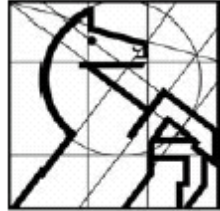




**ENGINEERS
AUSTRALIA**
Western Australia
Division



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Joint Session

[Mechanical Branch]

**The Western Australian Division Branch of the College of Mechanical Engineers
Engineers Australia**

&

[Western Australian Panel]

The Institution of Mechanical Engineers

&

[Western Australian Chapter]

American Society of Mechanical Engineers

NUCLEAR GENERATED POWER

The International Resurgence - Why Not in Australia?

[College of Mechanical Engineers 2006 Eminent Speaker]

Wednesday, 26 April 2006

6.00 – 7.00pm

Auditorium, Engineers Australia

Dr Neil McDonald

Nuclear power generates 16% of the world's electricity. It is a mature, proven technology, competitive in many regions worldwide and ranks among the safest and least environmentally intrusive of generation technologies. Complex energy market and socio-political issues stalled nuclear expansion [outside of Asia] for several decades. Now nuclear's intrinsic economic and environmental benefits are being more clearly recognised by industrial and political leaders in many countries. A number of operating licences are being extended. New, cheaper and safer designs are available with regulatory approval for new construction with several already operating or being built. The speaker will address pertinent aspects of the improved performance of the existing technology and characteristics of the new designs.

Nuclear power has been effectively proscribed by Governments in Australia [which paradoxically has 40% of the world's proven uranium reserves and 20% of the world market]. Nuclear power would not currently be competitive with our low cost fossil generation but should be cheaper than wind and solar and more easily integrated into the grid. The new, cheaper nuclear systems and increased fossil generation costs could alter the situation in the longer term. Difficult issues of waste management and regulation of safety for have technical solutions but require political and industrial leadership for their resolution. Nuclear generation should no longer be precluded from objective assessment in forward energy supply planning. A rational debate of the issues in the Australian context is required. The presentation will contribute as a technical input for such a debate.

Dr Neil McDonald retired in October 2001 after 45 years with Australia's nuclear agencies. His last major task was as Safety and Licensing Manager for ANSTO's Replacement Research Reactor Project. His career commenced as an Atomic Energy Commission Undergraduate Scholar in Metallurgy at the UNSW in 1956. He joined the Commission in 1963 after completing his PhD and has worked on many aspects of nuclear technology including reactor materials, reactor engineering, the nuclear fuel cycle, nuclear safety and regulation and non-proliferation safeguards. Assignments to the UKAEA; as Counsellor [Atomic Energy] in Australia' delegation to the IAEA in Vienna; and with the OECD Nuclear Energy Agency in Paris provided him with a broad international exposure to the nuclear industry. This has been maintained through participation in Government and professional delegations to many international nuclear fora. Dr McDonald sits on the Nuclear Panel and the Fuel and Energy National Committee of Engineers Australia and the Nuclear Safety Committee of ARPANSA, the Federal nuclear safety regulator. He chairs the Technical Program Committee of the 15th Pacific Basin Nuclear Conference to be hosted by the Australian Nuclear Association and Engineers Australia in Sydney, October 2006.

RSVP to Michael King [Mechanical Branch secretary] via email [Michael.King@per.jpkenney.com.au] by no later than close of business on Wednesday 19 April 2006.

Limited parking is available at the WA Division premises. Ample street parking is also available.

Please circulate this notice as widely as possible