



Nuclear Power Reactors in the World



IAEA

International Atomic Energy Agency

REFERENCE DATA SERIES No. 2

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INTRODUCTION

This is the twenty-eighth edition of Reference Data Series No. 2, *Nuclear Power Reactors in the World*, which is published once per year, to present the most recent reactor data available to the Agency. It contains the following summarized information:

- General information as of the end of 2007 on power reactors operating or under construction, and shut down;
- Performance data on reactors operating in the Agency's Member States, as reported to the IAEA.

The Agency's Power Reactor Information System (PRIS) is a comprehensive data source on nuclear power reactors in the World. It includes specification and performance history data of operating reactors as well as reactors under construction or reactors being decommissioned. PRIS data are collected by the Agency through the designated national correspondents of Member States.

PRIS outputs are available in the annual publications and on the PRIS web site

<http://www.iaea.org/dbpage>.

Detail outputs are accessible to registered users through on-line applications. Enquiries should be addressed to:

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DEFINITIONS

Performance Factors

$$\text{EAF (\%)} = \frac{(\text{REG} - \text{PEL} - \text{UEL} - \text{XEL})}{\text{REG}} \times 100$$

$$\text{UCF (\%)} = \frac{(\text{REG} - \text{PEL} - \text{UEL})}{\text{REG}} \times 100$$

$$\text{UCL (\%)} = \frac{\text{UEL}}{\text{REG}} \times 100$$

$$\text{PCL (\%)} = \frac{\text{PEL}}{\text{REG}} \times 100$$

$$\text{LF (\%)} = \frac{\text{EG}}{\text{REG}} \times 100$$

$$\text{OF (\%)} = \frac{\text{Online Hours}}{\text{Total Hours}} \times 100$$

where

EAF is the energy availability factor, expressed in per cent.

UCF is the unit capability factor, expressed in per cent.

UCL is the unplanned capability loss factor, expressed in per cent.

PCL is the planned capability loss factor, expressed in per cent.

LF is the load factor, expressed in per cent.

OF is the operating factor, expressed in per cent.

REG reference energy generation: is the net electrical energy [MW·h], which would have been supplied when a unit is continuously operated at the reference unit power during the entire reference period.

- PEL planned energy loss: is the energy [MW·h] that was not supplied during the period because of planned shutdowns or load reductions due to causes under plant management control. Energy losses are considered planned if they are scheduled at least four weeks in advance.
- UEL unplanned energy loss: the energy [MW·h] that was not supplied during the period because of unplanned shutdowns, outage extensions, or load reductions due to causes under plant management control. Energy losses are considered to be unplanned if they are not scheduled at least four weeks in advance.
- XEL external energy loss: the energy [MW·h], that was not supplied due to constraints reducing plant availability and being beyond plant management control.
- EG the net electrical energy supplied during the reference period as measured at the unit outlet terminals, i.e. after deducting the electrical energy taken by unit auxiliaries and the losses in transformers that are considered integral parts of the unit.

Construction Start

Date when first major placing of concrete, usually for the base mat of the reactor building, is done.

First Criticality

Date when the reactor is made critical for the first time.

Grid Connection

Date when the plant is first connected to the electrical grid for the supply of power. After this date, the plant is considered to be in operation.

Commercial Operation

Date when the plant is handed over by the contractors to the owner and declared officially to be in commercial operation.

Permanent Shutdown

Date when the plant is officially declared to be shut down by the owner and taken out of operation permanently.

Long-term Shutdown

A unit is considered in the long-term shutdown status, if it has been shut down for an extended period (usually several years) without any firm recovery schedule at the beginning but there is the intention to re-start the unit eventually.

Units and Energy Conversion

1 terawatt-hour [TW·h] = 10^6 megawatt-hours [MW·h].

For an average power plant,

1 TW·h = 0.39 megatonnes of coal equivalent (input)
= 0.23 megatonnes of oil equivalent (input).

TABLE 1. REACTORS IN OPERATION, LONG-TERM SHUTDOWN AND UNDER CONSTRUCTION, 31 DEC. 2007

Country	Reactors in Operation		Long-term Shutdown Reactors		Reactors under Construction		Nuclear Electricity Supplied in 2007	
	No of Units	Total MW(e)	No of Units	Total MW(e)	No of Units	Total MW(e)	TW(e).h	% of Total
ARGENTINA	2	935			1	692	6.72	6.20
ARMENIA	1	376					2.35	43.48
BELGIUM	7	5824					45.85	54.05
BRAZIL	2	1795					11.65	2.84
BULGARIA	2	1906			2	1906	13.69	32.10
CANADA	18	12610	4	2726	5	4220	88.19	14.70
CHINA	11	8572					59.30	1.92
CZECH REP.	6	3619					24.64	30.25
FINLAND	4	2696			1	1600	22.51	28.94
FRANCE	59	63260			1	1600	420.13	76.85
GERMANY	17	20430					133.21	27.28
HUNGARY	4	1829					13.86	36.81
INDIA	17	3782			6	2910	15.76	2.52
IRAN, ISL. REP.					1	915	NA	NA
JAPAN	55	47587			1	866	267.34	27.54
KOREA REP.	20	17451	1	246	3	2880	136.60	35.34
LITHUANIA	1	1185					9.07	64.36
MEXICO	2	1360					9.95	4.56
NETHERLANDS	1	482					3.99	4.10
PAKISTAN	2	425			1	300	2.31	2.34
ROMANIA	2	1305					7.08	13.02
RUSSIAN FED.	31	21743			6	3639	147.99	15.97
SLOVAKIA	5	2034					14.16	54.30
SLOVENIA	1	666					5.43	41.57
SOUTH AFRICA	2	1800					12.60	5.45
SPAIN	8	7450					52.71	17.44
SWEDEN	10	9034					64.31	46.12
SWITZERLAND	5	3220					26.49	40.03

TABLE 1. REACTORS IN OPERATION, LONG-TERM SHUTDOWN AND UNDER CONSTRUCTION, 31 DEC. 2007 — continued

Country	Reactors in Operation		Long-term Shutdown Reactors		Reactors under Construction		Nuclear Electricity Supplied in 2007	
	No of Units	Total MW(e)	No of Units	Total MW(e)	No of Units	Total MW(e)	TW(e).h	% of Total
UK	19	10222					57.52	15.12
UKRAINE	15	13107			2	1900	87.22	48.09
USA	104	100582			1	1165	806.55	19.39
TOTAL	439	372208	5	2972	33	27193	2608.14	NA

Note: The total includes the following data from Taiwan, China:

— 6 units, 4921 MW(e) in operation; 2 units, 2600 MW(e) under construction;

— 38.96 TW(e).h of nuclear electricity generation, representing 19.30% of the total electricity generated there;

The total share is related only to the countries with NPPs in operation

TABLE 2. TYPE AND NET ELECTRICAL POWER OF REACTORS CONNECTED TO THE GRID, 31 DEC. 2007

Country	PWR		BWR		GCR		PHWR		LWGR		FBR		Total	
	No.	MW(e)	No.	MW(e)	No.	MW(e)	No.	MW(e)	No.	MW(e)	No.	MW(e)	No.	MW(e)
ARGENTINA							2	935					2	935
ARMENIA	1	376											1	376
BELGIUM	7	5824											7	5824
BRAZIL	2	1795											2	1795
BULGARIA	2	1906											2	1906
CANADA							18	12610					18	12610
CHINA	9	7272					2	1300					11	8572
CZECH REP.	6	3619											6	3619
FINLAND	2	976	2	1720									4	2696
FRANCE	58	63130									1	130	59	63260
GERMANY	11	13973	6	6457									17	20430
HUNGARY	4	1829											4	1829
INDIA			2	300			15	3482					17	3782
JAPAN	23	18420	32	29167									55	47587
KOREA REP.	16	14824					4	2627					20	17451
LITHUANIA									1	1185			1	1185
MEXICO			2	1360									2	1360
NETHERLANDS	1	482											1	482
PAKISTAN	1	300											2	425
ROMANIA													2	425
RUSSIA	15	10964											2	1305
SLOVAKIA	5	2034											31	21743
SLOVENIA	1	666											5	2034
SOUTH AFRICA	2	1800											1	666
SPAIN	6	5940											2	1800
SWEDEN	3	2819	7	6215									8	7450
SWITZERLAND	3	1700	2	1520									10	9034
UK	1	1188					18	9034					5	3220
UKRAINE	15	13107											19	10222
USA	69	66697	35	33885									15	13107
TOTAL	265	243421	94	85275	18	9034	44	22384	16	11404	2	690	439	372208

The totals include 6 units, 4921 MW(e) in Taiwan, China.

During 2007, 3 reactors, 1852 MW(e) were newly connected to the grid.

TABLE 3. TYPE AND NET ELECTRICAL POWER OF REACTORS UNDER CONSTRUCTION, 31 DEC. 2007

Country	PWR		BWR		PHWR		LWGR		FBR		Total	
	No.	MW(e)	No.	MW(e)	No.	MW(e)	No.	MW(e)	No.	MW(e)	No.	MW(e)
ARGENTINA					1	692					1	692
BULGARIA	2	1906									2	1906
CHINA	5	4220									5	4220
FINLAND	1	1600									1	1600
FRANCE	1	1600									1	1600
INDIA	2	1834			3	606			1	470	6	2910
IRAN,ISL.REP	1	915									1	915
JAPAN	1	866									1	866
KOREA REP.	3	2880									3	2880
PAKISTAN	1	300									1	300
RUSSIAN FEDERATION	4	1964					1	925	1	950	6	3839
UKRAINE	2	1900									2	1900
USA	1	1165									1	1165
TOTAL	24	21150	(*) 2	2600	4	1298	1	925	2	1420	33	27393

(*) The totals include 2 units (2x BWR), 2600 MW(e) in Taiwan, China. During 2007, 7 reactors, 5194 MW(e) started construction.

TABLE 4. REACTOR YEARS OF EXPERIENCE, UP TO 31 DEC. 2007

Country	Reactors Connected to the Grid		Long-term Shutdown Reactors		Permanently Shutdown Reactors		Total, Operating and Shutdown Reactors			
	No	Capacity MW(e) Net	No	Capacity MW(e) Net	No	Capacity MW(e) Net	No	Capacity MW(e) Net	Experience Years	Months
	ARGENTINA	2	935					2	935	58
ARMENIA	1	376			1	376	1	752	33	8
BELGIUM	7	5824			1	10	1	5834	219	7
BRAZIL	2	1795					2	1795	33	3
BULGARIA	2	1906			4	1632	4	3538	143	3
CANADA	18	12610	4	2726	3	478	25	15814	546	1
CHINA	11	8572					11	8572	77	3
CZECH REP.	6	3619					6	3619	98	10
FINLAND	4	2696					4	2696	115	4
FRANCE	59	63260			11	3748	70	67008	1582	2
GERMANY	17	20430			19	5879	36	26309	717	5
HUNGARY	4	1829					4	1829	90	2
INDIA	17	3782					17	3782	284	4
ITALY	55	47687			4	1423	4	1423	81	8
JAPAN	20	17451	1	246	3	297	59	48130	1331	8
KAZAKHSTAN	1	1185			1	52	1	52	25	10
KOREA REP.	1	1360			1	1185	2	17451	299	8
LITHUANIA	2	482					2	2370	41	6
MEXICO	1	425			1	55	2	1360	31	11
NETHERLANDS	2	1305					2	537	63	10
PAKISTAN	2	21743			2	425	2	425	43	10
ROMANIA	31	2034			5	786	2	1305	11	11
RUSSIAN FED.	5	666			2	501	36	22529	932	3
SLOVAKIA	1	1800					7	2535	123	7
SLOVENIA	2	7450			2	621	1	666	26	3
SOUTH AFRICA	8	9034			2	1225	2	1800	46	3
SPAIN	10				3		10	8071	253	6
SWEDEN							13	10259	352	6

TABLE 4. REACTOR YEARS OF EXPERIENCE, UP TO 31 DEC. 2007 — continued

Country	Reactors Connected to the Grid		Long-term Shutdown Reactors		Permanently Shutdown Reactors		Total, Operating and Shutdown Reactors			
	No	Capacity MW(e) Net	No	Capacity MW(e) Net	No	Capacity MW(e) Net	No	Capacity MW(e) Net	Experience Years	Months
SWITZERLAND	5	3220					5	3220	163	10
UK	19	10222			26	3666	45	13888	1419	8
UKRAINE	15	13107			4	3515	19	16622	338	6
USA	104	100582			28	9764	132	110346	3291	9
TOTAL	439	372208	5	2972	119	35213	563	410393	13036	5

Notes:

1. The total includes the following data from Taiwan, China:
— reactors connected to the grid: 6 units, 4921 MW(e), 158 years 1 month.
2. Operating Experience counted from grid connection and a long-term shutdown period is excluded.

TABLE 5. OPERATING REACTORS AND NET ELECTRICAL POWER, 1980 TO 2007

Country	Number of Units and Net Capacity (MW(e)) Connected to the Grid at 31st Dec. of Each Year															
	1980		1985		1990		1995		2000		2005		2006		2007	
	No.	MW(e)	No.	MW(e)	No.	MW(e)	No.	MW(e)	No.	MW(e)	No.	MW(e)	No.	MW(e)	No.	MW(e)
ARGENTINA	1	335	2	935	2	935	2	935	2	978	2	935	2	935	2	935
ARMENIA	2	816	2	816	1	376	1	376	1	376	1	376	1	376	1	376
BELGIUM	4	1670	8	5464	7	5631	7	5631	7	5712	7	5801	7	5824	7	5824
BRAZIL			1	626	1	626	1	626	1	1976	2	1901	2	1901	2	1795
BULGARIA	3	1224	4	1632	5	2585	6	3538	6	3760	4	2722	2	1906	2	1906
CANADA	10	5172	16	9741	20	13993	21	14902	14	9998	18	12584	18	12610	18	12610
CHINA			1	391	4	1632	3	2188	3	2188	9	6587	10	7572	11	8572
CZECH REP.			1	391	4	1632	4	1782	5	2578	6	3373	6	3523	6	3619
FINLAND	4	2208	4	2300	4	2310	4	2310	4	2656	4	2676	4	2696	4	2696
FRANCE	22	14388	43	37478	56	58808	56	58573	59	63183	59	63363	59	63260	59	63260
GERMANY	19	10323	24	18110	21	21250	19	20972	19	21283	17	20339	17	20339	17	20430
HUNGARY			2	825	4	1710	4	1729	4	1729	4	1755	4	1755	4	1829
ITALY	4	832	6	1143	7	1324	10	1746	14	2508	15	2993	16	3577	17	3782
JAPAN	4	1112	3	1273												
JAPAN	23	14918	33	23612	41	30867	51	39871	52	43262	55	47593	55	47587	55	47587
KAZAKHSTAN	1	135	1	135	1	135	1	50								
KOREA REP.	1	564	5	3580	9	7220	11	9115	16	12990	20	16810	20	17454	20	17451
LITHUANIA			1	1380	2	2760	2	2370	2	2370	1	1185	1	1185	1	1185
MEXICO			1	640	1	640	2	1256	2	1290	2	1360	2	1360	2	1360
NETHERLANDS	2	498	2	508	2	539	2	510	1	449	1	450	1	482	1	482
PAKISTAN	1	125	1	137	1	125	1	125	2	425	2	425	2	425	2	425
ROMANIA			1	655	1	655	1	655	1	655	1	655	1	655	1	655
RUSSIAN FED.	20	8596	28	15841	29	18898	30	19848	30	19848	31	21743	31	21743	31	21743
SLOVAK REP.	2	780	4	1632	4	1632	4	1632	6	2440	6	2442	5	2034	5	2034
SLOVENIA			1	632	1	620	1	620	1	676	1	656	1	666	1	666
SOUTH AFRICA			2	1840	2	1840	2	1840	2	1840	2	1800	2	1800	2	1800
SOUTH AFRICA	3	1073	8	5608	9	7099	9	7099	9	7468	9	7591	8	7450	8	7450
SPAIN	8	5515	12	9455	12	9919	12	10058	11	9417	10	8916	10	9097	10	9034
SWEDEN	4	1940	5	2881	5	2942	5	3056	5	3170	5	3220	5	3220	5	3220
SWITZERLAND																

TABLE 5. OPERATING REACTORS AND NET ELECTRICAL POWER, 1980 TO 2007 — continued

Country	Number of Units and Net Capacity (MW(e)) Connected to the Grid at 31st Dec. of Each Year															
	1980		1985		1990		1995		2000		2005		2006		2007	
	No.	MW(e)	No.	MW(e)	No.	MW(e)	No.	MW(e)	No.	MW(e)	No.	MW(e)	No.	MW(e)	No.	MW(e)
UK	33	8686	38	12485	37	13496	35	13718	33	13059	23	11852	19	10965	19	10222
UKRAINE	3	2286	10	8324	15	13020	15	13045	13	11195	15	13107	15	13107	15	13107
USA	69	50881	90	74401	108	96228	108	98068	103	96297	103	98145	103	99257	104	100582
WORLD	245	135285	363	248075	416	320482	435	342471	435	350660	441	368239	435	369682	439	372208

Note: The world total includes the following data from Taiwan, China:

- 1980: 2 units, 1208 MW(e), 1985: 6 units, 4890 MW(e), 1990: 6 units, 4828 MW(e), 1995: 6 units, 4884 MW(e), 2000: 6 units, 4884 MW(e), 2005: 6 units, 4884 MW(e), 2006: 6 units, 4921 MW(e), 2007: 6 units, 4921 MW(e).
 Estimates for 2008 based on current expected grid connection dates for reactors under construction as of 31 December 2007.

