Introduction

Pegasus Economics has been requested by Lock the Gate to review a report prepared by ACIL Allen Consulting on the economic impact of the Narrabri Gas Project (NGP) that was commissioned by the proponent, Santos (Eastern) Pty Ltd, a fully owned subsidiary of Santos Limited (Santos).[1] Our observations and comments on the report are provided below.

LNG Import Prices

Figure 3.4 of the ACIL Allen Consulting report shows an estimated import parity price for LNG delivered to an import terminal in the South Gas Region such as Port Kembla.[2] The estimated import parity price for LNG is based on the forward price curve for the Japan-Korea Marker (JKM), the most widely quoted measure of spot LNG prices in Asia. On the basis of Figure 3.4, the ACIL Allen Consulting report observes:

> *the delivered LNG import parity price is likely to exceed the cost of Narrabri gas including transmission costs from Narrabri over the longer term.*[3]

Based on the current forward price curve for the JKM and estimated production costs for the NGP of $6.40 per gigajoule (GJ), the above statement is factually correct. However, Pegasus Economics is not aware of any pricing commitment on the part of Santos to sell gas produced from the NGP at cost. The relevant point of comparison between gas from the NGP and an LNG import terminal is the actual sale price of gas from the NGP.

In its economic assessment of the NGP on behalf of Santos, GHD commented that Santos had estimated a constant gas price of $8.70 per GJ for NGP gas that included the implicit costs of transporting gas to the Sydney Moomba pipeline.[4] The $8.70 per GJ price referenced by GHD was in 2016-17 constant prices, that equates to around $9.03 per GJ at the end of June 2020 if deflated by the consumer price index.

For comparison purposes I have used an updated reference price for the NGP of $9.03 per GJ based on the gas price previously suggested by Santos. However, this presupposes that Santos has not raised its pricing intentions in the interim. The ACCC has recently noted that gas prices offered in the Southern Gas Region over late 2019 to early 2020 were in the $8–11 per GJ range, slightly down from the previous range of $9–12 per GJ.[5]

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[1] ACIL Allen Consulting (2020) *Narrabri Gas Project – Update of the Economics*, Report to Santos (Eastern) Pty Ltd, 6 August 2020.
[2] Ibid., p. 16.
[3] Ibid., p. 16.
[4] GHD. (2016). *Report for Santos Ltd. - Narrabri Gas Project: Enivronmental Impact Assessment Economic Assessment*. Sydney, p. 13.
[5] ACCC (2020) *Gas inquiry 2017-2025: Interim report July 2020*, Canberra, p. 6.

In Figure 3.4 from the ACIL Allen Consulting report, the only time periods in which the estimated import parity price of LNG exceeds $9.03 per GJ is during seasonally price peaks that occur during the northern hemisphere winter when demand for gas increases for heating purposes. On this basis, I continue to maintain that LNG imports remain a viable commercial proposition for the Eastern Gas Region.

Will the Narrabri Gas Project Lower Gas Prices?

According to ACIL Allens Consulting:

> *The modelling undertaken by ACIL Allen shows that gas prices in Sydney could potentially be between 4 per cent and 12 percent lower from 2025 onwards over the 25-year evaluation period with the NGP, than without it …*[6]

I note that ACIL Allens Consulting puts qualifications on its gas price modelling:

> *ACIL Allen's GasMark model is based on an assumption that the eastern Australian gas market operates as a single pool market, connecting supply sources with customer loads through the interconnected network of transmission pipelines. It is a theoretical model that does not take into account the impact of gas contracts on delivered prices year on year.*[7]

I also note the Department of Planning, Industry and Environment's Executive Director of Resource Assessments, Mr David Kitto, commented in evidence before the Independent Planning Commission that:

> *I think it would be fair to say that we are not saying in our assessment that the Narrabri Gas Project would reduce gas prices.*[8]

Before it can exert an influence over gas prices in the Eastern Gas Region, the NGP needs to become the marginal source of supply for gas. The marginal source of supply is the highest cost supply source required in order to satisfy market demand.

In its 2020 Gas Statement of Opportunities report, the Australian Energy Market Operator found that the NGP is a relatively high cost gas development project ranking 31 out of 48 actual and undeveloped gas projects in terms of production costs.[9] There are 15 developed and 15 undeveloped gas projects with lower estimated production costs than the NGP. The 15 undeveloped gas projects with lower production costs represent in excess of 19,000 petajoules (PJ) of 2P and 2C natural gas resources.

I remain unconvinced that the NGP will ever become the marginal source of supply for gas in the Eastern Gas Region and thus exert any influence over gas prices. Further, I am extremely skeptical in relation to claims that the NGP will exert downward pressure on gas prices, especially in light competition problems in the Eastern Gas Region that are discussed below.

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[6] ACIL Allen Consulting, op. cit., p. ii.
[7] Ibid.
[8] Messenger, A. (2020) Narrabri Gas Project IPC hearing: project would not reduce prices, DPIE chief David Kitto concedes on first day of hearings, *The Northern Daily Leader*, 21 July 2020 - https://www.northerndailyleader.com.au/story/6842252/narrabri-gas-project-would-not-reduce-prices-department-chief-says/
[9] Australian Energy Market Operator. (2020). *Gas Statement of Oppoortunities March 2020: For eastern and south-eastern Australia.* Melbourne.

Competition Problems in the Eastern Gas Region

Even the ACIL Allens Consulting report acknowledges competition problems exist in the Eastern Gas Region:

> *There is some evidence that the market is not as competitive as it could be, with some producers shadow pricing against future expected LNG netback prices. Increasing the number of domestic producers would assist in increasing the level of competition in the market.*[10]

The problem in relation to the NGP from a competition perspective is that its development will not actually increase the number of domestic producers. In this regard, the ACCC has called for greater diversity of gas suppliers.[11]

Pegasus Economics has previously suggested that a level of tacit collusion may be underpinning domestic gas pricing of the three Queensland LNG export projects.[12] There have been longstanding concerns expressed that the Queensland LNG export projects have been hoarding, banking and warehousing gas reserves, perhaps in order to maintain tacitly collusive gas pricing.[13] As a part-owner of one of the Queensland LNG export projects, the economic interests of Santos are closely aligned with those of the three Queensland LNG export projects.

The ACCC has recently highlighted the fact that in the period from late 2019 to early 2020 the Queensland LNG export projects collectively sold 18 LNG spot cargoes into international markets at prices substantially below domestic gas price offers during this time.[14] This is not rational behaviour on the part of gas suppliers operating in a competitive market environment. In turn, this provides prima facie evidence of anti-competitive conduct on the part of the Queensland LNG projects, even if it is not actionable under existing competition law because there has been no overt collusion.

In my opinion, the NGP will do nothing to improve the level of competition in the Eastern Gas Region because Santos is already part of the de facto gas cartel that operates in the Eastern Gas Region.

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[10] ACIL Allen Consulting, op cit., p. 20.
[11] ACCC, op. cit.
[12] Davey, A. (2020) *Commercial Viability of the Narrabri Gas Project*, Pegasus Economics, Canberra, p. 44.
[13] Ibid., p. 46.
[14] ACCC, op. cit., p. 6.