



29 August 2008

The Secretary
Select Committee on Fuel and Energy
PO Box 6100
Parliament House
Canberra ACT 2600

Dear Sir

Re: Submission to the Senate Select Committee on Fuel and Energy

Eastern Star Gas ("ESG") is pleased to provide this submission in response to the letter dated 8 July 2008 from the Chair of the Senate Select Committee on Fuel and Energy. The Committee's terms of reference and range of issues to be addressed are broad. We have not attempted to address all issues. Rather, this submission focuses on matters of pertinence to ESG that we believe should be brought to your attention.

ESG is developing a significant new coal seam gas ("CSG") resource in the Gunnedah Basin region of northern NSW, near Narrabri. The attachment to this letter provides a succinct outline of ESG and Narrabri CSG Project.

The sizeable potential of ESG's Narrabri CSG resource means that it is likely to both:

- play a material role in ensuring security of energy supply to east coast Australia, particularly NSW; and
- have an influence on the supply-demand dynamics of the east coast gas market.

Australia has a vibrant and successful natural gas industry. Natural gas in its various forms (including CSG) has contributed directly (through export of liquefied natural gas, or "LNG") and indirectly (for example, through minerals processing and export) to Australia's export earnings, as well providing a reliable, clean energy source for domestic and industrial users. Natural gas provides an environmentally responsible alternative to other fuels – a role that will undoubtedly become increasingly important in the relative near term.

The price of gas, like that of most other forms of energy, is affected by a complicated range of factors, some of which are cyclic in nature but the majority of which are likely to be structural or long-lived.

An example of a cyclic pricing influence is the knock-on effect of drought conditions in eastern Australia, which has resulted in a spike in demand for gas, for use in gas-fired



generation to replace drought-affected forms of generation, without an offsetting increase in gas supply capacity.

Structural pricing impacts, the effect of which is long-lived, include factors such as the cost of steel, which has increased significantly in recent times. Although the price of steel might decline again in future, the impact of present high steel prices upon the costs of gas production and transportation infrastructure being developed now is permanent.

Another key, structural impact upon gas prices is an anticipated fundamental shift in the underlying economics of the east coast Australian gas market – a shift that has already been seen in Western Australia. We consider it inevitable that large-scale LNG facilities will be developed in, and LNG exported from, Queensland. Queensland's CSG production potential is so large relative to the existing and potential size of the Australian gas market that export of gas as LNG is a compelling, high-value means of monetising the CSG resource. Market observations, including Western Australian experience, suggest that establishment of a "physical" link between domestic and international markets will eventually push domestic gas prices toward parity with international prices (since gas producers will arguably be able to supply into either market).

It is important to recognise that "parity" of domestic and international gas prices does not mean that domestic prices will be equal to international prices. Parity will be achieved when the domestic gas price is equivalent to the netback realizable from international gas prices (being, in essence, the international price minus the costs of liquefying the gas and delivering the LNG to market). In other words, it can be reasonably expected that domestic gas prices will continue to be low by international standards, even when there is parity between domestic and international prices.

A significant beneficial outcome of the gas price increases that will result (should the move to international pricing parity occur) will be a considerable increase in economic incentive for gas explorers and producers to find and develop new sources of gas supply. Furthermore, existing sub-economic resources may become viable, as has been the experience in USA with recent expansions in production of gas from shale.

Developments of the nature referred to above will strengthen the Australian gas market, complementing the maturity that has been realised over recent years through initiatives including deregulation and interconnection of state based gas markets through gas transmission pipeline developments. Australia's natural gas wealth will in future not only be a basis for continued, stable, environmentally appropriate and competitively priced energy supply for Australian energy users, the opportunity could also exist (and



should be investigated) for that wealth to be used to reduce the country's dependence upon imported oil.

Although domestic gas demand has increased as a result of environmental and cost imperatives, Australia continues to be a net importer of oil with consequent exposure both to oil price movements and in terms of supply security. Australia's gas wealth (itself the driver for LNG exports as referred to earlier) might also be harnessed to reduce this dependence upon imported oil. This could be achieved through:

- direct use of gas as a substitute for liquid fuels (for example, through use of compressed or liquefied natural gas as a vehicle fuel); or
- use of gas as a feedstock for production of liquid fuels, using proven, world-scale Gas-to-Liquids technologies.