TABLE 6. NUCLEAR ELECTRICITY PRODUCTION AND SHARE FROM 1980 TO 2007

Country	Nuclear capacity (TW(e).h) of reactors connected to the Grid at 31st Dec. of the year															
	1980		1985		1990		1995		2000		2005		2006		2007	
	TW(e).h	% of Total	TW(e).h	% of Total	TW(e).h	% of Total	TW(e).h	% of Total	TW(e).h	% of Total	TW(e).h	% of Total	TW(e).h	% of Total	TW(e).h	% of Total
ARGENTINA	2.18	NA	5.25	11.73	6.72	19.78	6.57	11.79	5.74	7.26	6.37	6.92	7.15	6.93	6.72	6.20
ARMENIA	11.86	NA	29.25	59.78	40.59	60.12	39.30	55.52	45.81	33.00	2.50	42.74	2.42	41.95	2.35	43.48
BELGIUM			3.17	1.65	2.06	0.96	2.33	0.97	5.59	1.87	9.20	2.46	12.98	3.31	11.65	54.05
BRAZIL	5.71	NA	12.17	31.60	13.51	35.73	16.22	46.43	16.79	45.00	17.38	44.10	18.15	43.64	13.69	32.10
BULGARIA	38.02	NA	59.47	12.73	69.87	14.77	93.98	17.26	69.12	11.77	86.83	14.54	92.44	15.80	88.19	14.70
CANADA							12.13	1.24	16.02	1.19	50.33	2.03	51.81	1.93	59.30	1.92
CHINA			1.99	NA	11.77	NA	12.23	20.04	12.70	18.69	23.25	30.52	24.50	31.48	24.64	30.25
CZECH REP.	6.68	NA	17.98	38.19	18.13	35.05	18.13	29.91	21.58	32.15	22.36	32.91	22.00	27.99	22.51	28.94
FRANCE	57.31	NA	213.26	64.82	297.61	74.52	358.71	76.14	395.39	76.40	431.17	78.46	429.82	78.07	420.13	76.85
GERMANY	41.44	NA	119.59	31.21	139.37	33.10	146.13	29.64	160.66	30.57	154.61	31.08	158.71	31.42	133.21	25.86
HUNGARY			6.10	23.62	12.89	51.42	13.20	42.30	13.35	40.60	13.02	37.15	12.51	37.70	13.86	36.81
HUNGARY	2.77	NA	3.87	2.19	5.29	2.15	6.99	1.89	14.23	3.14	15.73	2.83	15.59	2.62	15.76	2.52
INDIA	2.11	NA	6.46	3.80												
ITALY	79.11	NA	145.37	22.67	187.19	27.10	274.71	33.40	305.67	33.82	280.50	29.33	291.54	29.97	267.34	27.54
JAPAN							0.08	0.13								
KAZAKHSTAN																
KOREA REP.	3.26	NA	12.14	23.21	50.26	49.11	60.21	36.10	103.54	40.74	137.59	44.67	141.18	38.64	136.60	35.34
LITHUANIA			8.75	NA	15.70	NA	10.64	86.08	7.42	73.88	9.54	70.26	7.94	69.74	9.07	64.36
MEXICO					2.78	2.57	7.53	6.00	7.92	3.86	10.32	5.01	10.40	4.86	9.95	4.56
NETHERLANDS	3.97	NA	3.69	6.09	3.29	4.85	3.78	4.89	3.70	4.31	3.77	3.92	3.27	3.47	3.99	4.10
PAKISTAN	0.07	0.45	0.26	1.02	0.38	1.06	0.46	0.88	0.90	1.65	2.41	2.80	2.55	2.74	2.31	2.34
ROMANIA									5.05	10.86	5.11	8.58	5.18	9.00	7.08	13.02
RUSSIAN FED.	43.78	NA	88.26	NA	109.62	NA	91.59	11.79	120.10	14.95	137.64	15.78	144.65	15.91	147.99	15.97
SLOVAK REP.	4.52	NA	8.70	NA	11.16	NA	11.35	44.14	15.17	53.43	16.34	56.06	16.60	57.16	14.16	54.30
SLOVENIA			3.85	NA	4.39	NA	4.57	39.46	4.55	37.38	5.61	42.36	5.29	40.26	5.43	41.57
SOUTH AFRICA									11.29	6.48	12.24	5.52	10.07	4.41	12.60	5.45
SPAIN	4.98	NA	26.83	24.03	51.98	35.87	53.49	34.06	59.49	27.63	54.99	19.56	57.43	19.82	52.71	17.44
SWEDEN	25.42	NA	55.95	42.33	65.27	45.92	67.19	46.55	51.88	39.00	69.64	44.93	65.05	47.98	64.31	46.12
SWITZERLAND	13.63	NA	21.28	39.81	22.40	42.56	23.58	39.92	25.05	38.18	22.11	38.02	26.37	42.23	26.49	40.03

TABLE 6. NUCLEAR ELECTRICITY PRODUCTION AND SHARE FROM 1980 TO 2007 — continued

Country	Nuclear capacity (TW(e).h) of reactors connected to the Grid at 31st Dec. of the year															
	1980		1985		1990		1995		2000		2005		2006		2007	
	TW(e).h	% of Total	TW(e).h	% of Total	TW(e).h	% of Total	TW(e).h	% of Total	TW(e).h	% of Total	TW(e).h	% of Total	TW(e).h	% of Total	TW(e).h	% of Total
UK	32.32	NA	53.73	19.59	58.77	19.72	70.64	25.38	72.99	21.93	75.34	19.86	69.38	18.11	57.52	15.12
UKRAINE	6.38	NA	35.81	NA	71.26	NA	65.78	37.83	72.56	47.28	83.40	48.48	84.91	47.53	87.22	48.09
USA	249.84	NA	378.68	15.54	578.12	20.56	673.52	22.49	755.55	19.83	783.35	19.28	786.31	19.42	806.55	19.39
WORLD	635.36		1327.25		1890.39		2190.13		2440.36		2626.39		2660.83		2608.14	

Note: The world total includes the following data from Taiwan, China:

- 1990: 31.54 TW(e).h of nuclear electricity generation, representing 38.32% of the total electricity generated there
- 1995: 33.8 TW(e).h of nuclear electricity generation, representing 28.79% of the total electricity generated there
- 2000: 37 TW(e).h of nuclear electricity generation, representing 23.64% of the total electricity generated there
- 2005: 38.4 TW(e).h of nuclear electricity generation, representing 20.25% of the total electricity generated there
- 2006: 38.32 TW(e).h of nuclear electricity generation, representing 19.49% of the total electricity generated there
- 2007: 38.96 TW(e).h of nuclear electricity generation, representing 19.3% of the total electricity generated there

TABLE 7. ANNUAL CONSTRUCTION STARTS AND CONNECTIONS TO THE GRID, 1954 TO 2007

Year	Construction Starts		Connections to the Grid		Reactors in operation	
	Units	MW(e)	Units	MW(e)	Units	MW(e)
1954	1	60	1	5	1	5
1955	8	352			1	5
1956	5	581	1	50	2	55
1957	13	1747	3	134	5	189
1958	6	434	1	50	6	239
1959	7	906	5	238	11	477
1960	11	918	4	452	15	929
1961	7	1391	1	15	16	946
1962	7	1237	9	893	25	1839
1963	5	2100	9	456	33	2271
1964	9	2826	8	1036	40	3232
1965	9	3174	8	1681	48	4913
1966	15	7070	8	1375	55	6279
1967	25	15019	11	2107	64	8310
1968	32	22409	6	1063	68	9334
1969	18	12499	10	3670	78	13004
1970	34	23456	6	3539	84	18986
1971	14	8626	16	7768	99	26631
1972	30	23353	16	8538	113	35286
1973	27	23280	20	11696	132	45953
1974	27	23577	26	16878	154	63290
1975	32	30183	15	9760	169	72709
1976	33	30817	19	13533	186	86162
1977	19	16766	18	12889	200	98696
1978	14	13103	20	15496	219	114213
1979	25	22127	8	6889	225	120102
1980	20	19254	21	15170	245	135285
1981	15	14123	23	20391	267	156098
1982	14	15629	19	14997	284	170790
1983	9	7569	23	18921	306	190067
1984	7	7045	33	30878	336	220865
1985	13	11224	33	30631	363	248075
1986	7	5442	27	26876	389	274438
1987	7	6820	22	22002	407	298233
1988	5	5836	14	13618	416	307457
1989	6	4014	12	10397	420	314333
1990	4	2417	10	10531	416	320482
1991	2	2246	4	3668	415	323865
1992	3	3092	6	4799	418	327202
1993	4	3535	9	9026	427	335853
1994	2	1300	5	4164	429	338860
1995			5	3529	434	342225
1996	1	610	6	6974	438	348140
1997	5	4386	3	3555	433	348321
1998	3	2111	4	2978	430	345859
1999	4	4560	4	2704	432	348297
2000	6	5332	6	3180	435	350660
2001	1	1304	3	2696	438	353424
2002	5	2440	6	5036	439	357831
2003	1	202	2	1625	437	360084
2004	2	1336	5	4785	438	364807
2005	3	2900	4	3821	441	368239
2006	4	3520	2	1490	435	369682
2007	7	5194	3	1852	439	372208

TABLE 8. NUMBER OF NEW REACTORS CONNECTED TO THE GRID AND MEDIAN CONSTRUCTION TIME SPAN

Country	1976 to 1980		1981 to 1985		1986 to 1990		1991 to 1995		1996 to 2000		2001 to 2005		2006		2007	
	No.	Months	No.	Months	No.	Months	No.	Months	No.	Months	No.	Months	No.	Months	No.	Months
ARGENTINA			1	109												
ARMENIA	2	73														
BELGIUM			4	80												
BRAZIL			1	132						1	295					
BULGARIA	1	87			1	89		1	113							
CANADA	4	69			5	101		2	97							
CHINA			7	98				3	73							
CZECH REP.																
FINLAND	4	63			1	74										
FRANCE	13	66			24	68										
GERMANY	9	68			7	100		3	93							
HUNGARY			2	112												
INDIA	1	152			2	154										
ITALY	1	101														
JAPAN	11	61			10	46										
KOREA REP.	1	59			4	65										
LITHUANIA			1	80												
MEXICO					1	116										
PAKISTAN					1	151										
ROMANIA																
RUSSIAN FED.	6	74			9	73										
SLOVAKIA	2	89			2	99										
SLOVENIA			1	80												
SOUTH AFRICA			2	102												
SPAIN			5	112												
SWEDEN	3	85			4	74										
SWITZERLAND	1	63			1	125										

Note: Construction time is measured from the first pouring of basement concrete to the first grid connection of the unit.

TABLE 8. NUMBER OF NEW REACTORS CONNECTED TO THE GRID AND MEDIAN CONSTRUCTION TIME SPAN — continued

Country	1976 to 1980	1981 to 1985	1986 to 1990	1991 to 1995	1996 to 2000	2001 to 2005	2006	2007
	No. Months	No. Months	No. Months	No. Months	No. Months	No. Months	No. Months	No. Months
UK	4	6	4	1				
UKRAINE	3	7	6	1				
USA	18	25	22	1	1	2		
					278	227		
TOTAL	86	131	85	29	23	20	2	3
					146	64	77	80

Note: Construction time is measured from the first pouring of basement concrete to the first grid connection of the unit.

The totals include the following data from Taiwan, China:

— 1976 to 1980: 2 units, 64 Months

— 1981 to 1985: 4 units, 72 Months

TABLE 9. CONSTRUCTION STARTS DURING 2007

Country	Reactor		Type	Model	Capacity [MW]			Operator	NSSS Supplier	Construction start	Grid Connection	Commercial Operation
	Code	Name			Thermal	Gross	Net					
CHINA	CN-15	QINSHAN 2-4	PWR	CNP 600	1930	650	610	NPQJVC	CNNC	2007-1	2011-9	2012-1
	CN-20	HONGYANHE 1	PWR	CPR-1000	2905	1080	1000	LHNPC	DFEC	2007-8	—	—
FRANCE	FR-74	FLAMANVILLE-3	PWR	EPR	4300	1650	1600	EDF	FRAM	2007-12	2012-5	—
KOREA REP.	KR-22	SHIN-KORI-2	PWR	OPR-1000	2825	1000	960	KHNP	DHICKOPC	2007-6	2011-8	2011-12
	KR-23	SHIN-WOLSONG-1	PWR	OPR-1000	2825	1000	960	KHNP	DHICKOPC	2007-11	2011-5	2011-10
RUSSIAN FED.	RU-151	SEVERODVINSK 1	PWR	KL-40S 'FI	150	35	32	REA	FAEA	2007-4	—	2010-12
	RU-152	SEVERODVINSK 2	PWR	KL-40S 'FI	150	35	32	REA	FAEA	2007-4	—	2010-12

During 2007, 7 reactors (5194 MW) started construction.

TABLE 10. CONNECTIONS TO THE GRID DURING 2007

Country	Reactor		Type	Model	Capacity [MW]			Operator	NSSS Supplier	Construction Start	First Criticality	Grid Connection
	Code	Name			Thermal	Gross	Net					
CHINA	CN-11	TIANWAN 2	PWR	VVER V-428	3000	1000	1000	JNPC	IZ	2000-10	2007-5	2007-5
INDIA	IN-15	KAIGA-3	PHWR	Horizontal Pre	800	220	202	NPCIL	NPCIL	2002-3	2007-2	2007-4
ROMANIA	RO-2	CERNAVODA-2	PHWR	CANDU 6	2180	706	650	SNN	AECL	1983-7	2007-5	2007-8

During 2007, 3 reactors (1852 MW(e)) were newly connected to the grid.

TABLE 11. SCHEDULED CONNECTIONS TO THE GRID DURING 2008

Country	Reactor		Type	Capacity [MW]			Operator	NSSS Supplier	Construction Start	First Criticality	Grid Date
	Code	Name		Thermal	Gross	Net					
INDIA	IN-16	KAIGA-4	PHWR	800	220	202	NPCIL	NPCIL	2002-5	2008-6	2008-7
	IN-19	RAJASTHAN-5	PHWR	0	220	202	NPCIL	NPCIL	2002-9	2008-5	2008-6
	IN-20	RAJASTHAN-6	PHWR	0	220	202	NPCIL	NPCIL	2003-1	2008-11	2008-12

During 2008, 3 reactors (606 MW(e)) are expected to achieve grid connection.

TABLE 12. REACTORS PLANNED FOR CONSTRUCTION AS KNOWN ON 31 DEC. 2007

Country	Reactor		Type	Model	Capacity [MW]			Operator	NSSS Supplier	Expected Construction Start
	Code	Name			Thermal	Gross	Net			
BRAZIL	BR-3	ANGRA-3	PWR		3765	1350	1275	ELETRONU	KWU	—
CHINA	CN-28	FANGJIASHAN 1	PWR	CPR-1000						—
	CN-29	FANGJIASHAN 2	PWR	CPR-1000						—
	CN-30	FUQING 1	PWR	CPR-1000						—
	CN-31	FUQING 2	PWR	CPR-1000						—
	CN-24	HAIYANG 1	PWR	AP1000			1000	SNPC	WH	—
	CN-25	HAIYANG 2	PWR	AP1000			1000		WH	—
	CN-26	HONGSHIDING 1	PWR							—
	CN-27	HONGSHIDING 2	PWR							—
	CN-21	HONGYANHE 2	PWR	CPR-1000		2905	1080	LHNPC	DFEC	—
	CN-22	HONGYANHE 3	PWR	CPR-1000		2905	1080	LHNPC	DFEC	—
	CN-23	HONGYANHE 4	PWR	CPR-1000		2905	1080			—
	CN-37	NINGDE 1	PWR	M310		2905	1087	NDNPC	DFEC	2008-2
	CN-37	NINGDE 2	PWR	M310		2905	1080			—
	CN-38	NINGDE 3	PWR	M310		2905	1080			—
	CN-39	NINGDE 4	PWR	M310		2905	1080			—
	CN-16	SANMEN 1	PWR							—
	CN-17	SANMEN 2	PWR							—
	CN-34	TAISHAN 1	PWR	EPR						—
	CN-35	TAISHAN 2	PWR	EPR						—
CN-32	TAOHUAIJIANG 1	PWR							—	
CN-33	TAOHUAIJIANG 2	PWR							—	
CN-40	XIANNING 1	PWR							—	
CN-41	XIANNING 2	PWR							—	
CN-18	YANGJIANG 1	PWR	CPR-1000			900			—	
CN-19	YANGJIANG 2	PWR	CPR-1000			900			—	

TABLE 12. REACTORS PLANNED FOR CONSTRUCTION AS KNOWN ON 31 DEC. 2007 — continued

Country	Reactor		Type	Model	Capacity [MW]			Operator	NSSS Supplier	Expected Construction Start
	Code	Name			Thermal	Gross	Net			
IRAN/ISLREP	IR-2	BUSHEHR 2	PWR	WWER	3000	1000	915	NPPDCO	ASE	2011-1
	IR-5	BUSHEHR 3	PWR	TBD	3000	1000	915	NPPDCO	ASE	2012-1
	IR-9	DARKHOVAIN	PWR	IR-360	1113	360		NPPDCO		2010-1
JAPAN	JP-70	FUKUSHIMA-DAIICHI-7	BWR	ABWR	3926	1380	1325			—
	JP-71	FUKUSHIMA-DAIICHI-8	BWR	ABWR	3926	1380	1325			—
	JP-69	HIGASHI DORI 1 (TEPCO)	BWR	ABWR	3926	1385	1325	TEPCO		—
	JP-62	KAMINOSEKI 1	BWR	ABWR	1373			CHUGOKU		—
	JP-63	KAMINOSEKI 2	BWR	ABWR	1373			CHUGOKU		—
	JP-66	OMA	BWR	ABWR	3926	1383	1325	J-POWER		—
	JP-65	SHIMANE-3	BWR	ABWR	3926	1373	1325	CHUGOKU	HITACHI	2008-10
	JP-67	TSURUGA-3	PWR	APWR	4466	1538		JAPCO		—
JP-68	TSURUGA-4	PWR	APWR	4466	1538		JAPCO		—	
KOREA REP.	KR-25	SHIN-KORI-3	PWR	APR-1400	3983	1400	1340	KHNP	DHICKOPC	2008-10
	KR-26	SHIN-KORI-4	PWR	APR-1400	3938	1400	1340	KHNP	DHICKOPC	2009-10
	KR-27	SHIN-ULCHIN-1	PWR	APR-1400	3938	1400	1340	KHNP	DHICKOPC	2011-5
	KR-28	SHIN-ULCHIN-2	PWR	APR-1400	3983	1400	1340	KHNP	DHICKOPC	2012-5
	KR-24	SHIN-WOLSONG-2	PWR	OPR-1000	2825	1000	960	KHNP	DHICKOPC	2008-6
RUSSIAN FED.	RU-166	KURSK 2-1	PWR	WWER-1100	3200	1170	1000	REA	NIAEP	—
	RU-163	LENINGRAD 2-1	PWR	WWER-AES-2006	3200	1170	1085	REA	FAEA	2008-8
	RU-164	LENINGRAD 2-2	PWR	WWER-1100	3200	1170	1000	REA	NIAEP	—
	RU-165	LENINGRAD 2-3	PWR	WWER-1100	3200	1170	1000	REA	NIAEP	—
	RU-161	NOVOVORONEZH 2-1	PWR	WWER-1100	3200	1170	1085	REA	FAEA	2008-6
	RU-162	NOVOVORONEZH 2-2	PWR	WWER-1100	3200	1170	950	REA	NIAEP	—
TURKEY	TR-1	AKKUYU					TEAS			—

Status as of 31 December 2007, 50 reactors (34670 MW(e)) are planned.

TABLE 13. REACTORS UNDER CONSTRUCTION, 31 DEC. 2007

Country	Reactor		Type	Model	Capacity [MW]		Operator	NSSS Supplier	Construction Start	First Criticality Connection	Grid Connection	Commercial Operation
	Code	Name			Thermal	Gross						
ARGENTINA	AR-3	ATUCHA-2	PHWR		2160	745	NASA	SIEMENS	1987-7	—	2010-10	—
BULGARIA	BG-7	BELENE-1	PWR	WWER V-466	3000	1000	KOZNPP	ASE	1987-1	—	—	—
	BG-8	BELENE-2	PWR	WWER V-466	3000	1000	KOZNPP	ASE	1987-3	—	—	—
CHINA	CN-20	HONGYANHE 1	PWR	CPR-1000	2905	1080	LHNPC	DFEC	2007-8	—	—	—
	CN-12	LINGAO 3	PWR	M310	2905	1087	LDNFC	DFEC	2005-12	2010-7	2010-8	2010-12
	CN-13	LINGAO 4	PWR	M310	2905	1086	LDNFC	DFEC	2006-6	—	—	—
	CN-14	QINSHAN 2-3	PWR	CNP600	1930	650	NPQJVC	CNNC	2006-3	2010-11	2010-12	2011-3
	CN-15	QINSHAN 2-4	PWR	CNP 600	1930	650	NPQJVC	CNNC	2007-1	2009-12	2011-9	2012-1
FINLAND	FI-5	OLKILUOTO-3	PWR	EPR	4300	1720	TVO	AREVA	2005-8	—	—	2011-6
FRANCE	FR-74	FLAMANVILLE-3	PWR	EPR	4300	1650	EDF	FRAM	2007-12	2011-12	2012-5	—
INDIA	IN-16	KAIGA-4	PHWR	Horizontal Pre	800	220	NPICL	NPICL	2002-5	2008-6	2008-7	2008-9
	IN-25	KUDANKULAM-1	PWR	WWER V-412	1000	917	NPICL	MAEP	2002-3	2008-12	2009-1	2009-3
	IN-26	KUDANKULAM-2	PWR	WWER V-412	1000	917	NPICL	MAEP	2002-7	2009-6	2009-7	2009-9
	IN-29	PFBR	FBR		1253	500	BHAVINI		2004-10	—	—	—
	IN-19	RAJASTHAN-5	PHWR	Horizontal Pre	220	202	NPICL	NPICL	2002-9	2008-5	2008-6	2008-8
	IN-20	RAJASTHAN-6	PHWR	Horizontal Pre	220	202	NPICL	NPICL	2003-1	2008-11	2008-12	2009-2
IRAN, ISL. REP.	IR-1	BUSHEHR 1	PWR	WWER V-446	3000	1000	NPPDCO	ASE	1975-5	2008-9	2009-8	2009-8
JAPAN	JP-64	TOMARI-3	PWR	PWR	2652	912	HEPCO	MHI	2004-11	—	—	2009-12
KOREA REP.	KR-21	SHIN-KORI-1	PWR	OPR-1000	2825	1000	KHNP	DHICKOPC	2006-6	2010-7	2010-8	2010-12
	KR-22	SHIN-KORI-2	PWR	OPR-1000	2825	1000	KHNP	DHICKOPC	2007-6	2011-7	2011-8	2011-12
	KR-23	SHIN-WOLSONG-1	PWR	OPR-1000	2825	1000	KHNP	DHICKOPC	2007-11	2011-5	2011-5	2011-10

TABLE 13. REACTORS UNDER CONSTRUCTION, 31 DEC. 2007 — continued

Country	Reactor		Type	Model	Capacity [MW]			Operator	NSSS Supplier	Construction Start	First Criticality	Grid Connection	Commercial Operation
	Code	Name			Thermal	Gross	Net						
PAKISTAN	PK-3	CHASNUPP 2	PWR	PWR	999	325	300	PAEC	CNNC	2005-12	2011-4	2011-5	2011-8
RUSSIAN FED.	RU-116	BELOYARSKY-4 (BN-800)	FBR	BN-800	2100	1000	950	REA	FAEA	2006-7	—	—	—
	RU-37	KALININ-4	PWR	WWER V-320	3200	1000	950	REA	FAEA	1986-8	—	—	—
	RU-120	KURSK-5	LWGR	RBMK-1000	1000	1000	925	REA	FAEA	1985-12	—	—	—
	RU-151	SEVERODVINSK 1	PWR	KLT-40S 'Float	150	35	32	REA	FAEA	2007-4	—	—	2010-12
	RU-152	SEVERODVINSK 2	PWR	KLT-40S 'Float	150	35	32	REA	FAEA	2007-4	—	—	2010-12
	RU-62	VOLGODONSK-2	PWR	WWER V-320I	3200	1000	950	REA	FAEA	1983-5	—	—	—
UKRAINE	UA-51	KHIMELNITSKI-3	PWR	WWER	3200	1000	950	NNEGC	—	1986-3	—	2015-1	—
	UA-52	KHIMELNITSKI-4	PWR	WWER	3200	1000	950	NNEGC	—	1987-2	—	2016-1	—
USA	US-391	WATTS BAR-2	PWR	W (4-loop) (IC	3425	1218	1165	TVA	WH	1972-12	—	—	—

Status as of 31 December 2007, 33 reactors (27393 MW(e)) are under construction, including 2 units (2600 MW(e)) in Taiwan, China.

