

SASKPOWER/AIR LIQUIDE/BABCOCK & WILCOX CANADA
Media Fact Sheet
Clean Coal Project Technology Announcement
Monday, October 30, 2006

- During the next 20 to 30 years, SaskPower will be making major decisions concerning the refurbishment or replacement of virtually its entire generating fleet. In addition to clean coal, a variety of options are being reviewed, including: demand side management; polygeneration; renewables; purchased power; imports; cogeneration and nuclear power.
- Saskatchewan's 300-year supply of mineable lignite coal remains the most cost-efficient and stable-priced fuel for base load generation requirements. However, there are environmental concerns surrounding coal combustion.
- SaskPower is leading a pre-commitment engineering study (referred to as SaskPower's Clean Coal Project) to establish a design schedule, cost assessment and project execution plan for what may become the world's first near zero-emissions clean coal unit.
- The approximately \$1.5-billion, 300-megawatt clean coal plant would capture 90 per cent of carbon dioxide (CO₂) emissions. Approximately 8,000 tonnes of CO₂ a day would be sequestered in underground deep saline aquifers or sold to oil companies for use in enhanced oil recovery.
- SaskPower, Babcock & Wilcox Canada (B&W) and Air Liquide have come to an agreement to jointly develop CO₂ separation technology as the key process for the SaskPower Clean Coal Project.
- The technology called Oxyfuel involves removing nitrogen from all of the combustion air in order to operate the boiler in the absence of nitrogen.
- With this process, gasses leaving the boiler are relatively easy to purify, compress and deliver for enhanced oil recovery with ultimate geological sequestration. The technology nearly eliminates emissions of combustion by-products, including greenhouse gas emissions.
- This agreement builds upon the design supply partnership for the boiler with B&W announced earlier, and with Marubeni Canada and Hitachi for the turbine generator set. The boiler and turbine are considered the basic building blocks for a thermal generating station.
- As well as Air Liquide and B&W, SaskPower is assisted by Regina engineering company Neill and Gunter, Marubeni Canada, and Hitachi in the design of the unit.
- B&W serves North American electric utility and industrial markets and the global nuclear utility market, with manufacturing facilities in Cambridge, Ontario; and Melville, Saskatchewan.
- Air Liquide is a world leader in the design, construction and operation of air separation units with over €10 billion in sales annually.
- If successful, the advanced clean coal power plant will be the first of its kind in a utility scale application. This project has the potential to strategically position SaskPower in global markets where coal is a major fuel source. A decision on whether to proceed with the project will be made in mid-2007, with an in service date of 2011.