

# The Narrabri Gas Project – Supplementary Submission to the Independent Planning Commission

*Significant Factual Inaccuracies in Santos' and  
Acil Allen's Supplementary Reports Can't Mask  
the Poor Financial Results of the Proponent nor  
the Poor Future for Gas*

## Executive Summary

In this submission to the Independent Planning Commission of NSW (IPC), we review the late-received report submitted to the Commission by the project proponent, Santos, and their consultant Acil Allen.

IEEFA finds:

- There are many factual inaccuracies in the Santos/Acil Allen supplementary submission to the IPC. The most glaring inaccuracy is their bald statement that gas in Australia has a “*relatively flat domestic demand profile*”. Instead, gas usage in Australia has declined by 21% since 2014. This is a clear downtrend in domestic gas consumption, rather than a “relatively flat” trend.
- The Narrabri gas project, far from stimulating competition in the domestic gas industry, reinforces the power of the gas companies. Narrabri is owned by Santos, one of the five gas companies operating in Australia. As the Australian Competition and Consumer Commission (ACCC) has found, these gas companies have consistently priced Australian domestic gas above international prices for both spot and longer-term contracts since the building of the Gladstone LNG export plant in 2014. The ACCC’s ongoing East Coast gas inquiry has repeatedly and exhaustively shown there is no competition among the gas companies that are setting gas prices domestically, and that the Australian consumer is paying too much for gas. Opening Narrabri gas will not alter the market structure or enhance competition in the gas market, as there is no market. As such, Narrabri gas will not bring down the cost of gas on the east coast of Australia.
- Narrabri gas is high cost gas to produce, costing \$8.50/GJ (\$6.40/GJ at the well head plus \$2.10/GJ for transmission to Sydney). The current spot gas price is less than half this price at \$4.21 in Sydney (as at 21 August 2020). Contract prices are in the range of \$8-11/GJ. Santos cannot supply gas to Sydney and make a profit from the proposed Narrabri gas fields at current gas prices. Rather, Narrabri’s high cost gas will force up prices for domestic consumers, whilst the gas companies will continue to export lower cost sources of gas.

- Santos has attempted to mislead the Commission in its comparison of the price of Narrabri gas against imported LNG. It neglected to take into account transport costs from the remote region of Narrabri to consumption centres in Sydney. Narrabri gas is *not* cost competitive with imported LNG.
- In financial and investment markets, ‘timing is everything’. Santos’ delay in lodging its’ supplementary submission to the IPC (documents that clearly have been in production for months and that were submitted on the last day open for public submissions) has coincided with some game-changing economic news. AGL Energy, a company whose very name is synonymous with the gas industry and who produced the iconic natural gas “Living Flame” advertising campaign in 1979, announced on 13 August 2020 that there is a clear business case for big batteries usurping the role of gas in a renewables rich grid. This was followed up with news of a truly grid scale battery in the U.S., rivalling the size and capacity of a gas peaking plant, and then further news of a big battery in South Australia which is 10 times the size of the Tesla big battery at Hornsdale (formerly the largest battery in the world).
- Gas usage for gas-powered generation has declined by 58% since 2014. Future declines for gas in the power system are now assured. Australia does *not* need to open up new gas supply.