TWN, CHINA	TW-7	LUNG MEN 1	BWR	ABWR	3926	1350	1300	TPC	GE	1999-3	2008-12	2009-1	2009-7
TWN, CHINA	TW-8	LUNG MEN 2	BWR	ABWR	3926	1350	1300	TPC	GE	1999-8	2009-12	2010-1	2010-7

TABLE 14. REACTORS IN OPERATION, 31 DEC. 2007

Country	Reactor		Type	Model	Capacity [MW]		Operator	NSSS Supplier	Construction Start	Grid Connection	Commercial Operation	EAF % 1998 to 2007	UCF % 2007	Non-electrical Applies
	Code	Name			Thermal	Gross								
ARGENTINA	AR -1	ATUCHA-1	PWR	PHWR KWU	1179	357	NASA	SIEMENS	1968-6	1974-3	1974-6	71.6	72.9	-
	AR -2	EMBASE	PWR	CANDU 6	2015	648	NASA	AECL	1974-4	1983-4	1984-1	86.9	87.3	-
ARMENIA	AM -19	ARMENIA-2	PWR	WWER V-270	1375	408	ANPP/USC	FAEA	1975-7	1980-1	1980-5	64.1	66.3	-
BELGIUM	BE -2	DOEL-1	PWR		1192	412	ELECTRAB	ACECOWEN	1969-7	1974-8	1975-2	85.4	86.4	-
	BE -4	DOEL-2	PWR		1311	454	ELECTRAB	ACECOWEN	1971-9	1975-8	1975-12	81.2	82.0	-
	BE -5	DOEL-3	PWR		2775	1056	ELECTRAB	FRAMACEC	1975-1	1982-6	1982-10	86.2	87.6	-
	BE -7	DOEL-4	PWR		2988	1041	ELECTRAB	ACECOWEN	1978-12	1985-4	1985-7	84.1	84.9	-
	BE -3	TIHANGE-1	PWR	Framatome 3 lo	2873	1009	ELECTRAB	ACLF	1970-6	1975-3	1975-10	83.4	86.0	-
	BE -6	TIHANGE-2	PWR	WE 3-loops	3064	1055	ELECTRAB	FRAMACEC	1976-4	1982-10	1983-6	87.7	88.9	-
	BE -8	TIHANGE-3	PWR	WE 3-loops	3000	1065	ELECTRAB	ACECOWEN	1978-11	1985-6	1985-9	87.5	89.2	-
	BR -1	ANGRA-1	PWR	2-loop PWR	1876	657	ELETRONU WH		1971-5	1982-4	1985-1	52.3	59.9	-
BR -2	ANGRA-2	PWR	PRE KONVOI	3764	1350	ELETRONU KWU		1976-1	2000-7	2001-2	81.5	83.8	-	
BULGARIA	BG -5	KOZLODUY-5	PWR	WWER V-320	3000	1000	KOZNPP	AEE	1980-7	1987-11	1988-12	62.4	65.6	DH
	BG -6	KOZLODUY-6	PWR	WWER V-320	3000	1000	KOZNPP	AEE	1982-4	1991-8	1993-12	70.3	73.1	DH
CANADA	CA -10	BRUCE-3	PWR	CANDU 750A	2832	805	BRUCEPOW	NEIP	1972-7	1977-12	1978-2	72.6	73.4	-
	CA -11	BRUCE-4	PWR	CANDU 750A	2832	805	BRUCEPOW	NEIP	1972-9	1978-12	1979-1	70.4	71.4	-
	CA -18	BRUCE-5	PWR	CANDU 750B	2832	840	BRUCEPOW	OH/AECL	1978-6	1984-12	1985-3	83.7	84.3	-
	CA -19	BRUCE-6	PWR	CANDU 750B	2690	891	BRUCEPOW	OH/AECL	1978-1	1984-6	1984-9	79.9	80.7	-
	CA -20	BRUCE-7	PWR	CANDU 750B	2832	872	BRUCEPOW	OH/AECL	1979-5	1986-2	1986-4	83.9	85.0	-
	CA -21	BRUCE-8	PWR	CANDU 750B	2690	845	BRUCEPOW	OH/AECL	1979-8	1987-3	1987-5	81.7	83.1	-
	CA -22	DARLINGTON-1	PWR	CANDU 850	2776	934	OPG	OH/AECL	1982-4	1990-12	1992-11	83.8	84.8	-
	CA -23	DARLINGTON-2	PWR	CANDU 850	2776	934	OPG	OH/AECL	1981-9	1990-1	1990-10	75.4	76.4	-
	CA -24	DARLINGTON-3	PWR	CANDU 850	2776	934	OPG	OH/AECL	1984-9	1992-12	1993-2	84.8	85.7	-
	CA -25	DARLINGTON-4	PWR	CANDU 850	2776	934	OPG	OH/AECL	1985-7	1993-4	1993-6	84.8	85.5	-

The column Non-Electrical Applications indicates the use of the facility to provide: DH district heating.

TABLE 14. REACTORS IN OPERATION, 31 DEC. 2007 — continued

Country	Reactor		Type	Model	Capacity [MW]		Operator	NSSS Supplier	Construction Start	Grid Connection	Commercial Operation	EAF % 1998 to 2007	UCF % 1998 to 2007	Non-electrical Applies	
	Code	Name			Thermal	Gross									Net
CHINA	CA -12	GENTILY-2	PWR	CANDU 6	2156	675	635	HO	BBC	1974-4	1982-12	1983-10	82.2	84.0	-
	CA -4	PICKERING-1	PWR	CANDU 500A	1744	542	515	OPG	OHA/ECL	1966-6	1971-4	1971-7	65.6	65.7	-
	CA -7	PICKERING-4	PWR	CANDU 500A	1744	542	515	OPG	OHA/ECL	1968-5	1973-5	1973-6	66.0	66.4	-
	CA -13	PICKERING-5	PWR	CANDU 500B	1744	540	516	OPG	OHA/ECL	1974-11	1982-12	1983-5	72.8	73.4	-
	CA -14	PICKERING-6	PWR	CANDU 500B	1744	540	516	OPG	OHA/ECL	1983-11	1984-2	1984-2	76.4	77.1	-
	CA -15	PICKERING-7	PWR	CANDU 500B	1744	540	516	OPG	OHA/ECL	1975-10	1984-11	1985-1	78.8	79.5	-
	CA -16	PICKERING-8	PWR	CANDU 500B	1744	540	516	OPG	OHA/ECL	1976-3	1986-1	1986-2	76.1	76.8	-
	CA -17	POINT LEPREAU	PWR	CANDU 6	2180	680	635	NBEP	AECL	1975-5	1982-9	1983-2	82.6	83.8	-
	CN -2	GUANGDONG-1	PWR	M310	2905	984	944	GNP/JVC	GEC	1987-8	1993-8	1994-2	81.2	85.8	-
	CN -3	GUANGDONG-2	PWR	M310	2905	984	944	GNP/JVC	GEC	1988-4	1994-2	1994-5	81.5	83.6	-
	CN -6	LINGAO 1	PWR	M310	2895	990	938	LANPC	FRAM	1997-5	2002-2	2002-5	86.3	86.7	-
	CN -7	LINGAO 2	PWR	M310	2895	990	938	LANPC	FRAM	1997-11	2002-12	2003-1	88.0	88.2	-
	CN -1	QINSHAN 1	PWR	CNP-300	966	310	288	QNPC	CNNC	1985-3	1991-12	1994-4	75.8	77.6	-
	CN -4	QINSHAN 2-1	PWR	CNP600	1930	650	610	NPQJVC	CNNC	1996-6	2002-2	2002-4	74.9	74.9	-
	CN -5	QINSHAN 2-2	PWR	CNP600	1930	650	610	NPQJVC	CNNC	1997-4	2004-3	2004-5	88.1	88.1	-
	CN -8	QINSHAN 3-1	PWR	CANDU 6	2064	700	650	TQNPC	AECL	1998-6	2002-11	2002-12	85.5	86.1	-
	CN -9	QINSHAN 3-2	PWR	CANDU 6	2064	700	650	TQNPC	AECL	1998-9	2003-6	2003-7	89.2	89.3	-
CN -10	TIANWAN 1	PWR	WVER V-428	3000	1000	1000	JNPC	IZ	1999-10	2006-5	2007-5	83.6	83.6	-	
CN -11	TIANWAN 2	PWR	WVER V-428	3000	1000	1000	JNPC	IZ	2000-10	2007-5	2007-8	100.0	100.0	-	
CZECH REP.	CZ -4	DUKOVANY-1	PWR	WVER V-213	1375	456	427	CEZ	SKODA	1979-1	1985-2	1985-5	82.3	83.2	-
	CZ -5	DUKOVANY-2	PWR	WVER V-213	1375	440	412	CEZ	SKODA	1986-1	1986-1	1986-3	83.2	84.1	-
	CZ -8	DUKOVANY-3	PWR	WVER V-213	1375	456	427	CEZ	SKODA	1979-3	1986-11	1986-12	82.4	84.2	-
	CZ -9	DUKOVANY-4	PWR	WVER V-213	1375	456	427	CEZ	SKODA	1979-3	1987-6	1987-7	83.4	84.4	-
	CZ -23	TEMLIN-1	PWR	WVER V-320	3000	1013	963	CEZ	SKODA	1987-2	2000-12	2002-6	70.1	70.1	DH
	CZ -24	TEMLIN-2	PWR	WVER V-320	3000	1013	963	CEZ	SKODA	1987-2	2002-12	2003-4	71.6	71.8	DH
FINLAND	FI -1	LOVIISA-1	PWR	WVER V-213	1500	510	488	FORTUMPH AEE	AEE	1971-5	1972-2	1972-5	86.8	87.2	-
	FI -2	LOVIISA-2	PWR	WVER V-213	1500	510	488	FORTUMPH AEE	AEE	1972-8	1980-11	1981-1	88.6	89.3	-

The column Non-Electrical Applications indicates the use of the facility to provide: DH district heating.

TABLE 14. REACTORS IN OPERATION, 31 DEC. 2007 — continued

Country	Reactor		Type	Model	Capacity [MW]			Operator	NSSS Supplier	Construction Start	Grid Connection	Commercial Operation	EAF % 1998 to 2007	UCF % 1998 to 2007	Non-electrical Applies
	Code	Name			Thermal	Gross	Net								
FRANCE	FI -3	OLKILUOTO-1	BWR	BWR 2500	2500	890	860	TVO	ASEASTAL	1974-2	1978-9	1979-10	92.4	92.7	-
	FI -4	OLKILUOTO-2	BWR	BWR 2500	2500	890	860	TVO	ASEASTAL	1975-8	1980-2	1982-7	93.7	94.1	-
	FR -54	BELLEVILLE-1	PWR	P4 REP 1300	3817	1363	1310	EDF	FRAM	1980-5	1987-10	1988-6	76.2	77.6	-
	FR -55	BELLEVILLE-2	PWR	P4 REP 1300	3817	1363	1310	EDF	FRAM	1980-8	1988-7	1989-1	77.5	79.3	-
	FR -32	BLAYAIS-1	PWR	CP1	2785	951	910	EDF	FRAM	1977-1	1981-6	1981-12	76.8	79.2	-
	FR -33	BLAYAIS-2	PWR	CP1	2785	951	910	EDF	FRAM	1977-1	1982-7	1983-2	80.1	82.2	-
	FR -34	BLAYAIS-3	PWR	CP1	2785	951	910	EDF	FRAM	1978-4	1983-8	1983-11	80.4	82.4	-
	FR -35	BLAYAIS-4	PWR	CP1	2785	951	910	EDF	FRAM	1978-4	1983-5	1983-10	79.9	82.1	-
	FR -13	BUGEY-2	PWR	CP0	2785	945	910	EDF	FRAM	1972-11	1978-5	1979-3	72.1	74.0	-
	FR -14	BUGEY-3	PWR	CP0	2785	945	910	EDF	FRAM	1973-9	1978-9	1979-3	73.4	75.5	-
	FR -15	BUGEY-4	PWR	CP0	2785	917	880	EDF	FRAM	1974-6	1979-3	1979-7	72.4	74.7	-
	FR -16	BUGEY-5	PWR	CP0	2785	917	880	EDF	FRAM	1974-7	1979-7	1980-1	75.3	77.6	-
	FR -50	CATTENOM-1	PWR	P4 REP 1300	3817	1362	1300	EDF	FRAM	1979-10	1986-11	1987-4	72.6	73.9	-
	FR -53	CATTENOM-2	PWR	P4 REP 1300	3817	1362	1300	EDF	FRAM	1980-7	1987-9	1988-2	78.2	80.2	-
	FR -60	CATTENOM-3	PWR	P4 REP 1300	3817	1362	1300	EDF	FRAM	1982-6	1990-7	1991-2	80.8	82.8	-
	FR -65	CATTENOM-4	PWR	P4 REP 1300	3817	1362	1300	EDF	FRAM	1983-9	1991-5	1992-1	83.5	85.2	-
	FR -40	CHINON-B-1	PWR	CP2	2785	954	905	EDF	FRAM	1977-3	1982-11	1984-2	78.3	79.5	-
	FR -41	CHINON-B-2	PWR	CP2	2785	954	905	EDF	FRAM	1977-3	1983-11	1984-8	78.9	80.1	-
	FR -56	CHINON-B-3	PWR	CP2	2785	954	905	EDF	FRAM	1980-10	1986-10	1987-3	79.2	80.9	-
	FR -57	CHINON-B-4	PWR	CP2	2785	954	905	EDF	FRAM	1981-2	1987-11	1988-4	80.6	82.3	-
	FR -62	CHOOZ-B-1	PWR	N4 REP 1450	4270	1560	1500	EDF	FRAM	1984-1	1996-8	2000-5	80.0	82.0	-
	FR -70	CHOOZ-B-2	PWR	N4 REP 1450	4270	1560	1500	EDF	FRAM	1985-12	1997-4	2000-9	82.0	85.1	-
FR -72	CIVAUX-1	PWR	N4 REP 1450	4270	1561	1495	EDF	FRAM	1988-10	1997-12	2002-1	79.0	80.3	-	
FR -73	CIVAUX-2	PWR	N4 REP 1450	4270	1561	1495	EDF	FRAM	1991-4	1999-12	2002-4	82.0	83.5	-	
FR -42	CRUAS-1	PWR	CP2	2785	956	915	EDF	FRAM	1978-8	1983-4	1984-4	79.3	81.0	-	
FR -43	CRUAS-2	PWR	CP2	2785	956	915	EDF	FRAM	1978-11	1984-9	1985-4	78.9	81.1	-	
FR -44	CRUAS-3	PWR	CP2	2785	956	915	EDF	FRAM	1979-4	1984-5	1984-9	80.3	83.0	-	
FR -45	CRUAS-4	PWR	CP2	2785	956	915	EDF	FRAM	1979-10	1984-10	1985-2	78.1	80.2	-	
FR -22	DAMPIERRE-1	PWR	CP1	2785	937	890	EDF	FRAM	1975-2	1980-3	1980-9	75.9	76.9	-	

TABLE 14. REACTORS IN OPERATION, 31 DEC. 2007 — continued

Country	Reactor		Type	Model	Capacity [MW]		Operator	NSSS Supplier	Construction Start	Grid Connection	Commercial Operation	EAF % 1998 to 2007	UCF % 1998 to 2007	Non-electrical Applies
	Code	Name			Thermal	Gross								
	FR -29	DAMPIERRE-2	PWR	CP1	2785	937	EDF	FRAM	1975-4	1980-12	1981-2	76.8	78.5	-
	FR -30	DAMPIERRE-3	PWR	CP1	2785	937	EDF	FRAM	1975-9	1981-1	1981-5	77.3	78.8	-
	FR -31	DAMPIERRE-4	PWR	CP1	2785	937	EDF	FRAM	1975-12	1981-8	1981-11	76.6	78.5	-
	FR -11	FESSENHEIM-1	PWR	CP0	2660	920	EDF	FRAM	1971-9	1977-4	1978-1	70.9	72.1	-
	FR -12	FESSENHEIM-2	PWR	CP0	2660	920	EDF	FRAM	1972-2	1977-10	1978-4	74.7	75.6	-
	FR -46	FLAMANVILLE-1	PWR	P4 REP 1300	3817	1382	EDF	FRAM	1979-12	1985-12	1986-12	74.9	77.5	-
	FR -47	FLAMANVILLE-2	PWR	P4 REP 1300	3817	1382	EDF	FRAM	1980-5	1986-7	1987-3	77.3	78.4	-
	FR -61	GOLFECH-1	PWR	P4 REP 1300	3817	1363	EDF	FRAM	1982-11	1990-6	1991-2	82.6	85.5	-
	FR -68	GOLFECH-2	PWR	P4 REP 1300	3817	1363	EDF	FRAM	1984-10	1993-6	1994-3	84.0	85.8	-
	FR -20	GRAVELINES-1	PWR	CP1	2785	951	EDF	FRAM	1975-2	1980-3	1980-11	76.0	77.6	-
	FR -21	GRAVELINES-2	PWR	CP1	2785	951	EDF	FRAM	1975-3	1980-8	1980-12	79.3	80.7	-
	FR -27	GRAVELINES-3	PWR	CP1	2785	951	EDF	FRAM	1975-12	1980-12	1981-6	79.5	80.9	-
	FR -28	GRAVELINES-4	PWR	CP1	2785	951	EDF	FRAM	1976-4	1981-6	1981-10	78.8	80.3	-
	FR -51	GRAVELINES-5	PWR	CP1	2785	951	EDF	FRAM	1979-10	1984-8	1985-1	80.4	82.2	-
	FR -52	GRAVELINES-6	PWR	CP1	2785	951	EDF	FRAM	1979-10	1985-8	1985-10	80.2	81.7	-
	FR -58	NOGENT-1	PWR	P4 REP 1300	3817	1363	EDF	FRAM	1981-5	1987-10	1988-2	76.9	78.4	-
	FR -59	NOGENT-2	PWR	P4 REP 1300	3817	1363	EDF	FRAM	1982-1	1988-12	1989-5	81.5	83.7	-
	FR -36	PALUEL-1	PWR	P4 REP 1300	3817	1382	EDF	FRAM	1977-8	1984-6	1985-12	75.7	77.5	-
	FR -37	PALUEL-2	PWR	P4 REP 1300	3817	1382	EDF	FRAM	1978-1	1984-9	1985-12	73.2	75.4	-
	FR -38	PALUEL-3	PWR	P4 REP 1300	3817	1382	EDF	FRAM	1979-2	1985-9	1986-2	73.1	74.8	-
	FR -39	PALUEL-4	PWR	P4 REP 1300	3817	1382	EDF	FRAM	1980-2	1986-4	1986-6	76.1	78.0	-
	FR -63	PENLY-1	PWR	P4 REP 1300	3817	1382	EDF	FRAM	1982-9	1990-5	1990-12	81.1	82.6	-
	FR -64	PENLY-2	PWR	P4 REP 1300	3817	1382	EDF	FRAM	1984-8	1992-2	1992-11	82.7	83.9	-
	FR -10	PHENIX	FBR	PH-250	350	140	CEA/EDF	CNCLINEY	1968-11	1973-12	1974-7	51.7	52.0	-
	FR -48	ST. ALBAN-1	PWR	P4 REP 1300	3817	1381	EDF	FRAM	1979-1	1986-8	1986-5	74.9	76.6	-
	FR -49	ST. ALBAN-2	PWR	P4 REP 1300	3817	1381	EDF	FRAM	1979-7	1986-7	1987-3	74.6	77.1	-
	FR -17	ST. LAURENT-B-1	PWR	CP2	2785	956	EDF	FRAM	1976-5	1983-8	1983-8	75.8	77.4	-
	FR -23	ST. LAURENT-B-2	PWR	CP2	2785	956	EDF	FRAM	1976-7	1981-6	1983-8	76.4	78.1	-
	FR -18	TRICASTIN-1	PWR	CP1	2785	955	EDF	FRAM	1974-11	1980-5	1980-12	76.9	79.7	-
	FR -19	TRICASTIN-2	PWR	CP1	2785	955	EDF	FRAM	1974-12	1980-8	1980-12	77.0	79.5	-

