



Submission No 39

Inquiry into Australia's Relations with the Republic of Korea; and Developments on the Korean Peninsula

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**Additional information requested by Joint Standing Committee on Foreign
Affairs, Defence and Trade for Korea Inquiry
31 August 2005**

What is the trend in comparative cost per kilowatt hour across power sources?
(Hansard reference - FADT 82)

Cost of generating electricity:

Generating technologies	Construction costs	Construction times	Levelised generation costs (5% discount rate)	Levelised generation costs (10% discount rate)
Nuclear	1000-2000 US\$/kWe	~4 years	21-31 US\$/MWh	30-50 US\$/MWh
Coal-fired	1000-1500 US\$/kWe	~4 years	25-50 US\$/MWh	35-60 US\$/MWh
Gas-fired	400-800 US\$/kWe	~2-3 years	37-60 US\$/MWh	40-63 US\$/MWh
Solar	~2700- 10200 US\$/kWe	~2-3 years	150 US\$/MWh	200US\$/MWh
Wind	1000-2000 US\$/kWe	1-2 years	35-90 US\$/MWh	45-140 US\$/MWh

Source: NEA/IEA/OECD, 2005. *Projected Costs of Generating Electricity 2005 Update*

Note: The study did not factor in any costs for carbon emissions from fossil fuel generators. The levelised costs is a constant annual cost that is equivalent in present value terms to the actual capital and variable costs of the project. kWe = Kilowatt electric, one thousand watts of electric capacity MWh = Megawatt-hour (1,000,000 watts for one hour).

In the case of uranium we supplied 29 per cent of Korea's import requirements. Do you know where they get the rest from – Canada? (Hansard reference - FADT 83)

In addition to Australia, Korea imports uranium concentrates from Canada, the UK, France, Russia, the US and South Africa.

(Source: *Uranium 2003: Resources, Production and Demand*, A Joint Report by the OECD Nuclear Energy Agency and the International Atomic Energy Agency. Note this is the latest report available.)