

ASX ANNOUNCEMENT: 28 July 2010

MD & CCO on Outlook & Strategy

Open Briefing with Eastern Star Gas Managing Director
David Casey & Chief Commercial Officer Roland Sleeman



Eastern Star Gas Limited
Level 7, 51 Pitt Street
Sydney NSW 2000

In this Open Briefing[®], MD David Casey & CCO Roland Sleeman discuss

- the proposed LNG development in Newcastle
- reserve certification progress at the Narrabri Coal Seam Gas project
- the performance of ESG's production pilots and priorities into FY2011

Open Briefing interview:

openbriefing.com

Eastern Star Gas Limited (ASX code: ESG) has entered into a Memorandum of Understanding (MoU) with Japan's Hitachi Limited and Toyo Engineering Corporation to undertake a feasibility study into the development of an electric-motor-driven mid-Scale LNG plant at Newcastle. What are the advantages of the type of LNG plant being proposed? What are ESG's obligations under the MoU? How long will the feasibility study take? Is a 2014 start-up date for the project achievable?

MD David Casey

Electric-motor-driven mid-scale LNG technology is ideally suited for use at a location like Newcastle, where proximity to urban development and co-existence with other port-side activities, especially coal exports, are important considerations. I think the best person to elaborate further on this is Roland Sleeman, ESG's Chief Commercial Officer (CCO).

CCO Roland Sleeman

Prior to making a commitment to detailed investigation of the feasibility for export of LNG from Newcastle, ESG commissioned a series of independent, specialist reviews of the concept. The outcome of those reviews was most favourable in particular the technical feasibility of LNG exports.

In the course of the initial studies, the key environmental issue identified by the independent specialists was noise minimisation. While this was something we thought manageable, we elected to address the issue regardless and pursue electric-motor-driven technology, rather than gas-turbine driven technology as adopted in large-scale LNG projects.

LNG projects are essentially large refrigeration units that cool the input natural gas down so that it becomes an easily and safely transported liquid. At the heart of this process is a refrigeration compressor, in our case to be driven by an electric motor, rather than a considerably noisier but potentially more powerful gas-turbine.

While the use of electric motor drives limits the ultimate size of each gas liquefaction train, a number of important advantages are realisable. Key among these advantages are:

- The project footprint, or land required, reduces, since electricity needed to operate the plant can be generated elsewhere;
- Project reliability, flexibility and efficiency are improved since electric motors are essentially maintenance free and, if necessary, can operate efficiently at part-load;
- Project cost and construction time, both of which will be at least 20% better than what is achievable with larger-scale gas-turbine driven technology owing to the modularised design of the mid-scale plant; and
- The level of gas reserves and LNG offtake commitment required to achieve financial close is significantly less with a mid-scale development. For example, an initial 1 Mtpa project could be bankable with just 750 PJ of reserves/market. This lends itself to a progressive ramp-up of production as reserves are proved and markets secured, with minimal ramp-gas management issues.

ESG is convinced this is the right technology for Newcastle and is delighted that Hitachi and Toyo Engineering are working to prove the concept. Among other things, Hitachi is one of a very limited number of companies that has expertise with refrigerant compression, electric motors and specialised systems for motor starting and control.

We envisage the feasibility study will be completed around the end of 2010. Given the short lead time for development of a mid-scale project, this is consistent with projections for first export of LNG as early as 2014. The main items of interest in the critical path are likely to be project approvals and LNG storage tank construction.

openbriefing.com

Will the signing of an LNG offtake agreement be predicated on the success of the feasibility study? Does ESG have the opportunity and capacity to supply more gas to the proposed project as it expands?

MD David Casey

While final commitments for offtake of LNG will be conditional upon the outcome of the feasibility study, and also upon receipt of development approvals, we envisage conditional offtake arrangements will be established over coming months. We also envisage that LNG offtakers will have a keen interest in assisting with financing of the planned LNG facility.

ESG will ensure the capacity of proposed new gas pipeline infrastructure from Narrabri to Newcastle is sufficient to transport gas not only for the initial LNG project but also for significant ongoing expansion. While ESG will have the capacity to supply more gas as the LNG project expands, the opportunity is also likely to exist for other parties to supply gas to the project.

openbriefing.com

In a recent report by KPMG (Gas Market Report, May 2010), the approvals process in New South Wales was cited as a significant impediment to the potential commercialisation of CSG projects like Narrabri (ESG: 65%), in some cases taking up to three years. Have you accounted for this in your strategic planning and commercialisation strategy? Has the NSW government sought to expedite the approvals process in order to meet the State's future energy demands?

MD David Casey

This project represents a significant opportunity for NSW. This state is heavily reliant on coal for energy production and needs to diversify its resource and export base. ESG's experience suggests that, provided the project proponent maintains focus and provides information to the Department of Planning in a timely manner, the NSW project approvals process can be completed in an acceptable timeframe. To this end, we are already working closely with relevant departments and agencies and have enlisted the services of planning industry specialists to ensure our approvals documentation is comprehensive, high quality and well-timed.