TABLE 14. REACTORS IN OPERATION, 31 DEC. 2007 — continued

Country	Reactor		Type	Model	Capacity [MW]		Operator	NSSS Supplier	Construction Start	Grid Connection	Commercial Operation	EAF % 1998 to 2007	UCF % 1998 to 2007	Non-electrical Applies
	Code	Name			Thermal	Gross								
GERMANY	FR-25	TRICASTIN-3	PWR	CP1	2785	955	915	EDF	1975-4	1981-2	1981-5	79.1	81.4	-
	FR-26	TRICASTIN-4	PWR	CP1	2785	955	915	EDF	1975-5	1981-6	1981-11	79.3	82.1	-
	DE-12	BIBLIS-A (KWB A)	PWR	PWR	3517	1225	1167	RWE	1970-1	1974-8	1975-2	69.0	69.4	-
	DE-18	BIBLIS-B (KWB B)	PWR	PWR	3733	1300	1240	RWE	1972-2	1976-4	1977-1	73.3	73.5	-
	DE-32	BROKDORF (KBR)	PWR	PWR	3900	1480	1370	E.ON	1976-1	1986-10	1986-12	90.1	90.4	-
	DE-13	BRUNSBUETTEL (KKB)	BWR	BWR 69	2282	806	771	KKB	1970-4	1976-7	1977-2	60.9	62.0	-
	DE-33	EMSLAND (KKE)	PWR	Konvol	3850	1400	1329	KLE	1982-8	1988-4	1988-6	93.4	93.4	-
	DE-23	GRAFENRHEINFELD (KKG)	PWR	PWR	3765	1345	1275	E.ON	1975-1	1981-12	1982-6	88.1	88.1	-
	DE-27	GROENDE (KWG)	PWR	PWR	3900	1430	1360	KWG	1976-6	1984-9	1985-2	92.4	92.5	-
	DE-26	GUNDREMMINGEN-B (GUN-B)	BWR	BWR 72	3840	1344	1284	KGK	1976-7	1984-3	1984-7	88.5	88.7	-
	DE-28	GUNDREMMINGEN-C (GUN-C)	BWR	BWR 72	3840	1344	1288	KGK	1976-7	1984-11	1985-1	86.8	87.1	-
	DE-16	ISAR-1 (KKI 1)	BWR	BWR 69	2575	912	878	E.ON	1972-5	1977-12	1979-3	82.2	82.6	-
	DE-31	ISAR-2 (KKI 2)	PWR	Konvol	3950	1475	1400	E.ON	1982-9	1988-1	1988-4	91.7	92.0	-
	DE-20	KRUEMMEL (KKK)	BWR	BWR 69	3690	1402	1346	KKK	1974-4	1983-9	1984-3	78.7	79.1	-
	DE-15	NECKARWESTHEIM-1 (GKN 1)	PWR	PWR	2487	840	785	EnKK	1972-2	1976-6	1976-12	83.1	83.2	-
	DE-44	NECKARWESTHEIM-2 (GKN 2)	PWR	Konvol	3850	1400	1310	EnKK	1982-11	1989-1	1989-4	93.4	93.6	-
	DE-14	PHILIPPSBURG-1 (KKP 1)	BWR	BWR 69	2575	926	890	EnKK	1970-5	1970-10	1980-3	79.5	79.6	-
DE-24	PHILIPPSBURG-2 (KKP 2)	PWR	PWR	3950	1458	1392	EnKK	1977-7	1984-12	1985-4	89.2	90.4	-	
DE-17	UNTERWESER (KKU)	PWR	PWR	3900	1410	1345	E.ON	1972-7	1978-9	1979-9	82.1	82.6	-	
HUNGARY	HU-1	PAKS-1	PWR	WWER V-213	1485	500	470	PAKS Zrt	1974-8	1982-12	1983-8	85.4	85.5	-
	HU-2	PAKS-2	PWR	WWER V-213	1375	470	443	PAKS Zrt	1974-8	1984-9	1984-11	79.0	79.1	DH
	HU-3	PAKS-3	PWR	WWER V-213	1375	470	443	PAKS Zrt	1979-10	1986-9	1986-12	86.3	86.7	DH
	HU-4	PAKS-4	PWR	WWER V-213	1375	500	473	PAKS Zrt	1979-10	1987-8	1987-11	87.6	87.8	DH
INDIA	IN-13	KAIGA-1	PHWR	Horizontal Pre	801	220	202	NPCIL	1989-9	2000-10	2000-11	73.4	89.1	-
	IN-14	KAIGA-2	PHWR	Horizontal Pre	801	220	202	NPCIL	1989-12	1999-12	2000-3	75.9	89.7	-
	IN-15	KAIGA-3	PHWR	Horizontal Pre	800	220	202	NPCIL	2002-3	2007-4	2007-5	25.3	29.6	-
	IN-9	KAKRAPAR-1	PHWR	Horizontal Pre	801	220	202	NPCIL	1984-12	1992-11	1993-5	70.1	78.4	-

The column Non-Electrical Applications indicates the use of the facility to provide: DH district heating.

TABLE 14. REACTORS IN OPERATION, 31 DEC. 2007 — continued

Country	Reactor		Type	Model	Capacity [MW]		Operator	NSSS Supplier	Construction Start	Grid Connection	Commercial Operation	EAF % 1998 to 2007	UCF % 1998 to 2007	Non-electrical Applies
	Code	Name			Thermal	Gross								
	IN-10	KAKRAPAR-2	PHWR	Horizontal Pre	801	220	202	NPCIL	1985-4	1985-3	1985-9	79.5	87.6	-
	IN-5	MADRAS-1	PHWR	Horizontal Pre	801	220	205	NPCIL	1971-1	1983-7	1984-1	54.4	58.4	DS
	IN-6	MADRAS-2	PHWR	Horizontal Pre	801	220	202	NPCIL	1972-10	1985-9	1986-3	60.2	65.6	DS
	IN-7	NARORA-1	PHWR	Horizontal Pre	801	220	202	NPCIL	1976-12	1989-7	1991-1	56.3	60.9	-
	IN-8	NARORA-2	PHWR	Horizontal Pre	801	220	202	NPCIL	1977-11	1992-1	1992-7	67.1	75.9	-
	IN-3	RAJASTHAN-1	PHWR	Horizontal Pre	693	100	90	NPCIL	1965-8	1972-11	1973-12	24.6	25.6	PH
	IN-4	RAJASTHAN-2	PHWR	Horizontal Pre	693	200	187	NPCIL	1968-4	1980-11	1981-4	56.4	59.9	PH
	IN-11	RAJASTHAN-3	PHWR	Horizontal Pre	801	220	202	NPCIL	1990-2	2000-3	2000-6	74.5	88.4	PH
	IN-12	RAJASTHAN-4	PHWR	Horizontal Pre	801	220	202	NPCIL	1990-10	2000-11	2000-12	74.4	90.2	PH
	IN-1	TARAPUR-1	BWR	BWR-1, Mark 2	530	160	150	NPCIL	1964-10	1969-4	1969-10	68.5	69.2	-
	IN-2	TARAPUR-2	BWR	BWR-1, Mark 2	530	160	150	NPCIL	1964-10	1969-5	1969-10	67.1	67.8	-
	IN-23	TARAPUR-3	PHWR	to be specific	1730	540	490	NPCIL	2000-5	2006-6	2006-8	64.3	88.9	-
	IN-24	TARAPUR-4	PHWR	to be specific	1730	540	490	NPCIL	2000-3	2005-6	2005-9	50.7	73.2	-
JAPAN	JP-5	FUKUSHIMA-DAICHI-1	BWR		1380	460	439	TEPCO	1967-7	1970-11	1971-3	52.9	52.9	-
	JP-9	FUKUSHIMA-DAICHI-2	BWR		2381	784	760	TEPCO	1969-6	1973-12	1974-7	60.4	60.4	-
	JP-10	FUKUSHIMA-DAICHI-3	BWR		2381	784	760	TEPCO	1970-12	1974-10	1976-3	64.7	64.7	-
	JP-16	FUKUSHIMA-DAICHI-4	BWR		2381	784	760	TEPCO	1973-2	1978-2	1978-10	70.1	70.2	-
	JP-17	FUKUSHIMA-DAICHI-5	BWR		2381	784	760	TEPCO	1972-5	1977-9	1978-4	71.3	71.4	-
	JP-18	FUKUSHIMA-DAICHI-6	BWR		3293	1100	1067	TEPCO	1973-10	1979-5	1979-10	70.1	70.2	-
	JP-25	FUKUSHIMA-DAINI-1	BWR		3293	1100	1067	TEPCO	1976-3	1981-7	1982-4	75.2	75.2	-
	JP-26	FUKUSHIMA-DAINI-2	BWR		3293	1100	1067	TEPCO	1979-5	1983-6	1984-2	73.3	73.3	-
	JP-35	FUKUSHIMA-DAINI-3	BWR		3293	1100	1067	TEPCO	1981-3	1984-12	1985-6	65.3	65.3	-
	JP-38	FUKUSHIMA-DAINI-4	BWR		3293	1100	1067	TEPCO	1981-5	1986-12	1987-8	72.2	72.2	-
	JP-12	GENKAI-1	PWR		1650	559	529	KYUSHU	1971-9	1975-2	1975-10	72.7	72.7	-
	JP-27	GENKAI-2	PWR		1650	559	529	KYUSHU	1977-2	1980-6	1981-3	81.0	81.0	-
	JP-45	GENKAI-3	PWR		3423	1180	1127	KYUSHU	1988-6	1993-6	1994-3	85.0	85.0	DS
	JP-46	GENKAI-4	PWR		3423	1180	1127	KYUSHU	1992-7	1996-11	1997-7	86.6	86.6	DS
	JP-11	HAMAOKA-1	BWR	BWR4	1593	540	515	CHUBU	1971-6	1974-8	1976-3	49.9	49.9	-
	JP-24	HAMAOKA-2	BWR	BWR4	2436	840	806	CHUBU	1974-6	1978-5	1978-11	61.7	61.8	-

The column Non-Electrical Applications indicates the use of the facility to provide: DS desalination, PH process heating.

TABLE 14. REACTORS IN OPERATION, 31 DEC. 2007 — continued

Country	Reactor		Type	Model	Capacity [MW]		Operator	NSSS Supplier	Construction Start	Grid Connection	Commercial Operation	EAF % 1998 to 2007	UCF % 1998 to 2007	Non-electrical Applies	
	Code	Name			Thermal	Gross									Net
	JP-36	HAMAOKA-3	BWR	BWR5	3293	1100	1056	CHUBU	TOSHIBA	1983-4	1987-1	1987-8	78.2	78.3	-
	JP-49	HAMAOKA-4	BWR	BWR5	3293	1137	1092	CHUBU	TOSHIBA	1989-10	1993-1	1993-9	80.9	81.0	-
	JP-60	HAMAOKA-5	BWR	ABWR	3926	1380	1325	CHUBU	TOSHIBA	2000-7	2004-4	2005-1	63.8	63.8	-
	JP-58	HIGASHI DORI 1 (TOHOKU)	BWR		3293	1100	1067	TOHOKU	TOSHIBA	2000-11	2005-3	2005-12	83.0	83.1	-
	JP-23	IKATA-1	PWR		1650	566	538	SHIKOKU	MHI	1973-6	1977-2	1977-9	78.1	78.1	DS
	JP-32	IKATA-2	PWR		1650	566	538	SHIKOKU	MHI	1978-2	1981-8	1982-3	82.4	82.5	DS
	JP-47	IKATA-3	PWR		2660	890	846	SHIKOKU	MHI	1986-11	1994-3	1994-12	85.5	85.5	DS
	JP-33	KASHIWAZAKI KARIWA-1	BWR		3293	1100	1067	TEPCO	TOSHIBA	1980-6	1985-2	1985-9	71.3	72.6	-
	JP-39	KASHIWAZAKI KARIWA-2	BWR		3293	1100	1067	TEPCO	TOSHIBA	1985-11	1990-2	1990-9	73.0	73.0	-
	JP-52	KASHIWAZAKI KARIWA-3	BWR		3293	1100	1067	TEPCO	TOSHIBA	1989-3	1992-12	1993-8	72.9	74.1	-
	JP-53	KASHIWAZAKI KARIWA-4	BWR		3293	1100	1067	TEPCO	HITACHI	1990-3	1993-12	1994-8	71.9	75.4	-
	JP-40	KASHIWAZAKI KARIWA-5	BWR		3293	1100	1067	TEPCO	HITACHI	1985-6	1989-9	1990-4	75.4	78.3	-
	JP-55	KASHIWAZAKI KARIWA-6	BWR	ABWR	3926	1356	1315	TEPCO	TOSHIBA	1992-11	1996-1	1996-11	79.3	83.0	-
	JP-56	KASHIWAZAKI KARIWA-7	BWR	ABWR	3926	1356	1315	TEPCO	HITACHI	1993-7	1996-12	1997-7	75.5	79.1	-
	JP-4	MIHAMA-1	PWR		1031	340	320	KEPCO	WH	1987-2	1970-8	1970-11	50.5	50.7	-
	JP-6	MIHAMA-2	PWR		1456	500	470	KEPCO	MHI	1988-5	1972-4	1972-7	61.9	61.9	-
	JP-14	MIHAMA-3	PWR		2440	826	780	KEPCO	MHI	1972-8	1976-2	1976-12	69.3	69.3	-
	JP-15	OHI-1	PWR		3423	1175	1120	KEPCO	WH	1972-10	1977-12	1979-3	66.0	66.1	DS
	JP-19	OHI-2	PWR		3423	1175	1120	KEPCO	WH	1972-12	1978-10	1979-12	72.0	72.2	DS
	JP-50	OHI-3	PWR		3423	1180	1127	KEPCO	MHI	1987-10	1991-6	1991-12	84.4	84.4	-
	JP-51	OHI-4	PWR	PWR	3423	1180	1127	KEPCO	MHI	1988-6	1992-6	1993-2	85.2	85.2	-
	JP-22	ONAGAWA-1	BWR		1593	524	498	TOHOKU	TOSHIBA	1980-7	1983-11	1984-6	69.3	71.2	-
	JP-54	ONAGAWA-2	BWR		2436	825	796	TOHOKU	TOSHIBA	1991-4	1994-12	1995-7	73.6	76.9	-
	JP-57	ONAGAWA-3	BWR		2436	825	796	TOHOKU	TOSHIBA	1998-1	2001-5	2002-1	64.5	66.6	-
	JP-28	SENDAI-1	PWR		2660	890	846	KYUSHU	MHI	1979-12	1983-9	1984-7	82.2	82.2	-
	JP-37	SENDAI-2	PWR		2660	890	846	KYUSHU	MHI	1981-10	1985-4	1985-11	83.3	83.3	-
	JP-48	SHIKA-1	BWR		1593	540	505	HOKURIKU	HITACHI	1989-7	1993-1	1993-7	75.8	75.8	-
	JP-59	SHIKA-2	BWR	ABWR	3926	1358	1304	HOKURIKU	HITACHI	2001-8	2005-7	2006-3	14.8	14.8	-
	JP-7	SHIMANE-1	BWR		1380	460	439	CHUGOKU	HITACHI	1970-7	1973-12	1974-3	73.1	73.3	-
	JP-41	SHIMANE-2	BWR		2436	820	789	CHUGOKU	HITACHI	1985-2	1988-7	1989-2	82.7	82.7	-

The column Non-Electrical Applications indicates the use of the facility to provide: DS desalination.

