

**NSW Department of Planning and Environment**  
**Project SSD 6456**  
**Narrabri Gas Project**  
**Santos NSW (Eastern) Pty Ltd**

**Submission in support of project but with reservations concerning proposed route to market for the gas**

As the recently retired technical regulator of gas distribution and transmission within NSW, I have considerable familiarity both directly with transmission pipelines and indirectly with the production of coal seam gas (CSG).

I have followed this proposed gas project closely since its earlier phase when the proponent was Eastern Star Gas (ESG). That proponent's plans included the production of gas in the Pilliga region along with two transmission pipelines, one from Narrabri to Coolah and one from Coolah to Newcastle. I was very familiar with the environmental aspects of the first of those two pipelines and the considerable community concerns about the proposed route. I became aware of the takeover of ESG by Santos and the ultimate cancelling of the original ESG proposals by Santos. I attended the Planning Focus Meeting in Narrabri around 2009/10.

I had no direct technical regulatory responsibilities for the exploration, production and treatment phases of CSG. However, through interactions with the industry, NSW colleagues, regulators in other jurisdictions and various industry associations, I have considerable knowledge of that industry.

**Statement confirming support for project**

Firstly, I wish to confirm my support for the above project. I am confident that the NSW regulatory regime will ensure the effective management of the environmental aspects of each of the stages of exploration, production, treatment, delivery of gas to a transmission pipeline and, ultimately, site remediation.

**Reservations concerning proposed route to market**

My reservations concerning the project relate to proposed transmission pipeline that Santos is proposing to use.

Santos, in its EIS and in other public statements, has indicated its commitment to supply the gas produced at Narrabri to NSW into a proposed new Western Slopes Pipeline from west of Narrabri to the Moomba to Sydney gas pipeline at Bundura. That pipeline proposal, by the APA Group, is subject to a separate application to the Department. My reservations do not relate to the merits, or otherwise, of that proposal.

Historically, NSW has always been dependent on gas produced in other States (other than a relatively small quantity produced by AGL from its Camden CSG fields).

Gas from the Cooper Basin gas fields in the Moomba region of north east South Australia was the original source for natural gas to the major gas markets of Sydney, Wollongong, Newcastle, the Central West, Wagga Wagga, other southern towns and the ACT. A series of

pipelines, originally constructed by the Commonwealth owned Pipeline Authority, and associated distribution networks, form the backbone of gas distribution within the State.

Later, gas from the Bass Strait fields off the coast of Victoria, was brought to Sydney through the Eastern Gas Pipeline (EGP) from the gas processing plant at Longford. This pipeline also supplied the ACT, Wollongong and SE NSW towns. Gas was delivered into Sydney via a connection to the Wilton to Newcastle pipeline at Horsley Park.

Subsequently, an additional interconnection between NSW and Victoria was provided by completing a pipeline (the Interconnect) from Wagga Wagga to Albury.

That network of transmission pipelines and distribution networks served the industrial, commercial and residential gas markets of NSW effectively for many years. It proved to be resilient during various periods of high demand or failure at the gas processing plants, the pipelines and associated equipment.

With the advent of the significant investment in Liquefied Natural Gas (LNG) plants at Gladstone in Queensland, a number of significant modifications were made to this complex interconnected network. These modifications were designed to facilitate the transmission of gas from the Southern States, primarily Victoria and South Australia, into Queensland.

The modifications included:

- capacity increases on the Interconnect pipeline and the systems in Victoria delivering gas at Albury;
- modifications to the MSP to enable gas to be transmitted in either direction (ie towards Sydney or towards Moomba) combined with a substantial compressor station at Moomba to deliver gas from the “upper end” of the MSP into Queensland;
- increased capacity on the EGP and a new interconnection at Wilton (the Sydney end of the MSP) to enable gas to be delivered to either Sydney and/or into the MSP towards Moomba.

A careful study of AEMO’s Gas Market Bulletin Board will reveal that whenever five or six trains of the three LNG plants at Curtis Island are operating at, or near capacity, gas flow in the MSP is typically in the direction of Young to Moomba.

**This means the gas delivered from the Narrabri gas fields, through the Western Slopes Pipeline to the MSP at Bundura, during periods of maximum demand from the Curtis Island Plants, will flow towards Moomba for delivery into Queensland and subsequently to Curtis Island.**

I have had personal knowledge of a pipeline originally proposed by Hunter Gas Pipeline Pty Ltd for a high capacity pipeline to deliver gas from Wallumbilla in Queensland to Newcastle - the Queensland Hunter Gas Pipeline (QHGP). That project (06-0286) was approved by the Minister for Planning on 12 February 2009. It was proposed to enable the then newly discovered CSG reserves in Queensland to be delivered into NSW to enable a further enhancement of gas supplies into this State. Its route was designed to enable the possible future development of known CSG resources within NSW.

In particular, the route of this proposed, and approved, pipeline is approximately 10 km east of Narrabri. If this pipeline was constructed as a consequence of a gas transmission agreement arising from this Narrabri Gas Project, a connection from the associated processing plant near Narrabri would be relatively straight forward.

Such an arrangement would guarantee the delivery of gas from this project directly into the major NSW gas markets. Gas could also be supplied to Curtis Island via an interconnection to the Dubbo to Tamworth Central Ranges Pipeline where it would be delivered into the MSP at Marsden – albeit in restricted quantities. Gas could also reach Curtis Island via the Wilton to Newcastle pipeline and the MSP.

It would appear that the Santos preference is to deliver the gas produced at Narrabri via the shortest possible route to Queensland. Whenever this gas is flowing towards Moomba at its connection point at Bundura, Santos could only supply the “promised” gas quantities into NSW markets through market “swaps”. Assuming these are available at the time required, the transmission distances involved would ensure the gas costs would be higher than if it was delivered directly from Narrabri by the QHGP.

Furthermore, this proposal does not enhance the security of supply of gas into NSW during periods of high demand or system failures. It does not provide NSW with any direct connection from NSW gas resources into the principal market demand centres within the State.

## **Recommendation**

The Narrabri Gas Project should be approved but on the condition that gas be delivered to NSW markets through the construction and utilization of the Narrabri to Newcastle section of the already approved Queensland Hunter Gas Pipeline.