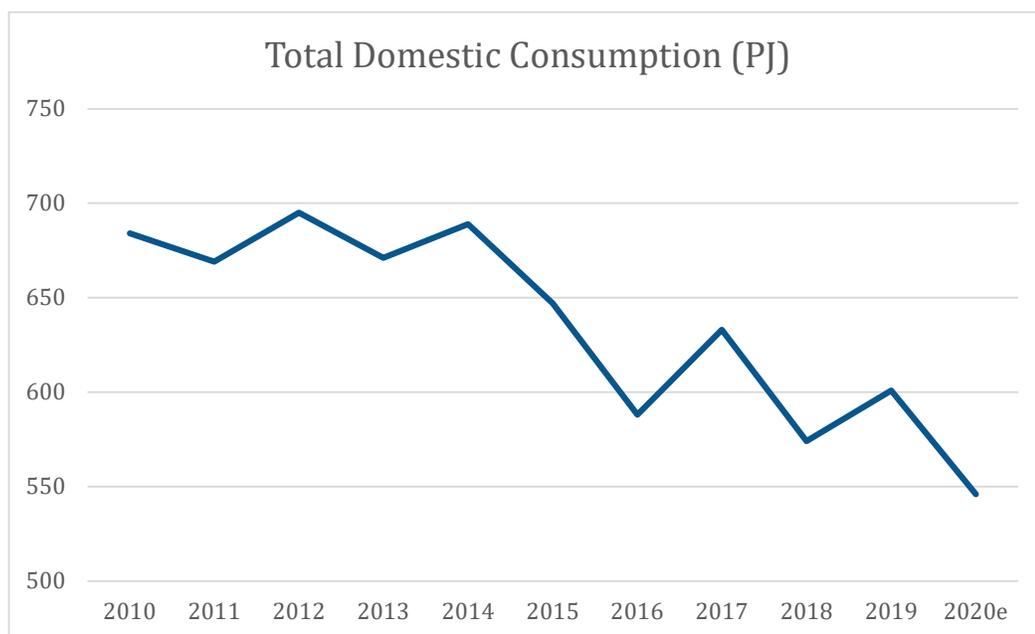
## Santos/Acil Allen Fail to Recognise Clear and Unequivocal Trends in Domestic Gas Consumption

On page i of their report, Santos/Acil Allen state there is a:

*“relatively flat domestic demand profile of the domestic market (estimated 2020 consumption of around 546 PJ)”*.<sup>1</sup>

Domestic demand is anything but “relatively flat” having declined by 21% since 2014 (using Acil Allen’s forecast domestic consumption of 546 PJ in 2020).

**Figure 1: The Clear Down Trend in Australian Domestic Gas Consumption**



Source: AEMO 2010-2019 and Acil Allen 2020

The entire basis on which Santos/Acil Allen’s report is written – the claim that there is stable domestic demand – is incorrect.

Domestic demand is falling, despite low prices, and is destined to fall further and faster due to the global gas supply glut and the flattening of international prices.

<sup>1</sup> Acil Allen. [The Narrabri Gas Project – Update of the Economics](#). 6 August 2020. Page i.

## The Narrabri Gas Project Will *Not* Increase Competition in the East Coast Gas Market as Santos With Four Other Gas Companies Have Been Fixing the Price of Gas Above International Prices

Santos/Acil Allen suggest the Narrabri gas project (NGP) will be increasing competition in the gas market:

*“The major benefit from the NGP would be increasing competition in the eastern Australian gas market.”<sup>2</sup>*

This claim shows a wilful disregard for the current market structure that is causing a lack of competition.

Santos is one of 5 companies that have effectively been fixing the price of gas at levels well above international parity prices since 2014. The other gas companies are BHP, Exxon, Shell and Origin Energy. Price-fixing is illegal in Australia. The price-fixing being used by the five gas companies can be described as cartel behaviour.

The expansion of production by any one of these five companies will make no difference to the price of gas for the Australian consumer, as the five companies control the prices, as the ACCC has repeatedly found.

The suggestion that Santos’ Narrabri gas project will “increase competition in the eastern Australian gas market” is akin to saying opening a new Commonwealth Bank branch on George Street, Sydney will increase banking competition in Australia.

The ACCC has written 15 reports on gas industry pricing and held two inquiries, spanning the last 5 years, all of which have been based on the same premise and conclusion; we are paying too much for gas in Australia. Gas price inquiries seem to have embedded themselves into the system, as the government has refused to act on the evidence provided - the obvious market manipulation by the gas companies acting as a cartel. In short, price fixing is rampant.

The ACCC said in its latest gas market report that domestic gas users were paying too much, while also finding there was no actual shortage of gas.<sup>3</sup>

*“I am yet to hear a compelling reason from LNG producers as to why domestic users are paying substantially higher prices than buyers in international markets,”* said ACCC chairman Rod Sims.

The ACCC found that prices offered to domestic gas users ranged from \$8-11/GJ, down from the \$9-12/GJ they reported in their January 2020 report, however this slight softening (down 9%) in domestic prices compares unfavourably with the level

---

<sup>2</sup> Acil Allen. *The Narrabri Gas Project – Update of the Economics*. 6 August 2020. Page i.

