

Albury Park Wellsite

Update for Albury Working Group

23 June 2011

1. Introductions
2. Appraisal drilling & gas storage update
3. Next steps for Albury Gasfield
4. Overview of Liquefied Natural Gas (LNG)
5. Our plans for LNG at Albury
6. Keeping the community informed
7. Any other business
8. Next meeting

- Julie Barlow, Managing Director, Production Division
- Sophie Tucker, Project Manager, Appraisal Drilling
- Barrie Hedges, Communications Consultant

Albury Park Wellsite



- **2 April 2010**
 - appraisal drilling completed
 - detailed analysis began
- **19 April 2010:**
 - last Working Group meeting
- **End April 2010**
 - acoustic structure and drilling rig dismantled and demobilised
- **July 2010**
 - steel gratings installed over well cellars, site activities complete.

- Appraisal drilling shows gas storage as planned is not economically viable
- Still considering longer term possible gas storage options
- Any gas storage project likely to be smaller
- In the meantime, there remains a gas resource in the field
- Liquefied natural gas (LNG) is a way to harness that resource for the national benefit
- ... as we were prior to drilling operations.

What is LNG?

- Natural gas super-cooled to minus 162 degrees C
- At that temperature it condenses into a liquid
- Odourless, colourless, non-corrosive, non-toxic
- Takes up 600 times less space than in gaseous state
- ... so it can then be transported potentially long distances
- ... and then warmed back to its natural state for use as natural gas
- Also valuable as a green vehicle fuel
- ... and that is the plan at Albury.

A valuable green fuel

- Burns more cleanly and quietly than diesel
- 90% reduction in PM10 particulates
- 60% reduction in nitrous oxide
- 50% reduction in sulphur dioxide
- 30% reduction in noise
- 20% less CO₂.

Why LNG is important

- Gas (and therefore LNG) is a clean fuel
- The UK is now a net importer of gas
- Security of supply is vital – as is diversity of sources
- LNG can viably travel long distances
 - eg Africa, the Caribbean, Australia
- UK has joined countries like US and China as an importer
- LNG expected to play an increasingly important UK role
- More import terminals planned.

- Imports are increasing rapidly
- Can be stored for release to the NTS at peak times
- Also used as a vehicle fuel
- Major advantage from its low carbon footprint
 - both during production and use
- Attracts tax credits to end-users as a Government incentive
- Allows gas fields like Albury to be harnessed for the national benefit.

The LNG process at Albury



- Gas produced from existing well
- Filtered to remove impurities
- Progressive refrigeration to convert to liquid
- Gas used to generate power for the plant
- Production capacity approx 20 tonnes per day
- Stored in above-ground tank at low pressure
- On-site storage capacity 25 tonnes
- Taken away daily for use as green vehicle fuel.

Typical LNG site



Typical LNG site



LNG road tanker

- Standard 20-tonne fuel tanker
- Total length 16.5m
- Width 2.6m
- Double skinned to keep LNG cool.



Albury well suited to this type of natural gas production because:

- A site where gas may not otherwise be fully harnessed
- Gas is dry, sweet and does not need to be cleaned up
- Virtually pure methane with very few higher hydrocarbons
- Low flow rates – an economical way to exploit the reserves
- Existing site is large enough to accommodate the equipment
- Some infrastructure already in place.

- Unmanned operation controlled by telemetry
- Low key 24/7 operation
- One LNG tanker movement per day
- One van movement per day for maintenance.

Specialists will now look at:

- Safety
- Traffic
- Noise
- Air quality
- Landscaping
- Ecology
- Lighting.

- Planning permission from Surrey County Council
- Hazardous substances consent from Surrey County Council
- Environmental permit from Environment Agency.

- Via Albury Parish Council
- Contact immediate neighbours
- Contact members of wider liaison group and other parishes
- Website to be updated
- Press release / holding statement
- Item for parish newsletter
- Exhibition before planning application submitted
- Further meetings of Working Group.