Regarding possible expedition of approvals processes, ESG is aware the Queensland Government has been very proactive in encouraging development of its CSG to LNG industry and there are clearly strong benefits to this approach. It is important that the NSW Government support the development of an indigenous gas industry, particularly given the massive long-term benefits, in terms of jobs, environmental benefits, capital investment, royalty income, economic diversification and gas supply security that stand to be realised. There is nothing else of comparable size and environmentally-favourable nature of the proposed LNG project on the horizon for NSW and the opportunity cost for NSW of the project not going forward would be significant.

openbriefing.com

Are there any alternatives to getting to market from the Narrabri CSG Project? Can the gas be transported to market via Queensland to supply other power/LNG projects? What options have you considered?

MD David Casey

There are two possible alternatives to export of LNG via Newcastle.

On one hand, ESG continues to actively investigate alternatives to LNG, for example, gas-to-liquids or production of methanol. While indications to date are that these options are less commercially attractive than export of LNG, ESG will be ready to respond should this change.

On the other hand, it is inevitable the opportunity will exist for gas to be piped north to be used as feed for LNG production at Gladstone. As a general observation, ongoing expansion of projects proposed at Gladstone will see significant economies of scale realised as infrastructure like ports and tanks is better utilised. It is ESG's view that gas could be sold to support expansions of this nature and we will actively monitor such opportunities.

Ultimately, our singular focus is to achieve the best outcome for ESG shareholders. This necessarily involves a balance between the price realised for gas sold and how quickly it can be realised. While ESG presently have the view that an LNG project at Newcastle is viable, we maintain an open mind.

The advantages of Newcastle, namely proximity and established port operations, will very quickly disappear if attempts to progress first stage approvals are not successful.

openbriefing.com

The last 2P reserves certification for the Narrabri Project was in December 2009 (ESG: 976 PJ). The two recent MoUs signed by Eastern Star exceed the company's current attributable 2P reserves? Is this a risk to meeting your MoU obligations? What certification progress has been made during the second half on your three target seams? What are your expectations for 3P to 2P conversion success into FY2011?

MD David Casey

While ESG's present 2P reserves position is marginally below that required to support gas sales to both ERM, 400 PJ, and a first stage LNG export project, at least 750 PJ, we are confident reserves will be further upgraded to support these and other possible projects. ESG will also, as a matter of course, afford our joint venture partner every opportunity to participate in these state-significant initiatives.

While I don't want to be particular in terms of quantum, on the basis of performance of our existing pilots and taking into account new areas that will be unlocked in terms of reserves certification, ESG is confident we will achieve a further, material increase in certified reserves by the end of this calendar year.

openbriefing.com

Production drilling activities for the Company are "in recess" until later this calendar year. What are your priorities ahead of the campaign restarting? When do you expect to recommence drilling at Narrabri? Will the focus be on testing the potential beyond the existing resource or improving the confidence of Possible (3P) Reserves already defined within PEL238?

MD David Casey

The recess in production well drilling activity has been carefully coordinated so that ESG can, over coming months, focus upon realising the potential of our existing production pilots with a view to achieving ongoing reserves upgrades including, for the first time, from the thick and laterally extensive Hoskissons coal seam.

At the same time, ESG will continue exploration activity, primarily corehole drilling and seismic acquisition, so that we can not only identify optimal locations for future pilot production wells, but also further expand our resource base without further specific requirement for additional capital.

In addition to this, ESG is also expediting approval processes with a view to securing the approvals that will be required to transition to full-scale development. I anticipate that, when ESG recommences pilot production drilling towards the end of the year, we will be well on track to consider development drilling that will eventually be required to supply gas into power station and LNG opportunities.

openbriefing.com

Can you provide an update on the performance of your production pilots, lessons learned and the outlook for the future as you transition to full-scale development? How do you see your production costs comparing with the industry generally?

MD David Casey

In short, the development of our production well design has advanced in leaps and bounds.

At the outset, back in 2006, we trialled a vertical, fracture stimulated well design – a design that, whilst commercial, could not produce gas in the volumes we had expected given that our coals have good permeability, as high as 150 millidarcies (mD) in some instances, and very favourable gas contents of in excess of 13 cubic metres per tonne of coal.

Following a wealth of technical review work carried out in 2007, and recognition of the unusual vertically fractured architecture of the target coals, the gas production potential of lateral wells became obvious. In CSG provinces, lateral wells are often used to overcome low permeability. At Narrabri this is not the case. The coals have high permeability, but this permeability is highly directional.

Lateral wells, when drilled perpendicular to the fracturing system, were identified to have the potential to substantially increase gas flow rates. This was immediately confirmed when we drilled the first Bibblewindi lateral well. Water flow rates, the precursor to gas flow from the lateral, were over 3,000 barrels per day, which is more than thirty times higher than was achievable with the vertical well design.

