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SMR/1315-3

WORKSHOP ON

DESALINATION ECONOMIC EVALUATION

international centre for theoretical physics

30 April - 4 May 2001

Miramare - Trieste, Italy

in cooperation with

The International Atomic Energy Agency (IAEA)

and

the Kuwait Foundation for the Advancement of Sciences (KFAS)

Economic Assessment

Technical Document 1186

Peter J. Gowin International Atomic Energy Agency Vienna, Austria

















Independent of the energy sources and regions considered, in all investigated cases water production costs from MSF appear to be systematically higher than those from RO or MED. If a relatively less stringent drinking water standard, such as WHO rather than EU, is adopted then whatever the energy source, the required desalination capacity or the region, water costs from RO are systematically lower than from other desalination processes. IAEA - P.J. Gowin 2001



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Nuclear desalination with PWRs would be less competitive than fossil desalination for fossil fuel prices below 15 \$/boe. With innovative nuclear reactor options with significant capital cost reductions (as in the case of PHWR and HTR-100, for example) nuclear desalination would remain competitive even for fossil prices below 10 \$/boe. The competitiveness of the nuclear option could become questionable if, assuming fossil cost to be 25 \$/boe (or lower), the capital costs of nuclear power plants are increased by 15-20 %. IAEA - P.J. Gowin 2001