<sup>3</sup> AFR. *Taylor to keep Clamps on Gas exporters*. 17 August 2020.

of reductions seen in domestic LNG markets.<sup>4</sup> The ACCC found that international LNG prices fell by over 40% between January and May 2020.

One of the key reasons the domestic LNG price on the east coast of Australia did not fall as overseas prices fell was that in the last quarter of 2019 and in early 2020, LNG producers collectively sold 18 LNG spot cargoes into international markets at prices substantially below domestic gas price offers.<sup>5</sup>

These sales are in contravention of the Heads of Agreement set out between LNG producers and the Australian Government, which stipulates that uncontracted gas must first be offered to the domestic market on “competitive market terms” before it is offered to the international market. This has *not* occurred, and no action has been taken by the government to rectify this.

Producers are also sending more gas to storage rather than supplying the domestic market with competitively priced gas.<sup>6</sup>

Effectively, the gas ‘cartel’ is wilfully selling domestic gas cheaply offshore to maintain high prices in Australia so that it can make super profits at the expense of the Australian consumer.

On release of the latest ACCC report, the Australian Financial Review quoted the latest spot prices as clear evidence of the overly high domestic prices:

*“The latest netback price estimate by the ACCC puts that domestic equivalent price at just \$2.36/GJ on August 3. Spot gas prices in Victoria on Monday were \$4/GJ.”<sup>7</sup>*

It really matters little as to whether we examine spot or contract prices. Both give clear indications that we are paying too much for gas in Australia, as all the ACCC reports have shown.

Producing gas at Narrabri will not reduce prices on the east coast of Australia, nor specifically in NSW or Sydney.

Santos is a member of the cartel of producers who manipulate the price of gas in Australia. If Santos have excess gas, as recent history has shown, they will *not* supply the domestic market. Rather, they will simply sell more spot cargoes at lower prices offshore in order to maintain the lucrative high-priced domestic market. Alternatively, they will store more gas.

Either way, the domestic consumer can look forward to a continuation of high-priced gas, with or without Narrabri, until our government protects them from the price and supply fixing being undertaken by the gas companies.

---

<sup>4</sup> ACCC. [East Coast Gas inquiry 2017-2025 Interim Report](#). July 2020 Page 6.

<sup>5</sup> ACCC. [East Coast Gas inquiry 2017-2025 Interim Report](#). July 2020 Page 6.

<sup>6</sup> ACCC. [East Coast Gas inquiry 2017-2025 Interim Report](#). July 2020 Page 20.

<sup>7</sup> AFR. [Taylor to keep Clamps on Gas exporters](#). 17 August 2020.

## Santos Has Misled and Deceived the Commission as to Its Costs in Comparison to LNG Imports

The five proposed LNG import terminals are all located close to, or indeed in, demand centres at the ports of Newcastle, Wollongong, Westernport Bay, Geelong and Pelican Point in Adelaide. The Narrabri gas project is located in remote North West NSW.

It is likely that two pipelines will be required to transport Narrabri gas to Sydney. Santos will likely use APA's proposed, but yet to be approved, Western Slopes pipeline.<sup>8</sup> This would then connect Narrabri gas to the Moomba-to-Sydney pipeline.

The new Western Slopes pipeline would be approximately 450km in length, and the proposal is for a pipe of 400-450mm in diameter.

The most recent pipeline constructed in Australia was the Northern Gas pipeline and the tariff charged on that pipeline equates to \$0.23 per GJ/Km.

Utilising this as a benchmark, it is likely that the Western Slopes pipeline will have to charge a tariff of over \$1/GJ. Further, according to the Australian Energy Market Operator's (AEMO's) 2020 Gas Statement of Opportunities<sup>9</sup>, the cost of transporting gas on the Moomba-to-Sydney pipeline is \$1.12/GJ.

In sum, the likely transport cost via pipelines of gas from the Narrabri gas project to Sydney would be over \$2/GJ.

Narrabri gas will therefore reach Sydney at around \$8.50/GJ.