TABLE 14. REACTORS IN OPERATION, 31 DEC. 2007 — continued

Country	Reactor		Type	Model	Capacity [MW]			Operator	NSSS Supplier	Construction Start	Grid Connection	Commercial Operation	EAF % 1998 to 2007	UCF % 1998 to 2007	Non-electrical Applies
	Code	Name			Thermal	Gross	Net								
	JP-8	TAKAHAMA-1	PWR		2440	826	780	KEPCO	WH/MHI	1970-4	1974-3	1974-11	68.1	68.2	-
	JP-13	TAKAHAMA-2	PWR		2440	826	780	KEPCO	MHI	1971-3	1975-1	1975-11	67.9	68.0	-
	JP-29	TAKAHAMA-3	PWR		2660	870	830	KEPCO	MHI	1980-12	1984-5	1985-1	83.7	83.8	DS
	JP-30	TAKAHAMA-4	PWR		2660	870	830	KEPCO	MHI	1981-3	1984-11	1985-6	84.2	84.2	DS
	JP-21	TOKAI-2	BWR	BWR	3293	1100	1060	JAPCO	GE	1973-10	1978-3	1978-11	73.9	74.0	-
	JP-43	TOMARI-1	PWR		1650	579	550	HEPCO	MHI	1985-7	1988-12	1989-6	85.3	85.3	-
	JP-44	TOMARI-2	PWR		1650	579	550	HEPCO	MHI	1986-5	1990-8	1991-4	84.5	84.5	-
	JP-3	TSURUGA-1	BWR	BWR	1070	357	340	JAPCO	GE	1968-11	1969-11	1970-3	68.1	68.3	-
	JP-34	TSURUGA-2	PWR	PWR	3411	1160	1110	JAPCO	MHI	1982-11	1986-6	1987-2	80.8	81.0	-
KOREA REP.	KR-1	KORI-1	PWR	WH & #9651;60	1723	603	569	KHNP	WH	1972-8	1977-6	1978-4	77.7	78.6	-
	KR-2	KORI-2	PWR	WH F	1876	675	637	KHNP	WH	1977-12	1983-4	1983-7	85.9	86.0	-
	KR-5	KORI-3	PWR	WH F	2775	1004	964	KHNP	WH	1979-10	1985-1	1985-9	85.4	85.5	-
	KR-6	KORI-4	PWR	WH F	2775	1006	966	KHNP	WH	1980-4	1985-11	1986-4	86.8	87.0	-
	KR-9	ULCHIN-1	PWR	France CPI	2775	985	940	KHNP	FRAM	1983-1	1988-4	1988-9	85.5	85.8	-
	KR-10	ULCHIN-2	PWR	France CPI	2775	984	937	KHNP	FRAM	1983-7	1989-4	1989-9	86.8	87.0	-
	KR-13	ULCHIN-3	PWR	OPR-1000	2825	1047	995	KHNP	DHICKOPC	1983-7	1998-1	1998-8	90.5	90.7	-
	KR-14	ULCHIN-4	PWR	OPR-1000	2825	1045	992	KHNP	DHICKOPC	1993-11	1998-12	1999-12	89.6	89.7	-
	KR-19	ULCHIN-5	PWR	OPR-1000	2825	1048	995	KHNP	DHICKOPC	1999-10	2003-12	2004-7	89.9	89.9	-
	KR-20	ULCHIN-6	PWR	OPR-1000	2825	1048	994	KHNP	DHICKOPC	2000-9	2005-1	2005-6	90.8	91.1	-
	KR-3	WOLSONG-1	PHWR	CANDU 6	2064	622	578	KHNP	AECL	1977-10	1982-12	1983-4	83.9	84.3	-
	KR-4	WOLSONG-2	PHWR	CANDU 6	2061	730	683	KHNP	AECL/DHI	1992-9	1997-4	1997-7	90.9	90.9	-
	KR-15	WOLSONG-3	PHWR	CANDU 6	2061	729	681	KHNP	AECL/DHI	1994-3	1998-3	1998-7	92.4	92.4	-
	KR-16	WOLSONG-4	PHWR	CANDU 6	2061	730	685	KHNP	AECL/DHI	1994-7	1999-5	1999-10	93.7	93.7	-
	KR-7	YONGGWWANG-1	PWR	WH F	2775	985	942	KHNP	WH	1981-6	1986-3	1986-8	86.8	86.8	-
	KR-8	YONGGWWANG-2	PWR	WH F	2775	978	936	KHNP	WH	1981-12	1986-11	1987-6	85.2	85.3	-
	KR-11	YONGGWWANG-3	PWR	OPR-1000	2825	1039	987	KHNP	DHICKAEC	1989-12	1994-10	1995-3	89.2	89.2	-
	KR-12	YONGGWWANG-4	PWR	OPR-1000	2825	1039	987	KHNP	DHICKAEC	1990-5	1995-7	1996-1	89.2	89.3	-
	KR-17	YONGGWWANG-5	PWR	OPR-1000	2825	1046	990	KHNP	DHICKOPC	1987-6	2001-12	2002-5	85.2	85.2	-
	KR-18	YONGGWWANG-6	PWR	OPR-1000	2825	1050	993	KHNP	DHICKOPC	1987-11	2002-9	2002-12	86.4	86.5	-

The column Non-Electrical Applications indicates the use of the facility to provide: DS desalination.

TABLE 14. REACTORS IN OPERATION, 31 DEC. 2007 — continued

Country	Reactor		Type	Model	Capacity [MW]		Operator	NSSS Supplier	Construction Start	Grid Connection	Commercial Operation	EAF % 1998 to 2007	UCF % 1998 to 2007	Non-electrical Applies
	Code	Name			Thermal	Gross								
LITHUANIA	LT-47	IGNALINA-2	LWGR	RBMK-1500	4800	1300	1185	INPP	1978-1	1987-8	1987-8	63.7	73.7	-
MEXICO	MX -1	LAGUNA VERDE-1	BWR	BWR-5	2027	682	680	CFE	1976-10	1989-4	1990-7	82.0	82.7	-
	MX -2	LAGUNA VERDE-2	BWR	BWR-5	2027	682	680	CFE	1977-6	1994-11	1995-4	83.6	84.3	-
NETHERLANDS	NL -2	BORSSELE	PWR	2 loops PWR	1366	515	482	EPZ	1969-7	1973-7	1973-10	84.2	84.6	-
PAKISTAN	PK -2	CHASNUPP 1	PWR	CNP-300	999	325	300	PAEC	1993-8	2000-6	2000-9	71.7	72.5	-
	PK -1	KANUPP	PHWR	CANDU	433	137	125	PAEC	1966-8	1971-10	1972-12	28.1	29.3	DS
ROMANIA	RO -1	CERNAVODA-1	PHWR	CANDU 6	2180	706	655	SNN	1982-7	1996-7	1996-12	87.6	88.7	DH
	RO -2	CERNAVODA-2	PHWR	CANDU 6	2180	706	650	SNN	1983-7	2007-8	2007-10	93.0	93.0	-
RUSSIAN FED.	RU -96	BALAKOVO-1	PWR	WWER V-320	3000	1000	950	REA	1980-12	1985-12	1986-5	66.2	68.9	DH, PH
	RU -97	BALAKOVO-2	PWR	WWER V-320	3000	1000	950	REA	1981-8	1987-10	1988-1	64.1	68.0	DH, PH
	RU -98	BALAKOVO-3	PWR	WWER V-320	3000	1000	950	REA	1982-11	1988-12	1989-4	69.6	74.5	DH, PH
	RU -99	BALAKOVO-4	PWR	WWER V-320	3200	1000	950	REA	1984-4	1993-5	1993-12	73.2	79.3	DH, PH
	RU -21	BELOYARSKY-3 (BN-600)	FBR	BN-600	1470	600	560	REA	1969-1	1980-4	1981-11	73.7	74.4	DH, PH
	RU -141	BILIBINO-1	LWGR	EGP-6	62	12	11	REA	1970-1	1974-1	1974-4	68.8	80.4	DH
	RU -142	BILIBINO-2	LWGR	EGP-6	62	12	11	REA	1970-1	1974-12	1975-2	69.0	81.5	DH
	RU -143	BILIBINO-3	LWGR	EGP-6	62	12	11	REA	1970-1	1975-12	1976-2	68.2	80.9	DH
	RU -144	BILIBINO-4	LWGR	EGP-6	62	12	11	REA	1970-1	1976-12	1977-1	66.3	78.5	DH
	RU -30	KALININ-1	PWR	WWER V-338	3000	1000	950	REA	1977-2	1984-5	1985-6	71.4	72.4	DH, PH
	RU -31	KALININ-2	PWR	WWER V-338	3000	1000	950	REA	1982-2	1986-12	1987-3	71.0	74.2	DH, PH
	RU -36	KALININ-3	PWR	WWER V-338	3200	1000	950	REA	1985-10	2004-12	2005-11	80.7	81.2	PH
	RU -12	KOLA-1	PWR	WWER V-230	1375	440	411	REA	1969-5	1973-6	1973-12	69.4	76.5	DH, PH
	RU -13	KOLA-2	PWR	WWER V-230	1375	440	411	REA	1969-5	1974-12	1975-2	70.1	76.3	DH, PH
	RU -32	KOLA-3	PWR	WWER V-213	1375	440	411	REA	1977-4	1981-3	1982-12	73.8	82.7	DH, PH
	RU -33	KOLA-4	PWR	WWER V-213	1375	440	411	REA	1976-8	1984-10	1984-12	72.7	81.8	DH, PH
	RU -17	KURSK-1	LWGR	RBMK-1000	3200	1000	925	REA	1972-6	1976-12	1977-10	58.9	60.9	DH, PH

The column Non-Electrical Applications indicates the use of the facility to provide: DS desalination, DH district heating, PH process heating.

TABLE 14. REACTORS IN OPERATION, 31 DEC. 2007 — continued

Country	Reactor		Type	Model	Capacity [MW]		Operator	NSSS Supplier	Construction Start	Grid Connection	Commercial Operation	EAF % 1998 to 2007	UCF % 1998 to 2007	Non-electrical Applics	
	Code	Name			Thermal	Gross									Net
SLOVAKIA	RU-22	KURSK-2	LWGR	RBMK-1000	3200	1000	925	FAEA	1973-1	1979-1	1979-8	61.4	64.0	DH, PH	
	RU-38	KURSK-3	LWGR	RBMK-1000	3200	1000	925	REA	1978-4	1983-10	1984-3	72.1	73.4	DH, PH	
	RU-39	KURSK-4	LWGR	RBMK-1000	3200	1000	925	REA	1981-5	1985-12	1986-2	75.8	77.1	DH, PH	
	RU-15	LENINGRAD-1	LWGR	RBMK-1000	3200	1000	925	REA	1970-3	1973-12	1974-11	69.5	70.2	DH, PH	
	RU-16	LENINGRAD-2	LWGR	RBMK-1000	3200	1000	925	REA	1970-3	1975-7	1976-2	69.1	70.0	DH, PH	
	RU-34	LENINGRAD-3	LWGR	RBMK-1000	3200	1000	925	REA	1973-12	1979-12	1980-6	69.6	70.7	DH, PH	
	RU-35	LENINGRAD-4	LWGR	RBMK-1000	3200	1000	925	REA	1975-2	1981-2	1981-8	71.7	73.0	DH, PH	
	RU-9	NOVOVORONEZH-3	PWR	WWER V-179	1375	417	385	REA	1967-7	1971-12	1972-6	71.3	72.1	DH, PH	
	RU-11	NOVOVORONEZH-4	PWR	WWER V-179	1375	417	385	REA	1967-7	1972-12	1973-3	77.3	78.8	DH, PH	
	RU-20	NOVOVORONEZH-5	PWR	WWER V-187	3000	1000	950	REA	1974-3	1980-5	1981-2	62.0	63.0	DH, PH	
	RU-23	SMOLENSK-1	LWGR	RBMK-1000	3200	1000	925	REA	1975-10	1982-12	1983-9	71.1	73.6	DH, PH	
	RU-24	SMOLENSK-2	LWGR	RBMK-1000	3200	1000	925	REA	1976-6	1985-5	1985-7	72.8	75.5	DH, PH	
	RU-67	SMOLENSK-3	LWGR	RBMK-1000	3200	1000	925	REA	1984-5	1990-1	1990-10	79.1	81.9	DH, PH	
	RU-59	VOLGODONSK-1	PWR	WWER V-320I	3200	1000	950	REA	1981-9	2001-3	2001-12	84.7	85.4	-	
	SLOVENIA	SK-3	BOHUNICE-2	PWR	WWER V-230	1375	440	408	JAVYS	1972-4	1980-3	1981-1	75.1	77.3	-
		SK-13	BOHUNICE-3	PWR	WWER V-213	1375	440	408	SE,plc	1976-12	1984-8	1985-2	77.2	80.5	DH, PH
		SK-14	BOHUNICE-4	PWR	WWER V-213	1375	440	408	SE,plc	1976-12	1985-8	1985-12	79.0	82.4	DH, PH
		SK-6	MOCHOVCE-1	PWR	WWER V-213	1375	440	405	SE,plc	1983-10	1988-7	1988-10	81.0	84.1	-
		SK-7	MOCHOVCE-2	PWR	WWER V-213	1375	440	405	SE,plc	1983-10	1989-12	2000-4	82.3	84.4	-
SI-1		KRSKO	PWR	Westinghouse t	1994	730	666	NEK	1975-3	1981-10	1983-1	82.8	84.3	-	
ZA-1		KOEBERG-1	PWR	CP1	2785	944	900	ESKOM	1976-7	1984-4	1984-7	70.1	75.1	-	
SOUTH AFRICA	ZA-2	KOEBERG-2	PWR	CP1	2785	944	900	ESKOM	1976-7	1985-7	1985-11	70.0	77.4	-	
	ES-6	ALMARAZ-1	PWR	WE 3-loops	2729	977	944	CNAT	1973-7	1981-5	1983-9	85.4	86.3	-	
SPAIN	ES-7	ALMARAZ-2	PWR	WE 3-loops	2729	980	956	WH	1973-7	1983-10	1984-7	86.7	87.8	-	
	ES-8	ASCO-1	PWR	WE 3-loops	2931	1033	995	ANAV	1974-5	1983-8	1984-12	85.4	85.9	-	
	ES-9	ASCO-2	PWR	WE 3-loops	2910	1027	997	ANAV	1975-3	1985-10	1986-3	87.6	88.3	-	

The column Non-Electrical Applications indicates the use of the facility to provide: DH district heating, PH process heating.

TABLE 14. REACTORS IN OPERATION, 31 DEC. 2007 — continued

Country	Reactor		Type	Model	Capacity [MW]		Operator	NSSS Supplier	Construction Start	Grid Connection	Commercial Operation	EAF % 1998 to 2007	UCF % 1998 to 2007	Non-electrical Applies
	Code	Name			Thermal	Gross								
	ES-10	CORFENTES	BWR	BWR-6	3237	1092	1064	ID	1975-9	1984-10	1985-3	86.2	87.0	-
	ES-2	SANTA MARIA DE GARONA	BWR	BWR-3	1381	466	446	NUCLEONOR	1966-5	1971-3	1971-5	77.0	77.8	-
	ES-11	TRILLO-1	PWR	PWR 3 loops	3010	1066	1003	CNAT	1979-8	1988-5	1988-8	86.5	86.7	-
	ES-16	VANDELLOS-2	PWR	WE 3-loops	2941	1087	1045	ANAV	1980-12	1987-12	1988-3	82.7	83.5	-
SWEDEN	SE-9	FORSMARK-1	BWR	BWR 75	2928	1025	987	FKA	1973-6	1980-6	1980-12	83.7	85.9	-
	SE-11	FORSMARK-2	BWR	BWR 75	2928	1038	1000	FKA	1975-1	1981-7	1981-7	84.4	86.4	-
	SE-14	FORSMARK-3	BWR	BWR 3000	3300	1212	1170	FKA	1979-1	1985-3	1985-8	87.7	90.1	-
	SE-2	OSKARSHAMN-1	BWR	ABB BWR	1375	487	467	OKG	1966-8	1971-8	1972-2	63.0	63.1	-
	SE-3	OSKARSHAMN-2	BWR	ABB BWR	1800	623	598	OKG	1969-9	1974-10	1975-1	78.9	79.6	-
	SE-12	OSKARSHAMN-3	BWR	BWR 75	3300	1197	1150	OKG	1980-5	1985-3	1985-8	87.5	88.3	-
	SE-4	RINGHALS-1	BWR	BWR	2540	887	843	RAB	1969-2	1974-10	1976-1	72.9	73.8	-
	SE-5	RINGHALS-2	PWR	PWR	2660	917	867	RAB	1970-10	1974-8	1975-5	71.9	73.3	-
	SE-7	RINGHALS-3	PWR	PWR	3160	1037	1045	RAB	1972-9	1980-9	1981-9	77.0	78.6	-
	SE-10	RINGHALS-4	PWR	PWR	2775	979	907	RAB	1973-11	1982-6	1983-11	85.2	87.0	-
SWITZERLAND	CH-1	BEZNAU-1	PWR	WH - 2 loops	1130	380	365	NOK	1965-9	1969-7	1969-9	84.0	84.3	DH
	CH-3	BEZNAU-2	PWR	WH - 2 loops	1130	380	365	NOK	1968-1	1971-10	1971-12	86.9	87.0	DH
	CH-4	GOESGEN	PWR	BWR 6	2900	1020	970	KKG	1973-12	1979-2	1979-11	88.3	89.2	PH
	CH-5	LEIBSTADT	BWR	BWR 6	3138	1220	1165	KKL	1974-1	1984-5	1984-12	84.9	86.8	-
	CH-2	MUEHLEBERG	BWR	BWR 4	1097	372	355	BKW	1967-3	1971-7	1972-11	86.3	87.5	-
	UK	GB-18A	DUNGENESS-B1	GCR	AGR	1500	615	545	BE	1965-10	1983-4	1985-4	44.2	46.2
GB-18B		DUNGENESS-B2	GCR	AGR	1500	615	545	BE	1965-10	1985-12	1989-4	51.4	51.6	-
GB-19A		HARTLEPOOL-A1	GCR	AGR	1500	655	595	BE	1968-10	1983-8	1989-4	71.7	71.8	-
GB-19B		HARTLEPOOL-A2	GCR	AGR	1500	655	595	BE	1968-10	1984-10	1989-4	75.4	75.6	-
GB-20A		HEYSHAM-A1	GCR	AGR	1500	625	585	BE	1970-12	1983-7	1989-4	74.5	74.8	-
GB-20B		HEYSHAM-A2	GCR	AGR	1500	625	575	BE	1970-12	1984-10	1989-4	72.4	73.1	-
GB-22A		HEYSHAM-B1	GCR	AGR	1550	680	615	BE	1980-8	1988-7	1989-4	76.3	77.1	-
GB-22B		HEYSHAM-B2	GCR	AGR	1550	680	615	BE	1980-8	1988-11	1989-4	75.5	76.7	-

The column Non-Electrical Applications indicates the use of the facility to provide: DH district heating, PH process heating.

TABLE 14. REACTORS IN OPERATION, 31 DEC. 2007 — continued

Country	Reactor		Type	Model	Capacity [MW]		Operator	NSSS Supplier	Construction Start	Grid Connection	Commercial Operation	EAF % 1998 to 2007	UCF % 1998 to 2007	Non-electrical Applies
	Code	Name			Thermal	Gross								
	GB-16A	HINKLEY POINT-B1	GCR	AGR	1494	655	430	BEG	1967-9	1978-10	1978-10	75.3	76.0	-
	GB-16B	HINKLEY POINT-B2	GCR	AGR	1494	655	430	TNPG	1967-9	1976-2	1976-9	72.7	73.9	-
	GB-17A	HUNTERSTON-B1	GCR	AGR	1496	644	420	BE	1967-11	1976-2	1976-2	70.4	70.7	-
	GB-17B	HUNTERSTON-B2	GCR	AGR	1496	644	420	TNPG	1967-11	1977-3	1977-3	70.9	71.0	-
	GB-11A	OLDBURY-A1	GCR	MAGNOX	660	230	217	MEL	1962-5	1967-11	1967-12	81.1	81.5	-
	GB-11B	OLDBURY-A2	GCR	MAGNOX	660	230	217	TNPG	1962-5	1968-4	1968-9	77.4	77.4	-
	GB-24	SIZEWELL-B	PWR	AGR	3425	1250	1188	BE	1988-7	1995-2	1995-9	86.1	86.2	-
	GB-23A	TORNES 1	GCR	AGR	1623	682	625	BE	1980-8	1988-5	1988-5	72.7	74.8	-
	GB-23B	TORNES 2	GCR	AGR	1623	682	625	BE	1980-8	1989-2	1989-2	72.5	73.6	-
	GB-13A	WYLFA 1	GCR	MAGNOX	1920	540	490	MEL	1963-9	1971-1	1971-11	70.8	71.3	-
	GB-13B	WYLFA 2	GCR	MAGNOX	1920	540	490	MEL	1963-9	1971-7	1972-1	70.8	71.0	-
UKRAINE	UA-40	KHMELNITSKI-1	PWR	WWER V-320	3000	1000	950	NNEGC	1981-11	1987-12	1988-8	72.3	73.3	DH
	UA-41	KHMELNITSKI-2	PWR	WWER V-320	3000	1000	950	NNEGC	1985-2	2004-8	2005-12	87.6	89.3	DH
	UA-27	ROVNO-1	PWR	WWER V-213	1375	420	381	NNEGC	1973-8	1980-12	1981-9	80.0	80.7	DH
	UA-28	ROVNO-2	PWR	WWER V-213	1375	415	376	NNEGC	1973-10	1981-12	1982-7	80.0	81.1	DH
	UA-29	ROVNO-3	PWR	WWER V-320	3000	1000	950	NNEGC	1980-2	1986-12	1987-5	70.5	72.3	DH
	UA-69	ROVNO-4	PWR	WWER V-320	3000	1000	950	NNEGC	1986-8	2004-10	2006-4	67.3	67.7	DH
	UA-44	SOUTH UKRAINE-1	PWR	WWER V-302	3000	1000	950	NNEGC	1977-3	1982-12	1983-10	65.9	66.7	DH
	UA-45	SOUTH UKRAINE-2	PWR	WWER V-338	3000	1000	950	NNEGC	1979-10	1985-1	1985-4	62.3	63.5	DH
	UA-48	SOUTH UKRAINE-3	PWR	WWER V-320	3000	1000	950	NNEGC	1985-2	1989-9	1989-12	70.9	72.2	DH
	UA-54	ZAPOROZHE-1	PWR	WWER V-320	3000	1000	950	NNEGC	1980-4	1984-12	1985-12	62.7	64.9	DH
	UA-56	ZAPOROZHE-2	PWR	WWER V-320	3000	1000	950	NNEGC	1981-1	1985-7	1986-2	67.2	68.9	DH
	UA-78	ZAPOROZHE-3	PWR	WWER V-320	3000	1000	950	NNEGC	1982-4	1986-12	1987-3	69.1	72.0	DH
	UA-79	ZAPOROZHE-4	PWR	WWER V-320	3000	1000	950	NNEGC	1983-4	1987-12	1988-4	73.2	75.8	DH
	UA-126	ZAPOROZHE-5	PWR	WWER V-320	3000	1000	950	NNEGC	1985-11	1989-8	1989-10	73.2	74.9	DH
	UA-127	ZAPOROZHE-6	PWR	WWER V-320	3000	1000	950	NNEGC	1986-6	1995-10	1996-9	78.7	81.0	DH
	USA	US-313	ARKANSAS ONE-1	PWR	B&W (L-loop) D	2568	880	836	ENTGARKS	1968-12	1974-8	1974-12	78.6	78.9
US-368		ARKANSAS ONE-2	PWR	CE (2-loop) DR	3026	1040	988	ENTERGY	1968-12	1978-12	1980-3	82.6	82.8	-

The column Non-Electrical Applications indicates the use of the facility to provide: DH district heating.

