Roundtable for Unconventional Gas Projects

Discussion Topics:

1. Size of the prize – How big is it?
2. Initiatives directed at streamlining or facilitating business
3. Summary – Top 4
4. Questions
Introducing Santos

An Australian energy pioneer since 1954, Santos is one of the country’s leading gas producers, supplying Australian and Asian customers.

- Australia’s largest domestic natural gas producer
- ~3,200 employees
- ASX Top 30 company
- Market capitalisation of approximately $12 billion
The Market is moving creating opportunity

An increasing demand will require an increase in supply....

.....someone will solve this problem, will it be South Australia?
Cooper Gross Reserves and Unrisked Resource Potential

Cooper basin has the resource potential:

**Conventional Reserves/ Resources**
- Aspirational 75% 2P Recovery Factor 2,520 PJ
- Current Produced 6,420 PJ
- 2P Reserves 1,441 PJ
- Cooper infill
- Booked Contingent Resources 1,788 PJ

**Unconventional Resources**
- Booked Contingent Resources 3,520 PJ
- YE10 2P Recovery Factor: ~49%
- Unconventional Resource Potential: 39,000+ PJ

Note: Gross volumes; provisional YE10 Outlook
Potential Industry Resource Requirements

**Conventional Resource**
- 4 – 6 Drilling Rigs;
  - 80 - 100 wells per year
  - 480 – 600 frac stages per year
  - 15 – 20k tonnes proppant per year
  - 100 – 140 ML water per year
  - 480 – 600 km tubular per year

**Unconventional Resource**
- 10 – 15 Drilling Rigs;
  - 300 - 400 wells per year
  - 4000 – 6000 frac stages per year
  - 500k – 800k tonnes proppant per year
  - 2100 – 2800 ML water per year
  - 2500 – 3500 km tubular per year
  - 700 – 1000 people + services (i.e. trucking, flowlines, camps etc...)
  - 3500 – 6000 trailer loads per year
So what do we need to do differently?

Constraints facing industry

...if we don’t solve this issue today we will miss the opportunity
Initiatives directed at streamlining or facilitating business:

- **South Australia “Centre of Excellence” for the onshore oil and gas industry.**
  - South Australia has the ability to become Australia's centre of excellence for onshore oil and gas.
  - Initiatives that may assist the State in achieving this include the establishment of a Technical Training hub in Adelaide and a Industrial hub in the Cooper Basin.

- **Reducing regulatory burden regarding transportation**
  - Initiatives for seeking to reduce this burden include considering:
    1. Importing rig equipment from the USA/Canada without having to re-engineer.
    2. Operations of triple road-trains in the Cooper Basin.
    3. Permit earthmoving machinery to tow camp trailers in the Cooper Basin; and
    4. Changing the requirements for obtaining certain transport permits (i.e. road closures) to annual approval.
Roads - warrants exploratory discussions between industry and the State.

Particular benefits in paved roads:

- From Leigh Creek to Moomba; and
- From Moomba to:
  - Innamincka / Old Border – Dillon’s Highway; and
  - Tirrawarra

This would result in reduced road closures due to wet weather and a significant reduction in costs for transport of main supplies into and around the Cooper Basin for all operators.
Industry Top 4

1. Skilled People – Technical training hub in Adelaide
2. Develop “Common User” Cooper Basin Logistics Hub
3. Reduction of regulatory burden regarding transportation
4. Roads – Critical infrastructure, construction & maintenance
Questions