


# A nuclear future

Sunday, 27 April 2008



 [zoom](#)

**The UAE has signalled its intention to develop nuclear power as the local grid strains to cope with soaring energy consumption. *Arabian Business* reports on the nuclear race against time, and reveals why the cost of electricity is set to rocket across the region.**

The UAE expects demand for power to triple in the next 12 years - not much longer than the time required to build a nuclear power plant from scratch.

**I believe the UAE would not be enriching uranium — they'd be buying it in under the auspices of the IAEA. But they will undoubtedly have their critics.**

That's why the Gulf state which controls almost 10% of the world's oil reserves has signalled its intention to go nuclear, with plans to invest US\$100m in establishing the Emirates Nuclear Energy Corporation.

As much as 80,000 megawatts of new generating capacity is needed across the region over the next decade - demanding roughly 22 trillion cu ft in additional gas requirements, according to international power consultant PFC Energy.

It is one reason why nuclear energy is now under serious consideration among the Gulf states, which together account for the world's largest gas reserves.

But what of the cost of delivering nuclear power plants at a time when construction and engineering costs are soaring and when other cheaper alternatives exist such as the abundant natural gas lying beneath the desert?

UAE Foreign Minister HH Sheikh Abdullah bin Zayed Al Nahyan stressed the cost and environmental advantages of nuclear power, as the government published its white paper that outlines nuclear ambitions that are still under evaluation.

"In-depth studies carried out by government entities have shown that nuclear energy represents a commercially competitive and environmentally friendly option for the secure generation of electricity in the UAE, particularly in light of projected gas shortages," he said.

As construction costs continue to soar amid a weakening dollar environment, some commentators are questioning why energy-rich countries such as the UAE need to generate nuclear power.

The cost of building a nuclear plant is between 50% and 300% higher than a coal or gas-fired facility, says PFC.

"While the initial construction costs of a nuclear power plant would have typically averaged between US\$1000 to US\$2500 per kilowatt, capital expenditure costs today have soared and can reach US\$8,000 per kilowatt," according to research from the consultant.