TABLE 14. REACTORS IN OPERATION, 31 DEC. 2007 — continued

Country	Reactor		Type	Model	Capacity [MW]		Operator	NSSS Supplier	Construction Start	Grid Connection	Commercial Operation	EAF % 1998 to 2007	UCF % 1998 to 2007	Non-electrical Applies		
	Code	Name			Thermal	Gross									Net	
	US	-334	BEAVER VALLEY-1	PWR	W (3-loop)	2689	923	883	FENOC	WH	1970-6	1976-6	1976-10	71.3	71.3	-
	US	-412	BEAVER VALLEY-2	PWR	W (3-loop)	2689	923	832	FENOC	WH	1974-5	1987-8	1987-11	85.9	85.9	-
	US	-456	BRADWOOD-1	PWR	W (4-loop)	3587	1240	1178	EXELON	WH	1975-12	1988-7	1988-7	86.8	86.8	-
	US	-457	BRADWOOD-2	PWR	W (4-loop) DRY	3587	1213	1152	EXELON	WH	1975-12	1988-5	1988-10	90.4	90.4	-
	US	-259	BROWNS FERRY-1	BWR	BWR-4	3458	1152	1170	TVA	GE	1967-5	1973-10	1974-8	58.8	58.8	-
	US	-260	BROWNS FERRY-2	BWR	BWR-4 (Mark 1)	3458	1155	1223	TVA	GE	1967-5	1974-8	1975-3	78.4	78.4	-
	US	-296	BROWNS FERRY-3	BWR	BWR-4 (Mark 1)	3458	1190	1114	TVA	GE	1968-7	1976-9	1977-3	81.0	81.0	-
	US	-325	BRUNSWICK-1	BWR	BWR-4 (Mark 1)	2923	990	938	PROGENGC	GE	1970-2	1976-12	1977-3	73.1	73.4	-
	US	-324	BRUNSWICK-2	BWR	BWR-4 (Mark 1)	2923	989	937	PROGENGC	GE	1970-2	1975-4	1975-11	71.5	71.9	-
	US	-454	BYRON-1	PWR	W (4-loop) DR	3587	1225	1164	EXELON	WH	1975-12	1985-3	1985-9	86.9	87.0	-
	US	-455	BYRON-2	PWR	W (4-loop) DR	3587	1196	1136	EXELON	WH	1975-12	1987-2	1987-8	91.4	91.4	-
	US	-483	CALLAWAY-1	PWR	W (4-loop) DRY	3565	1236	1190	AMERGENE	WH	1976-4	1984-10	1984-12	88.1	88.1	-
	US	-317	CALVERT CLIFFS-1	PWR	CE (2-loop) D	2700	918	873	CCNPP	CE	1969-7	1975-1	1975-5	76.6	76.9	-
	US	-318	CALVERT CLIFFS-2	PWR	CE (2-loop) D	2700	911	862	CCNPP	CE	1969-7	1976-12	1977-4	80.3	80.3	-
	US	-413	CATAWBA-1	PWR	W (4-loop) IC	3411	1188	1129	DUKE	WH	1975-8	1985-1	1985-6	83.8	83.8	-
	US	-414	CATAWBA-2	PWR	W (4-loop) IC	3411	1188	1129	DUKE	WH	1975-8	1986-5	1986-8	84.3	84.3	-
	US	-461	CLINTON-1	BWR	BWR-6 (Mark 3)	3473	1098	1043	AMERGENE	GE	1976-2	1987-4	1987-11	73.5	73.6	-
	US	-397	COLUMBIA	BWR	BWR-5 (Mark 2)	3486	1200	1131	ENERGYNW	GE	1972-2	1984-5	1984-12	76.9	77.7	-
	US	-445	COMANCHE PEAK-1	PWR	W (4-loop) DRY	3458	1189	1150	TXU	WH	1974-12	1990-4	1990-8	88.2	88.2	-
	US	-446	COMANCHE PEAK-2	PWR	W (4-loop) DRY	3458	1189	1150	TXU	WH	1974-12	1993-4	1993-8	90.3	90.3	-
	US	-298	COOPER	BWR	BWR-4 (Mark 1)	2381	801	760	NPPD	GE	1968-6	1974-5	1974-7	74.8	74.9	-
	US	-302	CRYSTAL RIVER-3	PWR	B&W (L-loop)	2568	890	838	PROGRESS	B&W	1968-9	1977-1	1977-3	72.3	72.4	-
	US	-346	DAVIS BESSE-1	PWR	B&W (R-loop)	2772	925	889	FENOC	B&W	1971-3	1977-8	1978-7	67.5	67.6	-
	US	-275	DIABLO CANYON-1	PWR	W (4-loop)	3338	1136	1122	PGE	WH	1968-4	1984-11	1985-5	85.7	85.8	-
	US	-323	DIABLO CANYON-2	PWR	W (4-loop)	3411	1164	1118	PGE	WH	1970-12	1985-10	1986-3	88.9	89.0	-
	US	-315	DONALD COOK-1	PWR	W (4-loop) ICE	3304	1077	1029	IMPCCO	WH	1969-3	1975-2	1975-8	69.7	69.9	-
	US	-316	DONALD COOK-2	PWR	W (4-loop) ICE	3468	1133	1077	IMPCCO	WH	1969-3	1978-3	1978-7	67.3	67.5	-
	US	-237	DRESDEN-2	BWR	BWR-3 (Mark 1)	2527	913	867	EXELON	GE	1966-1	1970-4	1970-6	76.6	76.6	-
	US	-249	DRESDEN-3	BWR	BWR-3 (Mark 1)	2527	913	867	EXELON	GE	1966-1	1971-7	1971-11	72.9	73.0	-
	US	-331	DUANE ARNOLD-1	BWR	BWR-4 (Mark 1)	1912	614	581	FPLDUANE	GE	1970-6	1974-5	1975-2	77.8	77.9	-

TABLE 14. REACTORS IN OPERATION, 31 DEC. 2007 — continued

Country	Reactor		Type	Model	Capacity [MW]		Operator	NSSS Supplier	Construction Start	Grid Connection	Commercial Operation	EAF % 1998 to 2007	UCF % 1998 to 2007	Non-electrical Applies
	Code	Name			Thermal	Gross								
	US	-341 ENRICO FERMI-2	BWR	BWR-4 (Mark 1)	3430	1154	1122	DETE	1972-9	1986-9	1988-1	76.8	76.8	-
	US	-348 FARLEY-1	PWR	W (3-loop)	2775	895	851	ALP	1972-8	1977-8	1977-12	82.5	82.7	-
	US	-364 FARLEY-2	PWR	W (3-loop) DRY	905	860	850	ALP	1972-8	1981-5	1981-7	87.1	87.1	-
	US	-333 FITZPATRICK	BWR	BWR-4 (Mark 1)	2536	882	852	ENERGY	1970-5	1975-2	1975-7	76.1	76.3	-
	US	-285 FORT CALHOUN-1	PWR	CE (2-loop)	1500	512	482	OPPD	1968-6	1973-8	1973-9	80.2	80.2	-
	US	-416 GRAND GULF-1	BWR	BWR-6 (Mark 3)	3833	1333	1266	ENERGY	1974-9	1984-10	1985-7	86.4	86.6	-
	US	-261 H.B. ROBINSON-2	PWR	W (3-loop) DRY	2339	745	710	PROGRESS	1967-4	1970-9	1971-3	78.3	78.5	-
	US	-321 HATCH-1	BWR	BWR-4 (Mark 1)	2804	898	876	SOUTH	1969-9	1974-11	1975-12	79.7	79.7	-
	US	-366 HATCH-2	BWR	BWR-4 (Mark 1)	2804	921	883	SOUTH	1972-12	1978-9	1979-9	82.0	82.0	-
	US	-354 HOPE CREEK-1	BWR	BWR-4 (Mark 1)	3339	1139	1061	PSEG	1976-3	1986-8	1986-12	84.6	84.6	-
	US	-247 INDIAN POINT-2	PWR	W (4-loop) DRY	3216	1062	1020	ENERGY	1966-10	1973-6	1974-8	71.2	71.2	-
	US	-286 INDIAN POINT-3	PWR	W (4-loop) DRY	3216	1065	1025	ENERGY	1969-8	1976-4	1976-8	67.0	67.0	-
	US	-305 KEWAUNEE	PWR	W (2-loop) DRY	1772	581	556	DOMENGY	1968-8	1974-6	1974-6	82.7	82.7	-
	US	-373 LASALLE-1	BWR	BWR-5 (Mark 2)	3489	1177	1118	EXELON	1973-9	1982-9	1984-1	74.4	74.4	-
	US	-374 LASALLE-2	BWR	BWR-5 (Mark 2)	3489	1179	1120	EXELON	1973-9	1984-4	1984-10	73.1	73.1	-
	US	-352 LIMERICK-1	BWR	BWR-4 (Mark 2)	3458	1194	1134	EXELON	1974-6	1985-4	1986-2	89.3	89.3	-
	US	-353 LIMERICK-2	BWR	BWR-4 (Mark 2)	3458	1194	1134	EXELON	1974-6	1989-9	1990-1	92.6	92.7	-
	US	-369 MCGUIRE-1	PWR	W (4-loop) ICE	3411	1158	1100	DUKE	1973-2	1981-9	1981-12	79.8	80.1	-
	US	-370 MCGUIRE-2	PWR	W (4-loop) ICE	3411	1158	1100	DUKE	1973-2	1983-5	1984-3	83.9	83.9	-
	US	-336 MILLSTONE-2	PWR	COMB CE DRY	2700	910	882	DOMIN	1970-12	1975-11	1975-12	65.3	66.0	-
	US	-423 MILLSTONE-3	PWR	W (4-loop) DRY	3411	1253	1155	DOMIN	1974-8	1986-2	1986-4	74.1	74.1	-
	US	-263 MONTICELLO	BWR	BWR-3	1775	600	572	NORTHERN	1967-6	1971-3	1971-6	84.3	84.3	-
	US	-220 NINE MILE POINT-1	BWR	BWR-2 (Mark 1)	1850	642	621	NMPNSLLC	1965-4	1969-11	1969-12	73.3	73.3	-
	US	-410 NINE MILE POINT-2	BWR	BWR-5 (Mark 2)	3467	1205	1140	NMPNSLLC	1974-6	1987-8	1988-3	82.2	82.2	-
	US	-338 NORTH ANNA-1	PWR	W (3-loop)	2883	973	924	VEPCO	1971-2	1978-4	1978-6	81.3	81.3	-
	US	-339 NORTH ANNA-2	PWR	W (3-loop)	2568	958	910	VEPCO	1971-2	1980-8	1980-12	85.4	85.4	-
	US	-269 OCONEE-1	PWR	B&W (L-loop)	2568	891	846	DUKE	1967-11	1973-5	1973-7	79.3	79.6	-
	US	-270 OCONEE-2	PWR	B&W (L-loop)	2568	891	846	DUKE	1967-11	1973-12	1974-9	80.7	81.0	-
	US	-287 OCONEE-3	PWR	B&W (L-loop)	2568	891	846	DUKE	1967-11	1974-9	1974-12	79.0	79.4	-
	US	-219 OYSTER CREEK	BWR	BWR-2 (Mark 1)	1930	652	619	AMERGEN	1964-12	1969-9	1969-12	74.4	74.5	-

TABLE 14. REACTORS IN OPERATION, 31 DEC. 2007 — continued

Country	Reactor		Type	Model	Capacity [MW]		Operator	NSSS Supplier	Construction Start	Grid Connection	Commercial Operation	EAF % 1998 to 2007	UCF % 1998 to 2007	Non-electrical Applies
	Code	Name			Thermal	Gross								
	US-255	PALISADES	PWR	CE (2-loop) DR	2565	842	778	CONSENEC	1987-3	1971-12	1971-12	67.7	68.8	-
	US-528	PALO VERDE-1	PWR	CE (2-loop) DR	3990	1414	1311	AZPSCO	1976-5	1985-6	1985-6	76.3	76.5	-
	US-529	PALO VERDE-2	PWR	CE (2-loop) DR	3990	1414	1314	AZPSCO	1976-6	1986-9	1986-9	80.4	80.5	-
	US-530	PALO VERDE-3	PWR	CE (2-loop) DR	3990	1346	1247	AZPSCO	1976-6	1987-11	1988-1	82.2	82.6	-
	US-277	PEACH BOTTOM-2	BWR	BWR-4 (Mark 1)	3514	1171	1112	EXELON	1968-1	1974-2	1974-2	72.9	72.9	-
	US-440	PEACH BOTTOM-3	BWR	BWR-4 (Mark 1)	3514	1171	1112	EXELON	1968-1	1974-9	1974-12	73.2	73.3	-
	US-440	PERRY-1	BWR	BWR-6 (Mark 3)	3758	1303	1231	FENOC	1977-5	1986-12	1987-11	79.3	79.3	-
	US-293	PILGRIM-1	BWR	BWR-3 (Mark 1)	2028	711	685	ENTERGY	1968-8	1972-7	1972-12	69.1	69.3	-
	US-266	POINT BEACH-1	PWR	W (2-loop) DRY	1540	543	512	WEP	1967-7	1970-11	1970-12	82.7	83.1	-
	US-301	POINT BEACH-2	PWR	W (2-loop) DRY	1540	545	514	WEP	1968-7	1972-8	1972-10	84.3	84.3	-
	US-282	PRAIRIE ISLAND-1	PWR	W (2-loop) DRY	1650	566	551	NORTHERN	1968-6	1973-12	1973-12	86.0	86.0	-
	US-306	PRAIRIE ISLAND-2	PWR	W (2-loop) DRY	1650	544	545	NUCMAN	1969-6	1974-12	1974-12	87.9	87.9	-
	US-254	QUAD CITIES-1	BWR	BWR-3 (Mark 1)	2957	913	867	EXELON	1967-2	1972-4	1973-2	76.3	76.3	-
	US-265	QUAD CITIES-2	BWR	BWR-3 (Mark 1)	2511	913	867	EXELON	1967-2	1972-5	1973-3	74.8	75.6	-
	US-244	R.E.GINNA	PWR	W (2-loop)	1775	608	488	CCNPP	1966-4	1969-12	1970-7	84.1	84.1	-
	US-458	RIVER BEND-1	BWR	BWR-6 (Mark 3)	3091	1036	967	ENTGS	1977-3	1985-12	1986-6	81.7	81.7	-
	US-272	SALEM-1	PWR	W (4-loop) DRY	3459	1228	1174	PSEGPOWER	1968-9	1976-12	1977-6	66.0	66.1	-
	US-311	SALEM-2	PWR	W (4-loop) DRY	3459	1170	1130	PSEGPOWER	1968-9	1981-6	1981-10	68.8	68.8	-
	US-361	SAN ONOFRE-2	PWR	CE (2-loop) DR	3438	1127	1070	SCE	1974-3	1982-9	1983-8	80.9	80.9	-
	US-362	SAN ONOFRE-3	PWR	CE (2-loop) DR	3438	1127	1080	SCE	1974-3	1983-9	1984-4	81.8	81.8	-
	US-443	SEABROOK-1	PWR	W (4-loop) DRY	3587	1296	1244	FPL	1976-7	1990-5	1990-8	86.5	86.7	-
	US-327	SEQUOYAH-1	PWR	W (4-loop) ICE	3411	1221	1150	TVA	1970-5	1980-7	1981-7	70.1	70.1	-
	US-328	SEQUOYAH-2	PWR	W (4-loop) ICE	3411	1221	1127	TVA	1970-5	1981-12	1982-6	74.6	74.6	-
	US-400	SHEARON HARRIS-1	PWR	W (3-loop) DRY	2900	960	900	PROGENG	1978-1	1987-1	1987-5	87.4	87.4	-
	US-498	SOUTH TEXAS-1	PWR	W (4-loop) DRY	3853	1354	1280	STP	1975-12	1988-3	1988-8	80.0	80.0	-
	US-499	SOUTH TEXAS-2	PWR	W (4-loop) DRY	3853	1354	1280	STP	1975-12	1989-4	1989-6	81.3	81.3	-
	US-335	ST. LUCIE-1	PWR	CE (2-loop) DRY	2700	883	839	FPL	1970-7	1976-5	1976-12	81.6	81.8	-
	US-389	ST. LUCIE-2	PWR	CE (2-loop) DRY	2700	883	839	FPL	1977-5	1983-6	1983-8	85.7	86.1	-
	US-280	SURRY-1	PWR	W (3-loop) DRY	2546	848	799	VEPCO	1968-6	1972-7	1972-12	74.0	74.0	-
	US-281	SURRY-2	PWR	W (3-loop) DRY	2546	848	799	VEPCO	1968-6	1973-3	1973-5	75.0	75.1	-

TABLE 14. REACTORS IN OPERATION, 31 DEC. 2007 — continued

Country	Reactor		Type	Model	Capacity [MW]		Operator	NSSS Supplier	Construction Start	Grid Connection	Commercial Operation	EAF % 1998 to 2007	UCF % 1998 to 2007	Non-electrical Applics
	Code	Name			Thermal	Gross								
	US	-387 SUSQUEHANNA-1	BWR	BWR-4 (Mark 2)	3489	1199	1135	PP&L	1973-11	1982-11	1983-6	83.4	83.5	-
	US	-388 SUSQUEHANNA-2	BWR	BWR-4 (Mark 2)	3489	1204	1140	PP&L	1973-11	1984-7	1985-2	86.9	86.9	-
	US	-289 THREE MILE ISLAND-1	PWR	B&W (L-loop)	2588	837	786	AMERGENE B&W	1968-5	1974-6	1974-9	71.3	86.1	-
	US	-250 TURKEY POINT-3	PWR	W (3-loop) DRY	2300	729	693	FPL	1967-4	1972-11	1972-12	77.0	77.1	-
	US	-251 TURKEY POINT-4	PWR	W (3-loop) DRY	2300	729	693	FPL	1967-4	1973-6	1973-9	76.7	76.7	-
	US	-271 VERMONT YANKEE	PWR	BWR-4 (Mark 1)	1912	650	620	ENTERGY GE	1967-12	1972-9	1972-11	83.8	83.9	-
	US	-395 VIRGIL C. SUMMER-1	PWR	W (3-loop) DRY	2900	1003	966	SCEG WH	1973-3	1982-11	1984-1	84.6	84.6	-
	US	-424 VOGTLE-1	PWR	W (4-loop) DRY	3565	1203	1152	SOUTH WH	1976-8	1987-3	1987-6	89.9	89.9	-
	US	-425 VOGTLE-2	PWR	W (4-loop) DRY	3565	1202	1149	SOUTH WH	1976-8	1989-4	1989-5	89.9	89.9	-
	US	-382 WATERFORD-3	PWR	CE (2-loop)	3716	1200	1152	ENTERGY CE	1974-11	1985-3	1985-9	86.6	86.8	-
	US	-390 WATTS BAR-1	PWR	W (4-loop) (IC)	3459	1202	1121	TVA WH	1973-1	1996-2	1996-5	90.2	90.2	-
	US	-482 WOLF CREEK	PWR	W (4-loop)	3565	1213	1166	KGECO WH	1977-5	1985-6	1985-9	86.5	86.5	-
Status as of 31 December 2007. 439 reactors (372208 MW(e)) were connected to the grid, including 6 units (4921 MW(e)) in Taiwan, China.														
TWN, CHINA	TW	-1 CHIN SHAN-1	BWR		1775	636	604	TPC	1972-6	1977-11	1978-12	82.2	83.3	-
TWN, CHINA	TW	-2 CHIN SHAN-2	BWR		1775	636	604	TPC	1973-12	1978-12	1979-7	81.4	82.5	-
TWN, CHINA	TW	-3 KUOSHENG-1	BWR	BWR-6	2894	1019	985	TPC	1975-11	1981-5	1981-12	81.6	82.3	-
TWN, CHINA	TW	-4 KUOSHENG-2	BWR		2894	985	948	TPC	1976-3	1982-6	1983-3	81.4	82.5	-
TWN, CHINA	TW	-5 MAANSHAN-1	PWR		2785	951	890	TPC	1978-8	1984-5	1984-7	82.7	84.3	-
TWN, CHINA	TW	-6 MAANSHAN-2	PWR		2785	951	890	TPC	1979-2	1985-2	1985-5	83.6	85.6	-

TABLE 15. LONG-TERM SHUT DOWN REACTORS, 31 DEC. 2007

Country	Reactor		Type	Model	Capacity [MW]			Operator	NSSS Supplier	Construction Start	Grid Connection	Commercial Operation	Long-term Shutdown Date
	Code	Name			Thermal	Gross	Net						
CANADA	CA -8	BRUCE-1	PHWR	CANDU 791	2832	825	848	BRUCEPOW	OH/AECL	1971-6	1977-1	1977-9	1997-11
	CA -9	BRUCE-2	PHWR	CANDU 791	2832	825	848	BRUCEPOW	OH/AECL	1970-12	1976-9	1977-9	1995-11
	CA -5	PICKERING-2	PHWR	CANDU 500A	1744	542	515	OPG	OH/AECL	1966-9	1971-10	1971-12	1998-1
	CA -6	PICKERING-3	PHWR	CANDU 500A	1744	542	515	OPG	OH/AECL	1967-12	1972-5	1972-6	1998-1
JAPAN	JP -31	MONJU	FBR	Not specified	714	280	246	JAEA	T/H/F/M	1986-5	1995-8	—	1996-1

Status as of 31 December 2007, 5 reactors (2972 MW(e)) were in long-term shutdown.

