



The Bruce Power Deal: A Comparative Analysis

In 2004 and 2005 the Government of Ontario entered into contracts with independent power producers for renewable and natural gas-fired electricity supplies. These independent power producers were selected through a competitive bidding process. On October 17, 2005, the Government announced that it had negotiated a special, out-of-market deal with Bruce Power for nuclear electricity. The contract requires Bruce Power to:

- a) Re-start Bruce A Unit 1 and Unit 2 nuclear reactors. The reactors are targeted to re-start in 2009 and/or 2010;
- b) Refurbish Bruce A Unit 3. The refurbishment is targeted to occur in 2010 and 2011.
- c) Replace Bruce A Unit 4's steam generation equipment. This is targeted to occur in 2007.

This fact sheet compares the key contract terms of the Bruce Power Deal with those of the Government of Ontario's supply contracts for renewable and natural gas-fired electricity.

Cost Overruns

Bruce Power

If Bruce Power has capital cost overruns, it can pass on 25-75% of these extra costs onto the Ontario Power Authority (OPA), the provincial government agency responsible for securing electricity supplies. The OPA can, in turn, pass these cost overruns on to electricity consumers. With respect to Unit 3, Bruce Power can pass on 100% of its capital cost increases (up to \$200 million) if these increases are identified by Bruce Power before the refurbishment commences.

Renewable and Natural Gas-Fired Power Plants

The renewable and natural gas-fired power suppliers cannot pass on any of their capital cost overruns to the Government of Ontario or electricity consumers.

Price Escalators

Bruce Power

The Bruce Power total contract price (exclusive of fuel costs) is adjusted in relation to changes in the Consumer Price Index (CPI). Prices are escalated by the full CPI when the CPI is between 0% and 2.5%. If the CPI is greater than 2.5%, the contract price escalator is 2.5% plus 60% of the percentage above 2.5%. In a deflationary environment, prices would be adjusted by 60% of the negative CPI.

Natural Gas-Fired Power Plants

For natural gas-fired power producers the total contact price (exclusive of fuel and operating and maintenance costs) is escalated by 20% of CPI or less. Operating and maintenance costs are escalated by full CPI.

Renewable Power Plants

For renewable power producers the total contract price is escalated by 15% of the CPI.

Fuel Cost Price Escalators

Bruce Power

Bruce Power is entitled to full reimbursement for all of its reasonably incurred nuclear fuel supply costs for fuel used in the generation of electricity at the Bruce A plant.

Natural Gas-Fired Power Plants

Natural gas-fired power producers receive gas cost payments that are equal to the spot market competitive price for natural gas.

Renewable Power Plants

The renewable power contracts do not have fuel cost price escalators

Late Penalties

Bruce Power

If the actual commercial operation dates for Bruce A Units 1, 2 or 3 are more than three months late, Bruce Power will have to pay late payment penalties of \$33.33 to \$133.33 per megawatt (MW) times the unit's contracted capacity for each day that a unit is more than three months late.

If the actual commercial operation date for Units 1 or 2 are 33 months late, the OPA may terminate the contract with respect to such unit.

If the actual commercial operation date for Units 3 or 4 are four years late, the OPA may terminate the contract with respect to such unit.

Natural Gas-Fired Power Plant

If the actual commercial operation date for a natural gas-fired power plant is one day late or more, the plant owner will have to pay penalties of \$150 to \$300 per MW times the plant's contracted capacity for each day that it is late.

If the actual commercial operation date for a natural gas-fired power plant is 18 months late, the OPA may terminate its contract with the power plant.

Renewable Power Plant

If the actual commercial operation date for a renewable power plant is one day late or more, the plant owner will have to pay a late payment penalty of \$65 per MW times the plant's contracted capacity for each day that it is late.

If a renewable power facility does not achieve actual commercial operation by December 31, 2008, the OPA may terminate its contract with the facility.

Performance Standards

Bruce Power

There are no specific output performance standards in the contract.

Natural Gas-Fired Power Plant

If a natural gas-fired power plant cannot produce full power for:

- a) 70% of the year during the second contract year;
- b) 75% of the year during the third contract year; or
- c) 80% of the year during the fourth and each succeeding contract year;

the OPA can terminate the contract.

Renewable Power Plants

There are no specific output performance standards for renewable power producers.

