition.
	Linking Australian domestic gas pricing to USA as the marginal producer will future-proof the index for both producers and users.
11. Whether the ACCC should consider additional methodological approaches,	Not necessarily, because averaging can be as complex as the volatility it seeks to solve.
such as averaging, to account for the impact of price volatility of price markers on calculated LNG netback prices.	A solution is to let the market do the work. Using Henry Hub as the price marker from which to base the LNG netback would ensure 24/7 daily data and let market participants do their own 'averaging'. A Henry Hub linked price will allow all market participants to manage their price risk through liquid derivative products that are both affordable and readily available.
12. Any other issues that should be considered when determining which LNG and gas reference price should be used for the ACCC LNG netback price series.	Some published price series are aligned to a proprietary information providers. This can pose challenges for those users/customers that do not wish to use such providers or platforms. A market-based or exchange-based platform such as shadowing the Henry Hub would allow all participants and providers to create a range of indices and or forward curves and aid price discovery and market competition.

LNG freight costs

13. Available data sources for longer-term LNG freight rates (beyond a period of two years), and whether the	For periods beyond two years, it is likely freight rates and LNG forward gas prices would move broadly in concert with industry trends.
appropriate data source would be different international LNG and gas price markers were used to calculate LNG netback prices.	The ACCC could consider the Baltic Exchange with its deep experience in global shipping and LNG freight rates as alternative as information source, or as an exchange-based price series.
14. Whether northeast Asia should be considered the appropriate delivery location for the purposes of estimating LNG freight costs for LNG exported from Gladstone.	Yes
15. Any other issues that should be considered when sourcing longer-term LNG freight rates.	No

Conversion to \$AUD/GJ

16. Whether the ACCC's current approach to converting FOB LNG prices to \$AUD/GJ is appropriate.	Yes
17. Alternative approaches that should be considered by the ACCC.	N/a
18. Any other issues that should be considered when converting FOB LNG prices to \$AUD/GJ.	N/a

LNG plant costs

19. Whether the ACCC's current approach to deducting LNG plant and liquefaction costs is appropriate.	The ACCC methodology can be substantially improved as outlined below.
20. How LNG plant and liquefaction costs should be accounted for when calculating the LNG netback price series.	The current approach uses short-run (i.e., marginal cost) LNG capital and fixed cost assumptions. Excluding all capital and fixed costs, would be a more appropriate and deliver a fairer export parity price. It would ensure export gas pays for export capital and ensure efficient future allocation of capital.
21. Whether different approaches to LNG plant costs should be used for different reference price markers.	As above. Excluding all capital and fixed costs, would be a more appropriate and deliver a fairer export parity price. It would ensure export gas pays for export capital and costs.
22. Whether different approaches to LNG plant costs should be used for short-term and longer-term LNG netback prices.	No. Regardless of whether the price series is 1,2,5,10 years removing capital and fixed costs is the best way to improve the netback series.
23. Any other issues that should be considered when accounting for LNG plant and liquefaction costs.	The ACCC should update the operating and capital cost assumptions it uses for the three Queensland LNG plants, given the publicly published data on the projects' operating costs and "break even costs" (inclusive opex, capex, interest and debt repayment).

Pipeline transportation costs

24. Whether the ACCC's current approach to deducting pipeline transportation costs is appropriate.	The ACCC methodology can be substantially improved as outlined below.
25. How pipeline transportation costs should be accounted for when calculating the LNG netback price series.	Similar to our recommendation on removing all liquefaction capital and fixed costs, the ACCC should remove all pipeline capital cost and charges between Gladstone and Wallumbilla. Excluding all capital and fixed costs, would be a more appropriate and deliver a fairer export parity price. It
	would ensure export gas pays for export capital and costs to export.
26. Whether different approaches to pipeline costs should be used for short-term versus longer-term LNG netback prices.	No
27. Any other issues that should be considered when accounting for pipeline transportation costs	As a broader policy issue, the ACCC should review if pipeline tariffs in general should be lower in a low interest environment for a monopoly or regulated assets which may have already recovered their sunk capital (or written down capital value).