TABLE 16. REACTORS PERMANENTLY SHUT DOWN, 31 DEC. 2007

Country	Reactor		Type	Capacity [MW]			Operator	NSSS Supplier	Construction Start	Grid Connection	Commercial Operation	Shut Down
	Code	Name		Thermal	Gross	Net						
ARMENIA	AM-18	ARMENIA-1	PWR	1375	408	376	ANPPJSC	FAEA	1969-7	1976-12	1977-10	1989-2
BELGIUM	BE-1	BR-3	PWR	41	12	10	CEN/SCK	WH	1957-11	1962-10	1962-10	1987-6
BULGARIA	BG-1	KOZLODUY-1	PWR	1375	440	408	KOZNPP	AEE	1970-4	1974-7	1974-10	2002-12
	BG-2	KOZLODUY-2	PWR	1375	440	408	KOZNPP	AEE	1970-4	1975-8	1975-11	2002-12
	BG-3	KOZLODUY-3	PWR	1375	440	408	KOZNPP	AEE	1973-10	1980-12	1981-1	2006-12
	BG-4	KOZLODUY-4	PWR	1375	440	408	KOZNPP	AEE	1973-10	1982-5	1982-6	2006-12
CANADA	CA-2	DOUGLAS POINT	PHWR	704	218	206	OPG	AECL	1960-2	1967-1	1968-9	1984-5
	CA-3	GENTILLY-1	HWLWR	792	266	250	HQ	AECL	1966-9	1971-4	1972-5	1977-6
	CA-1	ROLPHTON NPD	PHWR	92	25	22	OH	CGE	1958-1	1962-6	1962-10	1987-8
FRANCE	FR-9	BUGEY-1	GCR	1954	555	540	EDF	VARIOUS	1965-12	1972-4	1972-7	1994-5
	FR-2	CHINON-A1	GCR	300	80	70	EDF	LEVIVIER	1957-2	1963-6	1964-2	1973-4
	FR-3	CHINON-A2	GCR	800	230	180	EDF	LEVIVIER	1959-8	1965-2	1965-2	1985-6
	FR-4	CHINON-A3	GCR	1170	480	360	EDF	GTM	1961-3	1966-8	1966-8	1990-6
	FR-5	CHOOZ-A (ARDENNES)	PWR	1040	320	305	SENA	AF/W	1967-4	1967-4	1967-4	1991-10
	FR-6	EL-4 (MONTS D'ARREE)	HWGCR	250	75	70	EDF	GAAA	1962-7	1967-7	1968-6	1985-7
	FR-1B	G-2 (MARCOULE)	GCR	260	43	38	COGEMA	SACM	1955-3	1959-4	1959-4	1980-2
	FR-1	G-3 (MARCOULE)	GCR	260	43	40	COGEMA	SACM	1956-3	1960-4	1960-4	1984-6
	FR-7	ST. LAURENT-A1	GCR	1650	500	480	EDF	VARIOUS	1963-10	1969-3	1969-6	1990-4
	FR-8	ST. LAURENT-A2	GCR	1475	530	465	EDF	VARIOUS	1966-1	1971-8	1971-11	1992-5
	FR-24	SUPER-PHENIX	FBR	3000	1242	1200	EDF	ASPALDO	1976-12	1986-1	NA	1998-12
	GERMANY	DE-4	AVR JUELICH (AVR)	HTGR	46	15	13	AVR	BBK	1961-8	1967-12	1969-5
DE-502		GREIFSWALD-1 (KGR 1)	PWR	1375	440	408	EWN	AEE	1970-3	1974-3	1974-7	1990-2
DE-503		GREIFSWALD-2 (KGR 2)	PWR	1375	440	408	EWN	AEE	1970-3	1974-12	1975-4	1990-2
DE-504		GREIFSWALD-3 (KGR 3)	PWR	1375	440	408	EWN	AEE	1972-4	1977-10	1978-5	1990-2
DE-505		GREIFSWALD-4 (KGR 4)	PWR	1375	440	408	EWN	AEE	1972-4	1979-9	1979-11	1990-7

TABLE 16. REACTORS PERMANENTLY SHUT DOWN, 31 DEC. 2007 — continued

Country	Reactor		Type	Capacity [MW]			Operator	NSSS Supplier	Construction Start	Grid Connection	Commercial Operation	Shut Down
	Code	Name		Thermal	Gross	Net						
GERMANY	DE-506	GREIFSWALD-5 (KGR 5)	PWR	1375	440	408	EWN	AEE	1976-12	1989-4	1989-11	1989-11
	DE-3	GUNDEMMINGEN-A (KRB A)	BWR	801	250	237	KBG	AEG,GE	1962-12	1966-12	1967-4	1977-1
	DE-7	HDR GROSSWELZHEIM	BWR	100	25	25	KBG	AEG,KWU	1965-1	1969-10	1970-8	1971-4
	DE-8	KNK II	FBR	58	21	17	KBG	IA	1974-9	1978-4	1979-3	1991-8
	DE-6	LINGEN (KWL)	BWR	520	268	183	KWL	AEG	1964-10	1968-7	1968-10	1979-1
	DE-22	MUELHEIM-KAERLICH (KMK)	PWR	3760	1302	1219	KBG	BBR	1975-1	1986-3	1987-8	1988-9
	DE-2	MZFR	PHWR	200	57	52	KBG	SIEMENS	1961-12	1966-3	1966-12	1984-5
	DE-11	NIEDERAICHBACH (KKN)	HWGCR	321	106	100	KNK	SIEM,KWU	1966-6	1973-1	1973-1	1974-7
	DE-5	OBRIGHEIM (KWO)	PWR	1050	357	340	EnBW	SIEM,KWU	1965-3	1968-10	1969-3	2005-5
	DE-501	RHEINBERG (KKR)	PWR	265	70	62	E.ON	AEE	1960-1	1966-5	1966-10	1990-6
DE-10	STADE (KKS)	PWR	1900	672	640	E.ON	KWU	1972-12	1972-5	1972-5	2003-11	
DE-19	THTR-300	HTGR	750	308	296	HKG	HRB	1971-5	1985-11	1987-6	1988-4	
DE-1	VAK KAHL	BWR	60	16	15	VAK	GE,AEG	1958-7	1961-6	1962-2	1985-11	
DE-9	WUERGASSEN (KWW)	BWR	1912	670	640	PE	AEG,KWU	1968-1	1971-12	1975-11	1994-8	
ITALY	IT-4	CAORSO	BWR	2651	882	860	SOGIN	AMN/GETS	1970-1	1978-5	1981-12	1990-7
	IT-3	ENRICO FERMI (TRINO)	PWR	870	270	260	SOGIN	WH	1961-7	1964-10	1965-1	1990-7
	IT-2	GARIGLIANO	BWR	506	160	150	SOGIN	GE	1959-11	1964-1	1964-6	1982-3
	IT-1	LATINA	GCR	660	160	153	SOGIN	TNPG	1958-11	1963-5	1964-1	1987-12
JAPAN	JP-20	FUGEN ATR	HWLWR	557	165	148	JAEA	HITACHI	1972-5	1978-7	1979-3	2003-3
	JP-1	JPDR	BWR	90	13	12	JAEA	GE	1960-12	1963-10	1965-3	1976-3
	JP-2	TOKAI-1	GCR	587	166	137	JAPCO	GEC	1961-3	1965-11	1966-7	1998-3
KAZAKHSTAN	KZ-10	BN-350	FBR	1000	90	52	MAEC-KAZ	MAEC	1964-10	1973-7	1973-7	1999-4
LITHUANIA	LT-46	IGNALINA-1	LWGR	4800	1300	1185	INPP	MAEP	1977-5	1983-12	1984-5	2004-12
NETHERLANDS	NL-1	DODEWAARD	BWR	183	60	55	BV GKN	RDM	1965-5	1968-10	1969-3	1997-3
RUSSIAN FED.	RU-1	APS-1 OBNINSK	LWGR	30	6	5	REA		1951-1	1954-6	1954-6	2002-4

TABLE 16. REACTORS PERMANENTLY SHUT DOWN, 31 DEC. 2007 — continued

Country	Reactor		Type	Capacity [MW]		Operator	NSSS Supplier	Construction Start	Grid Connection	Commercial Operation	Shut Down	
	Code	Name		Thermal	Gross							Net
RUSSIAN FED.	RU-3	BELOYARSKY-1	LWGR	286	108	102	REA	FAEA	1958-6	1964-4	1964-4	1983-1
	RU-6	BELOYARSKY-2	LWGR	530	160	146	REA	FAEA	1962-1	1967-12	1969-12	1990-1
	RU-4	NOVORONEZH-1	PWR	760	210	197	REA	FAEA	1957-7	1964-9	1964-12	1988-2
	RU-8	NOVORONEZH-2	PWR	1320	365	336	REA	FAEA	1964-6	1969-12	1970-4	1990-8
SLOVAK REP.	SK-1	BOHUNICE A1	HWGCR	560	143	93	JAVYS	SKODA	1958-8	1972-12	1972-12	1977-2
	SK-2	BOHUNICE-1	PWR	1375	440	408	JAVYS	AEE	1972-4	1978-12	1980-4	2006-12
SPAIN	ES-1	JOSE CABRERA-1 (ZORITA)	PWR	510	150	141	UFG	WH	1964-6	1968-7	1969-8	2006-4
	ES-3	VANDELLOS-1	GCR	1670	500	480	HIFRENSA	CEA	1968-6	1972-5	1972-8	1990-7
SWEDEN	SE-1	AGESTA	PHWR	80	12	10	BKAB	ABBATOM	1957-12	1964-5	1964-5	1974-6
	SE-6	BARSEBACK-1	BWR	1800	615	600	BKAB	ASEASTAL	1971-2	1975-5	1975-7	1999-11
	SE-8	BARSEBACK-2	BWR	1800	615	615	BKAB	ABBATOM	1973-1	1977-3	1977-7	2005-5
UK	GB-3A	BERKELEY 1	GCR	620	166	138	MEL	TNPG	1957-1	1962-6	1962-6	1989-3
	GB-3B	BERKELEY 2	GCR	620	166	138	MEL	TNPG	1957-1	1962-6	1962-10	1988-10
	GB-4A	BRADWELL 1	GCR	481	146	123	MEL	TNPG	1957-1	1962-7	1962-7	2002-3
	GB-4B	BRADWELL 2	GCR	481	146	123	MEL	TNPG	1957-1	1962-7	1962-11	2002-3
	GB-1A	CALDER HALL 1	GCR	268	60	50	MEL	UKAEA	1953-8	1956-8	1956-10	2003-3
	GB-1B	CALDER HALL 2	GCR	268	60	50	MEL	UKAEA	1957-2	1957-2	1957-2	2003-3
	GB-1C	CALDER HALL 3	GCR	268	60	50	MEL	UKAEA	1955-8	1958-3	1958-5	2003-3
	GB-1D	CALDER HALL 4	GCR	268	60	50	MEL	UKAEA	1955-8	1959-4	1959-4	2003-3
	GB-2A	CHAPELCROSS 1	GCR	260	60	50	MEL	UKAEA	1955-10	1959-3	1959-3	2004-6
	GB-2B	CHAPELCROSS 2	GCR	260	60	50	MEL	UKAEA	1955-10	1959-7	1959-8	2004-6
	GB-2C	CHAPELCROSS 3	GCR	260	60	50	MEL	UKAEA	1955-10	1959-11	1959-12	2004-6
	GB-2D	CHAPELCROSS 4	GCR	260	60	50	MEL	UKAEA	1955-10	1960-1	1960-3	2004-6
	GB-14	DOUNREAY DFR	FBR	60	15	11	UKAEA	UKAEA	1955-3	1962-10	1962-10	1977-3
	GB-15	DOUNREAY PFR	FBR	600	250	234	UKAEA	TNPG	1966-1	1975-1	1976-7	1994-3
	GB-9A	DUNGENESS-A1	GCR	840	230	225	MEL	TNPG	1960-7	1965-9	1965-10	2006-12
GB-9B	DUNGENESS-A2	GCR	840	230	225	MEL	TNPG	1960-7	1965-11	1965-12	2006-12	

TABLE 16. REACTORS PERMANENTLY SHUT DOWN, 31 DEC. 2007 — continued

Country	Reactor		Type	Capacity [MW]			Operator	NSSS Supplier	Construction Start	Grid Connection	Commercial Operation	Shut Down	
	Code	Name		Thermal	Gross	Net							
UK	GB-7A	HINKLEY POINT-A1	GCR	900	267	235	MEL	EEB&WT	1957-11	1965-2	1965-3	2000-5	
	GB-7B	HINKLEY POINT-A2	GCR	900	267	235	MEL	EEB&WT	1957-11	1965-3	1965-5	2000-5	
	GB-6A	HUNTERSTON-A1	GCR	595	173	300	MEL	GE	1957-10	1964-2	1960-3	1990-3	
	GB-6B	HUNTERSTON-A2	GCR	595	173	300	MEL	GE	1957-10	1964-6	1964-7	1989-12	
	GB-10A	SIZEWELL-A1	GCR	1010	245	210	MEL	EEB&WT	1961-4	1966-1	1966-3	2006-12	
	GB-10B	SIZEWELL-A2	GCR	1010	245	210	MEL	EEB&WT	1961-4	1966-4	1966-9	2006-12	
	GB-8A	TRAFALGARWAY	GCR	850	235	390	MEL	APC	1959-7	1965-1	1965-3	1991-2	
	GB-8B	TRAFALGARWAY 2	GCR	850	235	195	MEL	APC	1959-7	1965-2	1965-3	1991-2	
	GB-5	WINDSCALE AGR	GCR	120	41	32	UKAEA	VARIOUS	1958-11	1963-2	1963-3	1981-4	
	GB-12	WINFRITH SGHWR	SGHWR	318	100	92	UKAEA	ICLIFE	1963-5	1967-12	1968-1	1990-9	
	UKRAINE	UA-25	CHERNOBYL-1	LWGR	3200	800	740	MTE	FAEA	1970-3	1977-9	1978-5	1996-11
		UA-26	CHERNOBYL-2	LWGR	3200	1000	925	MTE	FAEA	1973-2	1978-12	1979-5	1991-10
UA-42		CHERNOBYL-3	LWGR	3200	1000	925	MTE	FAEA	1976-3	1981-12	1982-6	2000-12	
UA-43		CHERNOBYL-4	LWGR	3200	1000	925	MTE	FAEA	1979-4	1983-12	1984-3	1986-4	
USA	US-155	BIG ROCK POINT	BWR	240	71	67	CPC	GE	1960-5	1962-12	1963-3	1997-8	
	US-014	BONUS	BWR	50	18	17	DOE/PRWR	GNEPRWRA	1960-1	1964-8	1965-9	1968-6	
	US-144	CVTR	PHWR	65	19	17	CVPA	WH	1960-1	1963-12	NA	1967-1	
	US-10	DRESDEN-1	BWR	700	207	197	EXELON	GE	1956-5	1960-4	1960-7	1978-10	
	US-011	ELK RIVER	BWR	58	24	22	RCPA	AC	1959-1	1963-8	1964-7	1968-2	
	US-16	ENRICO FERMI-1	FBR	200	65	61	DETED	UEC	1956-8	1966-8	NA	1972-11	
	US-267	FORT ST. VRAIN	HTGR	842	342	330	PSCC	GA	1968-9	1976-12	1979-7	1989-8	
	US-018	GE VALLECITOS	BWR	50	24	24	GE	GE	1956-1	1957-10	1963-12	1968-12	
	US-213	HADDAM NECK	PWR	1825	603	560	CYAPC	WH	1964-5	1967-8	1968-1	1996-12	
	US-077	HALLAM	X	256	84	75	AEC/NPPD	GE	1959-1	1963-9	1963-11	1964-9	
	US-133	HUMBOLDT BAY	BWR	220	65	63	PGE	GE	1960-11	1963-4	1963-8	1976-7	
	US-013	INDIAN POINT-1	PWR	615	277	257	ENTERGY	B&W	1962-9	1962-9	1962-10	1974-10	
	US-409	LACROSSE	BWR	165	55	48	DPC	AC	1963-3	1968-4	1969-11	1987-4	
	US-309	MAINE YANKEE	PWR	2630	900	860	MYAPC	CE	1968-10	1972-11	1972-12	1997-8	
US-245	MILLSTONE-1	BWR	2011	684	641	DOMIN	GE	1966-5	1970-11	1971-3	1998-7		

TABLE 16. REACTORS PERMANENTLY SHUT DOWN, 31 DEC. 2007 — continued

Country	Reactor		Type	Capacity [MW]			Operator	NSSS Supplier	Construction Start	Grid Connection	Commercial Operation	Shut Down
	Code	Name		Thermal	Gross	Net						
USA	US-130	PATHFINDER	BWR	115	63	59	NUCCMAN	AC	1959-1	1966-7	NA	1967-10
	US-171	PEACH BOTTOM-1	HTR	46	42	40	EXELON	GA	1962-2	1967-1	1967-6	1974-11
	US-012	PIQUA	X	2772	917	873	CoPiqua	GE	1960-1	1963-7	1963-11	1966-1
	US-312	RANCHO SECO-1	PWR	1347	456	436	SMUD	B&W	1969-4	1974-10	1975-4	1989-6
	US-206	SAN ONOFRE-1	PWR	236	68	60	SCE	WH	1964-5	1967-7	1968-1	1992-11
	US-146	SAXTON	PWR	2436	849	820	SNEC	GE	1960-1	1967-3	1967-3	1972-5
	US-001	SHIPPINGPORT	PWR	2772	959	890	DOE DUQU	WH	1954-1	1957-12	1958-5	1982-10
	US-322	SHOREHAM	BWR	3411	1155	1095	LIPA	GE	1972-11	1978-8	NA	1989-5
	US-320	THREE MILE ISLAND-2	PWR	600	180	167	GPU	B&W	1969-11	1978-4	1978-12	1979-3
	US-344	TROJAN	PWR	3250	1085	1040	PORTGE	WH	1970-2	1975-12	1976-5	1992-11
	US-029	YANKEE NPS	PWR	3250	1085	1040	YAEC	WH	1957-11	1960-11	1961-7	1991-10
	US-295	ZION-1	PWR	3250	1085	1040	EXELON	WH	1968-12	1973-6	1973-12	1998-1
	US-304	ZION-2	PWR	3250	1085	1040	EXELON	WH	1968-12	1973-12	1974-9	1998-1

Status as of 31 December 2007, 119 reactors (35213 MW(e)) are permanently shut down.