Moreover, the Bibblewindi Multi-lateral Pilot also demonstrated that the lateral wells achieved excellent communication with the fracture system of the target coals – communication so good that it was quickly evident that we may be able to increase the spacing between laterals to around 1 kilometre. This is important because increasing the spacing between wells significantly reduces field development costs.

The next pilot completed was of course Bibblewindi West. It was designed not only as an advancement upon the first lateral pilot, in that it incorporated three laterals drilled from one location, but also to tap the previously untested Namoi coal seam. Bibblewindi West was brought on line in November 2009 and, within one month, was producing over 2 MMscfd of gas. While a series of water handling related problems meant we did not, until recently, operate Bibblewindi West on a continuous basis, the Pilot has been an outstanding success.

Throughout this period, whenever it was brought on line it quickly ramped up to produce in excess of 1 MMscfd of gas with 500 metres of water head still on the coal. To put this into context, only about one third of the backpressure, or water, had been removed from the coal up to that point. Now that we have debottlenecked our water handling system, through upgrading and expansion of filtration and reverse osmosis capacity, we aim over coming months to show beyond doubt what our well design is capable of!

Of course, in addition to the Bibblewindi pilots, we are developing lateral pilots at Dewhurst and Tintfield, the latter targeting the Hoskissons coal seam. These pilots both incorporate three parallel but close-spaced lateral wells. Close-spacing of the laterals is important for pilot production purposes, to accelerate dewatering. Drilling of the Dewhurst and Tintfield pilots is completed. Pipeline and water storage facilities are currently being installed and should be on line in the coming months.

Looking to the future I am particularly excited by our new well design. At an early opportunity we plan to trial a 'stacked multi-lateral pilot', involving two or more lateral wells drilled from one location but targeting different coal seams, for example the Bohena, Namoi and Hoskissons.

The laterals will all intersect and be dewatered by a single vertical well. I should point out that this well design involves nothing we haven't already done across different wells, and it represents a significant and logical next step in terms of optimisation with multiple seams accessed from the same well.

Our expectation is that the stacked multi-lateral well design, accessing 3 to 4 coal seams, will allow up to 8 to 10 PJ of gas to be recovered, at a well-set costing of around A\$3M including pumps and wellhead facilities. I believe we are already one of Australia's lowest cost CSG producers and I have no doubt the new designs will allow that to continue.

openbriefing.com

We have seen in the media that there is growing concern over water issues in the Queensland CSG Sector. Farmers are claiming their water supplies will be compromised and these developments will damage the Great Artesian Basin. Is this likely to be a similar issue in ESG's area of operation?

MD David Casey

No, it isn't. We are very fortunate in our area of operation that our primary targets are completely surrounded by impenetrable layers of rock, essentially isolating them from any regional aquifers, the Great Artesian Basin and surface.

openbriefing.com

The Australian Federal Government has indicated its intention to apply the Petroleum Resource Rent Tax (PRRT) on CSG projects from July 2012. What are the implications of this for the CSG to LNG industry and for ESG? How would this change as the company transitions from explorer to producer?

MD David Casey

The original proposal for a Resource Super Profits Tax (RSPT) was onerous in the extreme and threatened project viability in many ways, including making capital more difficult and expensive to raise. The current PRRT proposal is clearly better than the RSPT.

While we won't know the exact impact of the proposed PRRT until we see the legislation, it would appear that ESG is actually in a more advantageous position than our Queensland peers. This is because under the PRRT we are again able to realise the benefits of the NSW Royalty Concessions. These concessions mean no royalty is payable for years 1-5 of a production lease, increasing to 6%, 7%, 8%, 9% and finally 10% per annum by year 10.

While we are concerned about the fairness of the Federal Government imposing a tax on a resource which belongs to the people of NSW, I am comfortable that the PRRT regime will not prevent us from realising our development vision.

openbriefing.com

What are the priorities for the Company in FY2011?

MD David Casey

ESG is a company that is now ready to transition to development and production.

While from a technical perspective a material ramp up of gas deliverability and continued reserves upgrades will be fundamental to supporting this transition, we will start to see the ongoing focus of the company becoming increasingly commercial in nature with key near term priorities including:

- completion of gas sales and LNG project agreements; and
- putting in place the development fundamentals, especially NSW Government approvals, to commence move to Newcastle LNG FEED in early 2011 and field development to support ERM's Wellington Power Station later that year.

openbriefing.com

Thank you David & Roland.

For more information about Eastern Star Gas, visit easternstar.com.au or call David Casey on +61 2 9251 5599.

To read other Open Briefings, or to receive future Open Briefings by email, please visit openbriefing.com

DISCLAIMER: Orient Capital Pty Ltd has taken reasonable care in publishing the information contained in this Open Briefing®. It is information given in a summary form and does not purport to be complete. The information contained is not intended to be used as the basis for making any investment decision and you are solely responsible for any use you choose to make of the information. We strongly advise that you seek independent professional advice before making any investment decisions. Orient Capital Pty Ltd is not responsible for any consequences of the use you make of the information, including any loss or damage you or a third party might suffer as a result of that use.