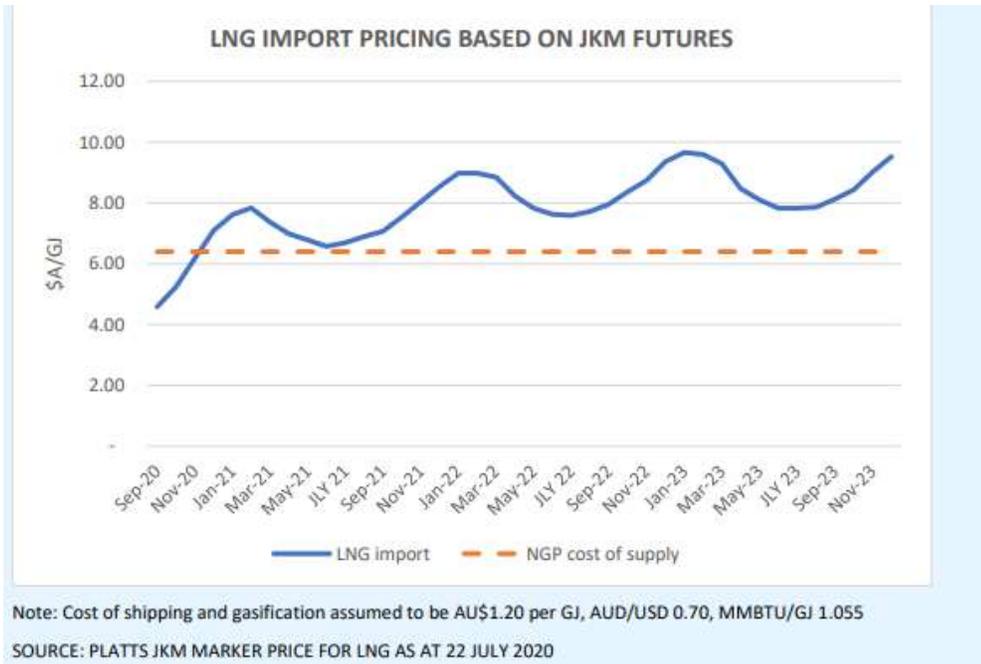
This figure dramatically changes the graph (see Figure 1) that Santos submitted in its latest report to the IPC showing imported LNG is more expensive than Narrabri gas. Instead, as is shown in Figure 2, LNG imports will be clearly cheaper than Narrabri gas.

---

<sup>8</sup> APA Preliminary Environmental Assessment, Western Slopes Pipeline Project. 2017.

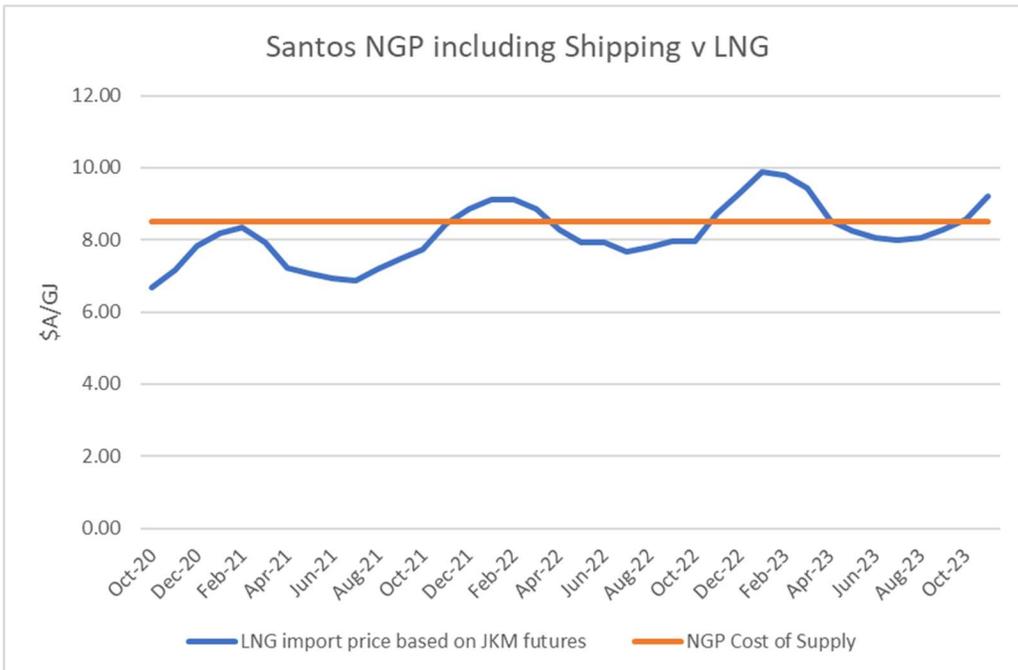
<sup>9</sup> 2020 GSOO supply input data files.