Finally, it would be remiss not to consider implications arising from the inevitable introduction of a regime (for example, the Australian Government's proposed Emissions Trading Scheme) to address carbon-based climate change. The value of allowing markets to derive outcomes has been implicitly recognised in the proposed introduction of an Emissions Trading Scheme, with the market-determined price for carbon being the driving force to achieve target outcomes in terms of emission reductions. The introduction of such a regime will be complex and widespread in its effect. It is likely that it will take a period of time, and significant effort, for industry to respond and adapt, for operation of the regime to stabilise, and for target outcomes to be realised. The potential for early success will be maximised if market signals are simple and transparent. The imposition of additional requirements to meet other, ancillary outcomes should be avoided.

ESG would welcome further opportunity to provide input to the Committee's process. Roland Sleeman, General Manager Commercial (02 9258 4507), is the appropriate contact in the first instance.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "R. Sleeman".

p.p. Hon. John Anderson
Chairman

A handwritten signature in blue ink, appearing to read "David Casey".

David Casey
Managing Director

Attachment

Background Information on Eastern Star Gas

Foundation and early development

ESG was formed in August 2000 to explore for, develop and produce both conventional natural gas and coal seam gas ("CSG") in eastern Australia. The company listed on the Australian Stock Exchange ("ASX") in February 2001 with a market capitalisation of A\$16 million. At its inception, ESG held interests in six exploration licences and two licence applications in Victoria and NSW and was focused on brown-coal gas plays in Victoria's eastern Otway Basins.

ESG subsequently shifted its focus to exploration and development in NSW, acquiring numerous exploration licenses. Notably, ESG acquired 100% of the conventional gas interest in PEL 238 in the Gunnedah Basin in December 2002 and, together with JV partner Hillgrove Resources Limited ("Hillgrove"), 65% of the CSG interest in the same prospect in October 2003 (North American-based JV partner Gatar holds the remaining 35%).

In January 2003 conventional gas reserves of 11.3 PJ were certified at the Coonarah Gas Field in PEL 238. To commercialise this gas resource ESG constructed the 10 MW gas-fired Wilga Park Power Station, which came online in July 2004.

ESG has two CSG production pilots within the PEL 238 area. The three well Bohena CSG project incorporates two wells drilled in 1998/99 plus a third well drilled in 2004 and deepened in 2006. The nine well Bibblewindi CSG project was spudded in March 2006 and commenced production in December 2006.

Hillgrove's interest in PEL 238 CSG was bought out in August 2006. At that time that ESG increased its interest in PEL 238 CSG rights to 65% while Hillgrove acquired a 19.99% stake in ESG. Hillgrove's present stake in ESG is 20.7%.

Gas-in-place

PEL 238 (ESG 65% & Gatar 35%), the main focus of ESG's current development programme, has been independently estimated to contain up to 17 tcf of CSG within the two thickest coal seams, a substantial percentage of which is expected to be producible.

Gas Reserves

The first independently certified CSG reserves within PEL238 were announced as at 1 September 2007, with a substantial further increase in reserves achieved as at 31 December 2007. Certified gas reserves are presently as tabulated below.

Reserves as at December 2007	1P Reserves	2P Reserves	3P Reserves
	21 PJ	185 PJ	1,300 PJ

Reserves Target

ESG is presently undertaking the largest ever CSG reserves appraisal programme carried out in the Gunnedah Basin. The programme involves drilling of 20 coreholes, shooting of 180 km of seismic and drilling of four new multi-lateral production pilots. The objective of the programme is to achieve an early increase in 2P gas reserves, with a target of at least 1,300 PJ by the end of 2009, as illustrated below.



Gas Marketing

ESG already has in place Memoranda of Understanding for supply of gas at aggregate rates that will increase the size of the NSW gas market by 50% from its present level (of around 140 PJ/a). One MoU, with Macquarie Generation, is for a total quantity of 500PJ. The other, with Babcock & Brown, is for supply of 40 PJ/a of gas. Both involve use of gas for generation of electricity. NSW requires of the order of 300 to 350 MW of new generating capacity to be installed annually.

In addition, ESG is pursuing a range of other market initiatives, including emerging high-value opportunities.