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From: Joseph Sebrosky - PRR
To: Thomas Bergman - RES
Date: Tue, Apr 30, 2002 8:03 AM
Subject: reactor review status

RLS

Tom,

Attached is an updated table for the reactors that the construction inspection team is considering. I promised in the meeting with Ronaldo to provide you with a copy for your information.

Joe

CC: James Lyons

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TAB 047

DOE Near Term Deployment Candidates and Status

April 30, 2002

Design	Supplier	Size and Type	Key Features	NRC Review Status
Advanced Boiling Water Reactor (ABWR)	General Electric	1,350 MWe BWR	Advanced evolutionary LWR, design certified by NRC and built and operating in Japan.	Certified
SWR-1000	ANP Framatome	1,013 MWe BWR	Advanced BWR design; to meet European Requirements	Initial discussion underway preapplication review possible
European Simplified Boiling Water Reactor (ESBWR)	General Electric	1,380 MWe BWR with passive safety features	Based on earlier passive Simplified Boiling Water Reactor design, but higher in capacity and decreased in physical size per installed KWe	GE requested a preapplication review in a 4/18/02 letter
AP600	Westinghouse	610 MWe PWR with passive safety	Advanced passive PWR, design certified by NRC	Certified
AP1000	Westinghouse	1,090 MWe PWR with passive safety features	Higher capacity version of AP-600; not yet certified	Application received 3/28/02 under acceptance review
European Designed Pressurized Water Reactor (not evaluated in DOE report but a preapplication review is being considered)	ANP Framatome	1000 Mwe range PWR	Based on joint Framatome Siemens Design	ANP will meet with NRC to discuss the design. Preapplication review possible
International Reactor Innovative and Secure (IRIS)	Westinghouse	100-300 MWe PWR	Integral primary system plant design; eliminates classic LOCA accidents.	Preapplication review possible
Pebble Bed Modular Reactor (PBMR)	ESKOM	110 -140 MWe modular pebble bed gascooled reactor	Modular direct cycle helium-cooled pebble bed design, currently planned for construction in South Africa.	Exelon announced it is no longer supporting design work. Staff evaluating effect on budget
Gas Turbine Modular Helium Reactor (GT-MHR)	General Atomics	288 MWe prismatic graphite moderated gas-cooled reactor	Modular direct cycle helium-cooled reactor being licensed for construction in Russia, for power production and disposition of excess Russian weapons-grade plutonium.	Preapplication review underway