MEDIA RELEASE

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Carbon capture demonstration project leads the way

The $245 million Callide Oxyfuel Project in Central Queensland continues to lead the way in the demonstration and development of low emission coal-fired electricity generation, passing more than 6,000 hours of operation.

The project has been operating in oxy-firing mode at Callide A Power Station since December 2012, making it one of the most advanced carbon capture projects in the world.

Project Director Dr Chris Spero said the Callide Oxyfuel Project aimed to prove the suitability of oxyfuel technology for both new build and existing coal-fired power stations.

“The Callide Oxyfuel Project and other oxyfuel projects underway around the world are essential to the development of the technology and its future application at a commercial scale,” Dr Spero said.

“We’ve been collaborating with R&D organisations and participants in other projects to carry out a number of tests at Callide A to help us optimise the technology and share knowledge. This will help progress the commercialisation and deployment of oxyfuel combustion with carbon capture.”

Oxy-firing involves burning coal in a mixture of oxygen and recirculated exhaust gases, instead of air, and results in a concentrated stream of carbon dioxide (CO_2) which is suitable for capture and storage.

The current demonstration phase follows the retrofit of Callide A with oxyfuel technology between 2009 and 2011 and the construction of a CO_2 capture plant on the site.

The Callide Oxyfuel Project is also advancing the understanding of CO_2 transport and storage options through its contributions to a number of feasibility studies and investigations.

The Callide Oxyfuel Project is a joint venture between CS Energy, ACA Low Emissions Technologies (ACALET), Glencore, Schlumberger Carbon Services, and Japanese participants J-Power, Mitsui & Co., Ltd and IHI Corporation.

The project was awarded $63 million from the Australian Government under the Low Emissions Technology Demonstration Fund and has also received financial support from the Japanese and Queensland governments and technical support from JCOAL.

For more information on the project, visit www.callideoxyfuel.com.

Media enquiries: (07) 3854 7399 or energyinfo@csenergy.com.au. Good quality images are available. Please see backgrounder on next page for more information on the project.

CALLIDE OXYFUEL PROJECT BACKGROUND

KEY FACTS	
What	Demonstration of carbon capture technology at Callide A Power Station in central Queensland.
How	The demonstration project has been operational since December 2012 following the retrofit of Callide A Power Station with oxyfuel technology and the construction of a carbon dioxide capture plant.
Fuel	Black coal
Who	Joint venture between CS Energy, ACA Low Emission Technologies (ACALET), Glencore, Schlumberger; and Japanese participants, J-POWER, Mitsui & Co., Ltd., and IHI Corporation. The project was awarded $63 million from the Australian Government under the Low Emissions Technology Demonstration Fund. The Callide Oxyfuel Project has also received financial support from the Japanese and Queensland governments and technical support from JCOAL.
Cost	$245 million
Timeframe	Project is currently in demonstration phase (2012 – 2014).

INFORMATION ON CALLIDE A OPERATIONS IN OXY-FIRING MODE

So far, the Callide A boiler has operated in oxy-firing mode for more than 6,000 hours and the carbon dioxide capture plant has achieved more than 3,000 hours of industrial operation (passing the halfway mark on the project's overall targets).

Some of the tests being carried out at Callide A as part of the Callide Oxyfuel Project include:

- Testing to monitor the performance of modern super-critical and ultra-supercritical boiler materials as test specimens in oxy-firing conditions. As Callide A is a 1960s era non-supercritical plant, this is important for testing the suitability of oxyfuel for new coal-fired power stations.
- Combustion testing of both local Callide coal and other coals in the boiler in oxy-firing mode.
- Boiler 'turndown tests' to assess the flexibility of the plant to adjust its output in response to electricity market conditions.
- Performance tests of the carbon dioxide capture plant to determine capture efficiency, scale-up merits and issues for future deployment.

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