Santos’ Narrabri Gas Project EIS
A Submission to the NSW Department of Planning and Environment

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**Introduction**

The Global LNG industry is oversupplied in the short, medium and longer term. Nominal global liquefaction capacity closed the 2016 year 29% above demand. The gap between supply and demand widened over the year despite very low prices. The market is significantly over supplied. This glut will deepen significantly out to 2020 with a further increase in supply of 34% to 456 MTPA.

Even with growth in emerging markets, growth in China, South Korean and Taiwan, the market remains significantly over supplied. Global demand will simply not take up the slack.

IEEFA expects that the expanding global gas glut will put relentless downward pressure on prices and lead to many contract defaults and renegotiations.

It is a truism in LNG supply that the product is expensive to store. The glut in supply can only be resolved by LNG processing capacity being curtailed. In all resource markets it is the high cost producers that have to curtail production first.

The three Gladstone plants sit right at the very apex of the global cost curve. It is these plants that will feel the pressure to shut in capacity most acutely. IEEFA expects some of the liquefaction trains at Gladstone to cease production over the coming 2 years.

The Narrabri project is a globally high cost project supplying globally high cost plants via a globally high cost pipeline network. It is currently not economic according to the published accounts of the proponent, Santos Ltd.

The project should not be approved as it is not economic. The proponent and its partner Energy Australia, have written off $1.7 billion dollars from the value of the Narrabri gas project and currently value the project at $0.0 in their respective accounts.

The Narrabri project currently has no economic proven or probable reserves according to the latest set of accounts produced by Santos.

With no value and no economic reserves the Department must reject Santos’ Environmental Impact Statement as it is not being lodged in good faith. There can be no intention to develop if the proponents published accounts say the project is valueless and has no reserves.

**Santos' Narrabri Project - Background**

In July 2011 Santos acquired Eastern Star Gas for $924m. The Narrabri project in the Pilliga State Forest was the principal asset of Eastern Star. Santos then on-sold 20% of the Narrabri project to Energy Australia (formerly named TRUenergy) for $284m. At the time Santos was emphasizing its access to the Gladstone export markets:
“Santos access to Wallumbilla infrastructure enables entry to LNG export projects at Gladstone”

The Deputy Premier, Andrew Stoner, signed a memorandum of understanding with Santos in February 2014, designating it a “strategic energy project” and guaranteeing a final decision on whether to approve the project or not, by January 23, 2015. Santos however did not lodge an Environmental Impact Statement and so the fast track approval lapsed.

In February 2015 Santos wrote down the value of the Pilliga project by $808m pre-tax citing a restatement of reserves. Reserves fell by approximately 30%. In common with many east coast Australian Coal Seam Gas fields reserves at Narrabri were far lower than initial estimates. Santos were quite simply too optimistic.

In February 2015 CLP group (EnergyAustralia’s Hong Kong parent) wrote off its entire investment in the Narrabri Project.

In February 2016 Santos wrote down its Pilliga project by a further $588m pre-tax. The company cited the recategorization of its reserves from 2P to 2C. Its reserves went from being commercial proven and probable reserves to non-commercial contingent resources.

Santos’ flagship development project, the Narrabri Project, was written down to $0.00. The company considers that the project is worthless.

In total, Santos and its partner EnergyAustralia wrote off nearly $1.7billion dollars pre-tax, on the Narrabri project a project that has yet to deliver 1 GJ of commercial gas.

In the June 2016 interim result following a further write down of $4m at Narrabri Santos stated that: “the impairment charges have arisen primarily as a consequence of the reduction or delay in future capital expenditure that diminishes or removes the path to commercialisation.” Effectively, Santos stated it would not be spending the money on the Narrabri project to progress it to the production stage.

On 8th December 2016 Santos announced that the Narrabri project was placed in a special purpose non–core assets company. Effectively Santos is looking to exit its investment in the Narrabri project.


1 Page 8


3 Page 19 2015 Santos Full year results presentation

4 Page 21 Santos interim result June 2016

5 8/12/16 ASX release “Santos announces new strategy” page 16
The costs at Narrabri

As shown in the table below, the costs at the well head at Narrabri (also known as Gunnedah) are estimated to be $7.25/GJ by the Australian Energy Market Operator. This is 75% higher than gas that has been delivered to the Henry Hub in the USA in April 2017.