**Figure 1: Santos’ Graph Comparing LNG Import Prices and Narrabri Gas Project’s Cost of Supply**



Source: Santos. Narrabri Gas Project (SSD 6456) page 8

**Figure 2: Santos’ Narrabri Gas Project Is Non-Competitive with LNG Imports Once Piping Costs Are Included**



Source: Platts JKM Marker price for LNG as at 20 August 2020

## The Role of the Gas in a Low-Carbon Economy

On page 9 of Santos’ final submission to the IPC, Santos attempted to argue for the role gas will play in a low carbon economy, particularly as a “natural partner for renewable energy power generation”.<sup>10</sup>

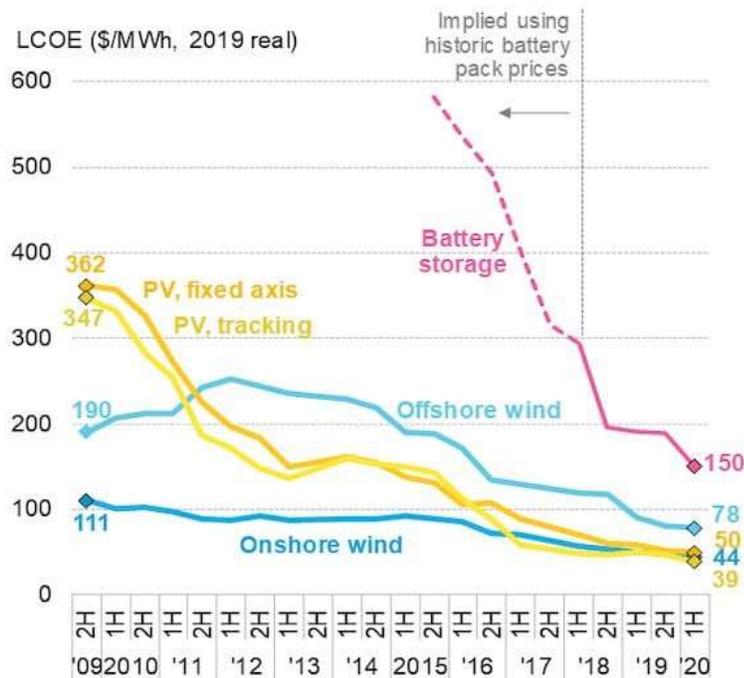
Increasingly, this is simply not the case. Batteries are usurping the role of gas in the power system.

AGL Energy’s newly appointed chief operating officer Markus Brokhof said last week:

*“There is a clear business case for big batteries, and added that they were starting to compete with gas peakers on commercial terms to firm up supplies of wind and solar.”<sup>11</sup>*

Gas is struggling to compete with batteries, with gas prices globally being at historic lows. When gas prices recover, gas will not be able to compete. The cost deflation will ensure batteries pay a larger role in the power system at the expense of gas in the very short term.

**Figure 3: Battery Cost Deflation Even Steeper Than Wind and Solar**



Source: Bloomberg NEF

<sup>10</sup> Santos. Narrabri Gas Project (SSD 6456) 10 August 2020 Page 9.

<sup>11</sup> Renew economy. AGL says batteries starting to compete with gas generators for peaking services. 17 August 2020.

AGL Energy now has big plans for installing several new batteries to complement its power generating operations.

It has set a goal of installing 1,200 megawatts (MW) of new battery storage and demand response capacity by 2024, and is tying executive and senior management bonuses to reaching growth targets for the company's clean energy and storage portfolio.<sup>12</sup>

AGL has also lodged initial development plans for a new big battery of up to 500MW at the Liddell coal-fired power station site.<sup>13</sup> It plans to construct a 150MW battery in the first instance.

