

Media Fact Sheet #1
2007 Electricity Generation Supply Decision
Simple Cycle Natural Gas Turbines (SCGT)
Thursday, September 6, 2007

The 2007 Supply Decision is designed to ensure a safe, reliable and sustainable power supply from 2010-2014.

SaskPower had originally anticipated that the next major supply addition would be required in 2012. However, due to the increased demand attributed to the strength of the provincial economy, SaskPower has revised this to 2010.

Advantages of simple cycle natural gas turbines (SCGT) include:

- SCGTs produce up to 50 per cent less carbon dioxide per megawatt hour than conventional coal-fired generation.
- SaskPower will offset the greenhouse gas emissions associated with the operation of these turbines through a carbon credit system.
- SCGTs will enable the integration of additional wind power into the electricity system.
- Unlike larger base-load units (units that are in operation at all times), these turbines can be turned on and off as needed and can be put into operation quickly during peak times when electricity demand is greatest.
- At a capital cost of approximately \$525 million, SCGTs are a relatively low capital cost option.
- SCGTs are relatively easy to install, minimizing construction costs, and can be installed within the required time frame.
- SCGTs are flexible with respect to location, helping to reduce the need for new transmission lines. The turbines will be installed in areas where electricity is most needed.
- Emissions of sulphur dioxide, particulates and mercury are near-zero. With modern control strategies, the nitrogen oxide emissions will also be reduced.