Termination Penalties

Bruce Power

There are no specific termination penalties in the contract.

Natural-Gas Fired Power Plant

If the OPA terminates its contract with a natural gas-fired power plant because of a supplier default event, the owner of the power plant is required to make a termination payment to the OPA that is equal to the province's incremental cost of obtaining replacement power for the duration of the original contract term.

Renewable Power Plants

There are no specific termination penalties for renewable power producers.

Insurance

Bruce Power

In the event of a catastrophic reactor accident, Bruce Power's liabilities are capped at \$75 million. Liabilities in excess of \$75 million are the responsibility of the Government of Canada, in effect providing the nuclear plant with subsidized insurance.

Natural Gas and Renewable Power Plants

Natural gas and renewable power plants must buy their own insurance.

Power Plant Decommissioning and Other Liabilities

Bruce Power

Bruce Power is not responsible for the decommissioning of its reactors or the long-term storage of their radioactive wastes. These costs are borne 100% by Ontario Power Generation and the Government of Ontario.

Natural Gas-Fired and Renewable Power Plants

The natural gas and renewable power plant owners are fully responsible for the decommissioning of their power plants and all other liabilities associated with their construction and operation.

Conclusion

The terms of the Bruce Power Deal are dramatically less favourable to the Government of Ontario and electricity ratepayers than those of the natural gas and renewable power contracts.

Recommendation

If, in the future, the Government believes that re-investing in nuclear power may be an appropriate option to meet Ontario's incremental supply needs, the Government should establish a competitive bidding process for new supplies where nuclear suppliers are required to compete on a level playing field with natural gas and renewable power plants.

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The Bruce Power Deal: A Comparative Analysis - Terms and Conditions Summary Chart

	Cost overruns	Price escalators	Fuel cost price escalators	Late penalties	Contract cancellation	Performance standards	Termination Policies	Contract Length	Insurance	Power plant decommissioning and other liabilities
Bruce Power	Can pass on 25-75% of extra capital costs to OPA and rate-payers. For Unit 3, can pass on 100% of capital cost increases (up to \$200 million) identified before refurbishment commences.	Escalated by full CPI when CPI is 0-2.5%. For CPI greater than 2.5%, escalator is 2.5% plus 60% of amount over 2.5%.	Fully covered for "reasonably incurred" fuel costs.	Penalty-free delay – Bruce A Units 1,2 or 3: 3 months Penalties: \$33-\$133.33 per megawatt per day.	If Units 1 or 2 are 33 months late achieving commercial operation, OPA may terminate unit contract If commercial operation for units 3 or 4 is four years late, OPA may terminate unit contract	No output performance standards	No termination penalties	Begins in 2005 and runs to Dec. 31, 2036 (approximately 31 years)	Catastrophic accident liability capped at \$75 million. All additional liabilities assumed by Canadian government.	Government of Ontario 100% responsible for decommissioning and long-term waste storage costs (in part, through costs assumed by Ontario Power Generation).
Natural Gas	Cannot pass on increased capital costs.	Total contract price escalated by 20% of CPI or less. Operating and maintenance costs escalated by full CPI.	Receive gas cost payments equal to spot market price.	No penalty-free delay. Penalties: \$150-\$300 per megawatt per day.	If commercial operation is 18 months late, OPA may terminate contract.	If a natural gas-fired power plant cannot meet strict output performance standards, OPA can terminate the contract.	If contract is cancelled due to poor performance, delay, etc., supplier must pay incremental cost of obtaining replacement power for full contract term.	Contract begins on the day the plant comes into commercial operation and runs for 20 years.	No cap; responsible for own coverage	Operator fully responsible for decommissioning, etc.
Renewable	Cannot pass on increased capital costs.	Total contract price escalated by 15% of CPI.	None	No penalty-free delay. Penalty: \$65 per megawatt per day.	If facility does not achieve commercial operation by Dec. 31, 2008, OPA may terminate contract	No output performance standards	No termination penalties	Contract begins on the day the facility comes into commercial operation and runs for 20 years.	No cap; responsible for own coverage.	Operator fully responsible for decommissioning, etc.

Please see our full *The Bruce Power Deal: A Comparative Analysis* factsheet for more information on the terms and conditions summarized here.