Table 5 – Summary of Supply costs ($A/GJ)

<table>
<thead>
<tr>
<th>Basin</th>
<th>Low</th>
<th>Reference</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bass</td>
<td>4.46</td>
<td>4.05</td>
<td>3.65</td>
</tr>
<tr>
<td>Cooper</td>
<td>5.63</td>
<td>5.30</td>
<td>4.77</td>
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<tr>
<td>Gippsland</td>
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<td>4.60</td>
<td>4.06</td>
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<tr>
<td>Otway</td>
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<tr>
<td>CSG</td>
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</tr>
<tr>
<td>Bowen - Fairview</td>
<td>4.95</td>
<td>4.50</td>
<td>4.05</td>
</tr>
<tr>
<td>Bowen - Morinabba RTP 1003</td>
<td>3.70</td>
<td>3.00</td>
<td>6.30</td>
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<tr>
<td>Bowen - Spring Guilly</td>
<td>3.90</td>
<td>3.66</td>
<td>3.19</td>
</tr>
<tr>
<td>Gloucester</td>
<td>5.49</td>
<td>4.86</td>
<td>4.46</td>
</tr>
<tr>
<td>Gunnedah</td>
<td>3.88</td>
<td>2.75</td>
<td>6.53</td>
</tr>
<tr>
<td>Surat - Eastern Wallons</td>
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<td>6.00</td>
<td>5.70</td>
</tr>
<tr>
<td>Surat - Ironbank</td>
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<td>Surat - Middle Wallons</td>
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<td>5.70</td>
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<tr>
<td>Surat - Undulla Nose</td>
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<td>3.60</td>
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<td>Surat - Western Wallons</td>
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<td>Sydney - Camden Gas Project</td>
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<td>Other Unconventional</td>
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<tr>
<td>Cooper - Napamemi</td>
<td>8.65</td>
<td>7.75</td>
<td>6.80</td>
</tr>
<tr>
<td>Cooper - CBJV Unconventional</td>
<td>6.83</td>
<td>6.30</td>
<td>4.77</td>
</tr>
</tbody>
</table>

Source: Gas Production and Transmission Costs – Core Energy/AEMO

Once extracted, Narrabri gas would have to be taken to Gladstone for export across one of the most expensive pipeline networks in the world. It will cost around $3.50 to get the gas to Gladstone making the delivered cost $10.75/GJ. The gas must then be liquefied and shipped to Asia at a cost of approximately $4.95 taking delivered cost in Asia to $15.79/GJ. In its first quarter of 2017 Santos reported a realised price for LNG sales of $8.86/GJ. Santos is currently exporting gas at a price some 78% below the cost at Narrabri.

As Santos itself has discovered the Narrabri gas project is not economic.

7 Gas Production and Transmission Costs – Core Energy/AEMO
8 Page 3 - utilising an exchange rate of 0.7583 https://www.santos.com/media/3600/170420_2017_first_quarter_activities_report-final.pdf
The Environmental Impact Statement

The NSW Department of Planning is currently assessing the Narrabri project for approval. Narrabri represents all that has been done badly by both the industry and government in the Australian Gas industry in recent years.

Essentially, the whole industry has proceeded in the wrong order. The order that the industry proceeded was:

1. Sign exports contracts.
2. Get government approval to build an export industry. The government did not assure domestic supply in this process.
3. Build multi-billion dollar plants concurrently with rushed poor planning and worse execution. The plants all suffered major cost over runs.
4. Seek to prove up a gas resource that simply did not exist in the form expected. This led to an uneconomic resource being developed.
5. Under supply the domestic market causing the gas price to inflate to levels that is sending industry offshore and leading to higher domestic electricity prices.

The government and Santos are attempting to repeat the exact mistakes made at the outset from the development of the Coal Seam Gas to LNG export industry.

At Narrabri Santos and the NSW government are attempting to get a project approved that:

1. According to Santos itself does not have an economic resource. (Narrabri does not have 1 GJ of proven or probable reserves).
2. Is currently worthless. Santos and EnergyAustralia both have a “True and Fair” value in their accounts at $0.00 for their Narrabri project. (The correct way is to prove up resources in the exploration phase, create value in the project, apply for a production licence and then produce).
3. There is no current prospect of this project proceeding to the production stage given the stated accounts of Santos and EnergyAustralia as shown in points 1 and 2.
4. The project is currently for sale so any undertakings given by Santos may not be honoured by future owners.
5. There is no guarantee that the resource developed is for the domestic market. Santos is currently short of production for its export project. The gas will flow to exports.
6. There is no gain for Australia in this project as it is high cost and if developed will increase domestic gas prices not lower them.

If the NSW government approves Narrabri it is repeating the mistakes made, by both the industry and government, at the outset of this industry. The Narrabri gas project is not economic and the EIS should not be approved by the NSW Department of Planning and Resources.