

World Nuclear Power Reactors 2006-08 and Uranium Requirements

20 March 2008

	NUCLEAR ELECTRICITY GENERATION 2006		REACTORS OPERABLE March 2008		REACTORS UNDER CONSTRUCTION March 2008		REACTORS PLANNED March 2008		REACTORS PROPOSED March 2008		URANIUM REQUIRED 2008
	billion kWh	% e	No.	MWe	No.	MWe	No.	MWe	No.	MWe	tonnes U
Argentina	7.2	6.9	2	935	1	692	1	740	1	740	123
Armenia	2.4	42	1	376	0	0	0	0	1	1000	51
Bangladesh	0	0	0	0	0	0	0	0	2	2000	0
Belarus	0	0	0	0	0	0	2	2000	0	0	0
Belgium	44.3	54	7	5728	0	0	0	0	0	0	1011
Brazil	13	3.3	2	1901	0	0	1	1245	4	4000	303
Bulgaria	18.1	44	2	1906	0	0	2	1900	0	0	261
Canada*	92.4	16	18	12652	2	1500	3	3500	5	5100	1665
China	51.8	1.9	11	8587	6	5540	29	31000	86	68000	1396
Czech Republic	24.5	31	6	3472	0	0	0	0	2	1900	619
Egypt	0	0	0	0	0	0	0	0	1	1000	0
Finland	22	28	4	2696	1	1600	0	0	1	1000	1051
France	428.7	78	59	63473	1	1630	0	0	1	1600	10527
Germany	158.7	32	17	20339	0	0	0	0	0	0	3332
Hungary	12.5	38	4	1826	0	0	0	0	2	2000	271
India	15.6	2.6	17	3779	6	2976	10	8560	9	4800	978
Indonesia	0	0	0	0	0	0	2	2000	0	0	0
Iran	0	0	0	0	1	915	2	1900	1	300	143
Israel	0	0	0	0	0	0	0	0	1	1200	0
Japan	291.5	30	55	47577	2	2285	11	14945	1	1100	7569
Kazakhstan	0	0	0	0	0	0	0	0	1	300	0
Korea DPR (North)	0	0	0	0	0	0	1	950	0	0	0

Korea RO (South)	141.2	39	20	17533	3	3000	5	6600	0	0	3109
Lithuania	8	69	1	1185	0	0	0	0	2	3200	225
Mexico	10.4	4.9	2	1310	0	0	0	0	2	2000	246
Netherlands	3.3	3.5	1	485	0	0	0	0	0	0	98
Pakistan	2.6	2.7	2	400	1	300	2	600	2	2000	65
Romania	5.2	9	2	1310	0	0	2	1310	1	655	174
Russia	144.3	16	31	21743	7	4920	8	9600	20	18200	3365
Slovakia	16.6	57	5	2064	2	840	0	0	0	0	313
Slovenia	5.3	40	1	696	0	0	0	0	1	1000	141
South Africa	10.1	4.4	2	1842	0	0	1	165	24	4000	303
Spain	57.4	20	8	7442	0	0	0	0	0	0	1398
Sweden	65.1	48	10	9016	0	0	0	0	0	0	1418
Switzerland	26.4	37	5	3220	0	0	0	0	3	4000	537
Thailand	0	0	0	0	0	0	0	0	4	4000	0
Turkey	0	0	0	0	0	0	0	0	3	4500	0
Ukraine	84.8	48	15	13168	0	0	2	1900	20	27000	1974
United Kingdom	69.2	18	19	11035	0	0	0	0	0	0	2199
USA	787.2	19	104	99049	0	0	7	10180	25	32000	18918
Vietnam	0	0	0	0	0	0	0	0	2	2000	0
WORLD**	2658	16	439	371,989	35	28,798	91	99,095	228	198,995	64,615
	billion kWh	% e	No.	MWe	No.	MWe	No.	MWe	No.	MWe	tonnes U
	NUCLEAR ELECTRICITY										URANIUM
	GENERATION 2006		REACTORS OPERATING		REACTORS BUILDING		ON ORDER or PLANNED		PROPOSED		REQUIRED

Sources:

Reactor data: WNA to 14/1/08.

IAEA- for nuclear electricity production & percentage of electricity (% e) 5/07.

WNA: Global Nuclear Fuel Market 2007 (2008 reference scenario) - for U. Includes first cores for new reactors.

Operating = Connected to the grid;

Building/Construction = first concrete for reactor poured, or major refurbishment under way (* In Canada, 'construction' figure is 2 laid-up Bruce A reactors);

Planned = Approvals, funding or major commitment in place, mostly expected in operation within 8 years, or construction well advanced but suspended indefinitely;

Proposed = clear intention or proposal but still without firm commitment. Planned and Proposed are generally gross MWe.

TWh = Terawatt-hours (billion kilowatt-hours), MWe = Megawatt net (electrical as distinct from thermal), kWh = kilowatt-hour

NB: 64,615 tU = 76,200 t U₃O₈