Further, at its Torrens Island site in South Australia, AGL is installing a 100-150MW battery in its initial stage.

AGL is progressing plans to add a 100MW/150MWh battery next to the proposed Wandoan solar farm in Queensland, and up to 200MW/400MWh of battery capacity spread across four sites in partnership with the Maoneng Group, including a 50MW/100MWh battery next to the Sunraysia solar farm.

Overseas, we are seeing batteries of such a size as to rival gas peaking plants.

Vistra in the U.S. has approval to expand an energy storage system under construction at its gas-fired Moss Landing generation station in California to 1,500MW/6,000MWh.<sup>14</sup> This is gigawatt-scale battery energy storage. It's the largest battery storage installation in the world and when completed, will be larger in capacity than every other utility-scale battery energy storage system in the U.S. combined.

At present, the largest battery in the world is the Hornsdale Big Battery in South Australia. It boasts a size of 150MW/193MWh. Hornsdale is 10% of the power and 3% of the duration of Vistra's new battery.

On 20 August 2020, Neoen filed plans for a \$3bn wind and solar farm with a battery 10 times bigger than the Hornsdale big battery.<sup>15</sup> The Goyder South project in South Australia proposes 1200MW of wind energy, 600MW of solar PV, and a 900MW/1800MWh battery dwarfing the size of the Hornsdale big battery. These types of hybrid projects, that totally exclude gas, are the future of the power system.

Gas usage for gas-powered generation has declined by 58% since 2014. The continued decline of gas as a fuel source for power generation looks assured.

---

<sup>12</sup> Renew economy. [AGL targets 1.2GW of new battery storage by 2024 plans tender](#). 13 August 2020.

<sup>13</sup> Renew economy. [AGL seeks approval for 500MW big battery at site of Liddell coal generator](#). 14 August 2020.

<sup>14</sup> PV Magazine. [Plan to deploy 1500MW, 600MWh storage project gets approval in the US](#). 14 August 2020.

<sup>15</sup> Renew Economy. [Neoen files plans for \\$3bn wind and solar farm with batteries 10 times bigger than Hornsdale](#). 20 August 2020.

## Conclusion

The Narrabri gas project is high cost gas.

The domestic gas consumer will likely see higher, rather than gas lower prices, if Narrabri gas fields are opened, due to both the distance the gas must travel to reach consumers, and because five gas companies control gas pricing.

There is no shortage of gas. There is already enough gas to supply the east coast of Australia. Rather, any shortage in supply is due to gas companies controlling the supply of gas, via storage or export.

The Narrabri gas project is not needed by the people of NSW. It is overwhelmingly unsupported.

The IPC must reject the proposed Narrabri gas project.

## About IEEFA

The Institute for Energy Economics and Financial Analysis conducts research and analyses on financial and economic issues related to energy and the environment. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy. [www.ieefa.org](http://www.ieefa.org)

## About the Author

### Bruce Robertson

Energy Finance Analyst– Gas/LNG Bruce Robertson has been an investment analyst, fund manager and professional investor for over 35 years. He has worked for major domestic and international institutions, including Perpetual Trustees, UBS, Nippon Life Insurance and BT. Bruce is an active participant in the national debate on energy issues in Australia and has been invited to present to numerous government enquiries into the electricity and gas industries.

This report is for information and educational purposes only. The Institute for Energy Economics and Financial Analysis ("IEEFA") does not provide tax, legal, investment, financial product or accounting advice. This report is not intended to provide, and should not be relied on for, tax, legal, investment, financial product or accounting advice. Nothing in this report is intended as investment or financial product advice, as an offer or solicitation of an offer to buy or sell, or as a recommendation, opinion, endorsement, or sponsorship of any financial product, class of financial products, security, company, or fund. IEEFA is not responsible for any investment or other decision made by you. You are responsible for your own investment research and investment decisions. This report is not meant as a general guide to investing, nor as a source of any specific or general recommendation or opinion in relation to any financial products. Unless attributed to others, any opinions expressed are our current opinions only. Certain information presented may have been provided by third-parties. IEEFA believes that such third-party information is reliable, and has checked public records to verify it where possible, but does not guarantee its accuracy, timeliness or completeness; and it is subject to change without notice.