TABLE 17. REACTORS IN DECOMMISSIONING PROCESS OR DECOMMISSIONED, 31 Dec. 2007

Country	Reactor		Shut down	Shutdown reason	Decom. Strategy	Current decom. Phase	Current Fuel management phase	Decom. Licensee	License terminated
	Code	Name							
BELGIUM	BE-1	BR-3	1987-6	2,5	Imdte.dism.	4,9	4	CEN/SCK	
BULGARIA	BG-1	KOZLODUY-1	2002-12	Others	Dd+SE	5		E-00707	
	BG-2	KOZLODUY-2	2002-12	Others	Dd+SE	5		E-00613	
FRANCE	FR-24	SUPER-PHENIX	1998-12	Others	Imdte.dism.	6	3,6	NERSA	
	FR-3	CHINON-A2	1985-6	1,2	Imdte.dism.	1		EDF	2025
	FR-5	CHOOZ-A (ARDENNES)	1991-10	Others	Imdte.dism.	4,9		SENA	2019
	FR-6	EL-4 (MONTS D'ARREE)	1985-7	1,2	Imdte.dism.	9		EDF	2015
	FR-9	BUGEY-1	1994-5	1,2	Imdte.dism.	6		EDF	2020
GERMANY	DE-10	STADE (KKS)	2003-11	2	Imdte.dism.	3,4,6		E.ON	2014
	DE-501	RHEINBERG (KKR)	1990-6	1	Imdte.dism.	3,9		G 01 KKR	
	DE-9	WUERGASSEN (KWW)	1994-8	2	Imdte.dism.	3,4		E.ON	
ITALY	IT-1	LATINA	1987-12	7,Others	Imdte.dism.	6		SOGIN	2020
	IT-2	GARIGLIANO	1982-3	3,4,Others	Imdte.dism.	6		SOGIN	2015
	IT-3	ENRICO FERMI (TRINO)	1990-7	7,Others	Imdte.dism.	6	3,7	SOGIN	2014
	IT-4	CAORSO	1990-7	7,Others	Imdte.dism.	6	3,7	SOGIN	2016
JAPAN	JP-2	TOKAI-1	1998-3	2	Dd+PD+SE	3,6,7		JAPCO	2018
	JP-20	FUGEN ATR	2003-3	2	Dd+SE	5	2,5	JAEA	2029
KAZAKHSTAN	KZ-10	BN-350	1999-4	2,5	Dd+PD+SE	1,5,6	3,6	MAEC-KAZ	2105
LITHUANIA	LT-46	IGNALINA-1	2004-12	Others	Imdte.dism.	2	1,2	planned	2050
NETHERLANDS	NL-1	DODEWAARD	1997-3	2,Others	Dd+SE	7		BV GKN	
SLOVAKIA	SK-1	BOHUNICE A1	1977-2	4	Dd+PD+SE	3,6		JAVVYS	
SPAIN	ES-1	JOSE CABRERA-1 (ZORITA)	2006-4	Others	Imdte.dism.	3	7	UFG	
	ES-3	VANDELLOS-1	1990-7	4	Dd+PD+SE	8		ENRESA	2032
SWEDEN	SE-1	AGESTA	1974-6	2,3	Dd+SE	7		BKAB	
	SE-6	BARSEBACK-1	1999-11	Others	Other		4	BKAB	2025
	SE-8	BARSEBACK-2	2005-5	Others	Other		4	BKAB	2025
USA	US-012	PIQUA	1966-1	1	in situ disp.	11		CofPiqua	
	US-029	YANKEE NPS	1991-10	5,7	Imdte.dism.	4,6		YAEC	1997
	US-10	DRESDEN-1	1978-10	6	Dd+SE	11		EXELON	
	US-133	HUMBOLDT BAY	1976-7	5	Dd+PD+SE	3,4,6	7	PGE	2005
	US-16	ENRICO FERMI-1	1972-11	4	Dd+SE	9,11		DETED	

TABLE 17. REACTORS IN DECOMMISSIONING PROCESS OR DECOMMISSIONED, 31 Dec. 2007 — continued

Country	Reactor		Shut down	Shutdown reason	Decom. Strategy	Current decom. Phase	Current Fuel managemt phase	Decom. Licensee	License terminated
	Code	Name							
	US-171	PEACH BOTTOM-1	1974-11	1 Others	Dd+SE	1		EXELON	
	US-206	SAN ONOFRE-1	1992-11		Dd+PD+SE	4,9,11		SCE	
	US-213	HADDAM NECK	1996-12	6	Imcte.dism.	4,6,11		CYAPC	
	US-245	MILLSTONE-1	1998-7	6	Dd+PD+SE		7	DOMIN	
	US-295	ZION-1	1998-1	5,6	Dd+PD+SE	1		CommonEd	
	US-304	ZION-2	1998-1	5,6	Dd+PD+SE	1		COMMED	2000
	US-309	MAINE YANKEE	1997-8	6	Imcte.dism.	4,11		MYAPC	
	US-320	THREE MILE ISLAND-2	1979-3	4	Dd+SE	11	4	GPU	
	US-344	TROJAN	1992-11	6	Dd+PD+SE	11		PORTGE	2011

TABLE 17. DEFINITIONS FOR REACTORS IN DECOMMISSIONING PROCESS OR DECOMMISSIONED

Shutdown reason	Description
1	The technology or process being used became obsolete
2	The process was no longer profitable
3	There were changes in licensing requirements
4	After an operating incident
5	Other technological reasons
6	Other economical reasons
7	Public acceptance reasons
undefd.	Others

Fuel Management	Description
1	Transfer to at reactor facility
2	Transfer to away from reactor facility
3	Storage in an on-site facility
4	Storage in an off-site facility
5	Shipment to a reprocessing plant
6	Under water storage
7	Dry storage
8	Encapsulation

Decommissioning strategy	Description
Imdte.dism.	Immediate dismantling and removal of all radioactive materials
Dd+SE	Deferred dismantling, placing all radiological areas into safe enclosure
Dd+PD+SE	Deferred dismantling, including partial dismantling and placing remaining radiological areas into safe enclosure
in situ disp.	In situ disposal, involving encapsulation of radioactive materials and subsequent restriction of access
undefined	Other

Current decommissioning phase	Description
1	Drawing up the Final Decommissioning Plan
2	Reactor core defuelling
3	Waste conditioning on site (Only for Decommissioning waste)
4	Waste shipment off site (Only for Decommissioning waste)
5	Safe enclosure preparation
6	Partial dismantling
7	Active safe enclosure period
8	Passive safe enclosure period
9	Final dismantling
10	Final survey
11	Licence terminated (Legal act at the end of the Decommissioning process)

TABLE 18. PERFORMANCE FACTORS BY REACTOR CATEGORY, 2005 to 2007

Reactor Category	Reactors reporting to IAEA PRIS (see note)							
	Number of Units	Availability Factor (EAF) %	Planned Cap. Loss Factor (PCL) %	Capacity Factor (UCF) %	Forced Loss Rate (FLR) %	Operating Factor (OF) %	Load Factor (LF) %	
PWR	270	84.59	11.15	85.59	2.36	85.74	83.34	
PWR < 600 MWe	53	82.78	12.34	84.81	2.07	85.11	81.63	
PWR ≥ 600 MWe	217	84.78	11.03	85.67	2.39	85.89	83.52	
BWR	95	78.60	14.10	80.16	4.82	78.69	78.50	
BWR < 600 MWe	14	66.31	21.85	67.87	5.10	68.82	66.61	
BWR ≥ 600 MWe	81	79.55	13.50	81.12	4.81	80.44	79.42	
PHWR	44	80.38	10.33	83.70	5.43	79.29	79.09	
PHWR < 600 MWe	26	65.07	14.37	74.15	11.01	71.03	61.93	
PHWR ≥ 600 MWe	18	88.09	8.28	88.51	2.86	89.06	87.74	
LWGR	16	73.15	22.24	75.44	1.48	77.54	73.49	
LWGR < 600 MWe	4	36.37	18.59	81.40	0.00	79.05	25.45	
LWGR ≥ 600 MWe	12	73.29	22.25	75.42	1.49	77.04	73.68	
GCR	22	65.42	15.25	65.73	16.94	72.52	65.21	
FBR	2	70.52	21.50	71.02	7.07	69.37	70.39	
TOTAL	449	82.13	12.22	83.40	3.43	82.60	80.97	

Note: 2007 is the latest year for which operating experience data is currently available to the IAEA.

— Reactors permanently shut down during 2005 to 2007 (10 units) are considered.

TABLE 19. FULL OUTAGE STATISTICS DURING 2007

Reactor Type	Number of Units In the World	Full Outage Hours per Operating Experience Year	% Planned Outages	% Unplanned Outages	% External Outages
PWR	265	1284	75.3	22.3	2.4
PWR < 600 MWe	48	1422	67.2	23.4	9.5
PWR >= 600 MWe	217	1253	77.3	22.1	0.6
BWR	94	2080	65.5	24.5	10.0
BWR < 600 MWe	14	3240	79.7	20.2	0.1
BWR >= 600 MWe	80	1877	61.2	25.7	13.0
PHWR	44	1873	64.1	33.4	2.5
PHWR < 600 MWe	26	2461	60.9	35.8	3.3
PHWR >= 600MWe	18	1023	75.2	24.8	0.0
LWGR	16	1853	87.2	8.7	4.1
LWGR < 600 MWe	4	1791	85.2	0.0	14.8
LWGR >= 600 MWe	12	1874	87.8	11.4	0.8
GCR	18	3104	45.7	54.3	0.0
FBR	2	2990	66.5	33.5	0.0
ALL REACTORS	439	1598	69.4	26.2	4.4

Note: 2007 is the latest year for which outage information is currently available to the IAEA.

TABLE 20. DIRECT CAUSES OF FULL OUTAGES DURING 2007

Direct Outage Cause	Planned Full Outages						Unplanned Full Outages					
	Energy Lost		Time Lost		Energy Lost		Time Lost		Energy Lost		Time Lost	
	GW(e).h	%	Hours	%	GW(e).h	%	Hours	%	GW(e).h	%	Hours	%
Plant equipment problem/failure	75	0.02	292	0.06	104552	60.65	139480	64.70				
Refuelling without a maintenance	8468	2.24	10695	2.29	605	0.35	1457	0.68				
Inspection, maintenance or repair combined with refuelling	309455	81.76	364704	78.02	2904	1.69	5094	2.36				
Inspection, maintenance or repair without refuelling	45126	11.92	68354	14.62								
Testing of plant systems or components	2022	0.53	4157	0.89	2789	1.62	5583	2.59				
Major back-fitting, refurbishment or upgrading activities with refuelling	11294	2.98	9303	1.99	1891	1.10	1810	0.84				
Nuclear regulatory requirements					15412	8.94	13935	6.46				
Grid failure or grid unavailability					1143	0.66	3917	1.82				
Load-following (frequency control, reserve shutdown due to reduced energy demand)					1026	0.60	2024	0.94				
Human factor related					13388	7.77	13541	6.28				
Governmental requirements or court decisions					2814	1.63	4933	2.29				
Environmental conditions.					22948	13.31	20198	9.37				
Fire					1484	0.86	1364	0.63				
External restrictions on supply and services.					1277	0.34	1161	0.25				
Fuel management limitation (including high flux tilt, stretch out or coast-down operation)	788	0.21	8760	1.87	1288	0.75	2108	0.98				
Others												
TOTAL	378505	100.00	467426	100.00	172368	100.00	215564	100.00				

Only reactors which have achieved full commercial operation in or before 2007 are considered.

TABLE 21. DIRECT CAUSES OF FULL OUTAGES, 1971 TO 2007

Direct Outage Cause	Planned Full Outages			Unplanned Full Outages		
	Energy Lost		Time Lost	Energy Lost		Time Lost
	GW(e).h	%	Hours	GW(e).h	%	Hours
Plant equipment problem/failure	17444	0.16	24973	3227273	70.32	4334898
Refuelling without a maintenance	48857	0.44	56069	81020	1.77	105476
Inspection, maintenance or repair combined with refuelling	8930460	80.43	11116911	83679	1.82	107244
Inspection, maintenance or repair without refuelling	1668019	15.02	2871108	25567	0.56	30138
Testing of plant systems or components	80958	0.73	105109	34526	0.75	53668
Major back-fitting, refurbishment or upgrading activities with refuelling	62810	0.57	93738	2354	0.05	2488
Nuclear regulatory requirements	84187	0.76	170184	323707	7.05	373195
Grid failure or grid unavailability	26		122	43056	0.94	98153
Load-following (frequency control, reserve shutdown due to reduced energy demand)	200550	1.81	204210	610479	13.30	664687
Human factor related	181		176	38361	0.84	43129
Governmental requirements or court decisions	2		6	3392	0.07	5908
Environmental conditions.				36849	0.80	37998
Fire				3585	0.08	3801
External restrictions on supply and services.	105		168	1283	0.03	1839
Fuel management limitation (including high flux tilt, stretch out or coast-down operation)	1822	0.02	1759	1101	0.02	1818
Others	6610	0.06	28050	73281	1.60	89502
TOTAL	11102031	100.00	14672583	4589513	100.00	5953942
						100.00

Only reactors which have achieved full commercial operation in or before 2007 are considered.

TABLE 22. COUNTRIES - Abbreviations and Summary

Country Code	Full Name	Number of Reactors, as of 31 Dec. 2007				
		Operational	Construction	LT Shut Down	Shut Down	Planned
AM	ARMENIA	1			1	
AR	ARGENTINA	2	1			
BE	BELGIUM	7				1
BG	BULGARIA	2	2		4	
BR	BRAZIL	2				1
CA	CANADA	18		4	3	
CH	SWITZERLAND	5				
CN	CHINA	11	5			25
CZ	CZECH REPUBLIC	6				
DE	GERMANY	17			19	
ES	SPAIN	8			2	
FI	FINLAND	4	1			
FR	FRANCE	59	1		11	
GB	UNITED KINGDOM	19			26	
HU	HUNGARY	4				
IN	INDIA	17	6			
IR	IRAN, ISLAMIC REPUBLIC OF		1		4	3
IT	ITALY					
JP	JAPAN	55	1	1	3	9
KR	KOREA, REPUBLIC OF	20	3			5
KZ	KAZAKHSTAN					
LT	LITHUANIA, REPUBLIC OF	1			1	
MX	MEXICO	2				
NL	NETHERLANDS	1			1	
PK	PAKISTAN	2	1			
RO	ROMANIA	2				
RU	RUSSIAN FEDERATION	31	6		5	6
SE	SWEDEN	10			3	
SI	SLOVENIA	1				
SK	SLOVAKIA	5			2	

TABLE 22. COUNTRIES - Abbreviations and Summary — continued

Country Code	Full Name	Number of Reactors, as of 31 Dec. 2007				
		Operational	Construction	LT Shut Down	Shut Down	Planned
TR	TURKEY					
UA	UKRAINE	15	2		4	1
US	UNITED STATES OF AMERICA	104	1		28	
ZA	SOUTH AFRICA	2				
TOTAL		439	33	5	119	50

Note: The total includes the following data in Taiwan, China:

— 6 units in operation; 2 units under construction;

TABLE 23. REACTOR TYPES - Abbreviations and Summary

Type Code	Full Name	Number of Reactors, as of 31 Dec. 2007				
		Operational	Construction	LT Shut Down	Shut Down	Planned
BWR	Boiling Light-Water-Cooled and Moderated Reactor	94	2		21	7
FBR	Fast Breeder Reactor	2	2	1	6	
GCR	Gas-Cooled, Graphite-Moderated Reactor	18			34	
HTGR	High-Temperature Gas-Cooled, Graphite-Moderated Reactor				4	
HWGCR	Heavy-Water-Moderated, Gas-Cooled Reactor				3	
HWLWR	Heavy-Water-Moderated, Boiling Light-Water-Cooled Reactor				2	
LWGR	Light-Water-Cooled, Graphite-Moderated Reactor	16	1		8	
PHWR	Pressurized Heavy-Water-Moderated and Cooled Reactor	44	4	4	5	
PWR	Pressurized Light-Water-Moderated and Cooled Reactor	265	24		33	42
SGHWR	Steam-Generating Heavy-Water Reactor				1	
X	Others				2	1
TOTAL		439	33	5	119	50

TABLE 24. OPERATORS - Abbreviations and Summary

Operator Code	Full Name	Number of Reactors, as of 31 Dec. 2007			
		Operational	Construction	LT Shut Down	Shut Down Planned
AEC/NPPD	HALLAM NUCLEAR POWER FACILITY				1
ALP	ALABAMA POWER CO.	2			
AMERGEN	AMERGEN ENERGY CO.	1			
AMERGENCE	AMERGEN ENERGY GENERATING CO.	3			
ANAV	ASOCIACION NUCLEAR ASCO-VANDELLOS A.I.E. (ENDESAMD)	3			
ANPP/JSC	JOINT STOCK COMPANY ARMENIAN NPP	1			1
AVR	ARBEITSGEMEINSCHAFT VERSUCHSREAKTOR GMBH	1			1
AZPSCO	ARIZONA PUBLIC SERVICE CO.	3			
BE	BRITISH ENERGY	14			
BEG	BRITISH ENERGY GROUP PLC	1			
BHAVINI	BHARATIYA NABHIKIYA VIDYUT NIGAM LIMITED		1		
BKAB	BARSEBÄCK KRAFT AB				3
BKW	BKW ENERGIE AG	1			
BRUCEPOW	BRUCE POWER	6		2	
BV GKN	BV GEMEENSCHAPPELJKE KERNENERGIECENTRALE NEDERLAND (BV GKN)				1
CCNPP	CALVERT CLIFFS NUCLEAR POWER PLANT INC.	3			
CEA/EDF	COMMISSARIAT A L'ENERGIE ATOMIQUE (80%)ELECTRICITE DE FRANCE (20%)	1			
CEN/SCK	CENTRE D'ETUDE DE L'ENERGIE NUCLEAIRE /STUDIECENTRUM VOOR KERNENERGIE				1
CEZ	CZECH POWER COMPANY , CEZ A.S.	6			
CFE	COMISION FEDERAL DE ELECTRICIDAD	2			
CHUBU	CHUBU ELECTRIC POWER CO.,INC.	5			
CHUGOKU	THE CHUGOKU ELECTRIC POWER CO.,INC.	2			3
CNAT	CENTRALES NUCLEARES ALMARAZ-TRILLO(IDU/FG/ENDESA/HC/NUCLENOR)	2			
CoPiquia	CITY OF PIQUIA GOVERNMENT	3			1
COGEMA	COMPAGNIE GENERALE DES MATIERES NUCLEAIRES				2
CONSENEC	CONSUMERS ENERGY CO.	1			
CPC	CONSUMERS POWER CO.				1
CVPA	CAROLINAS-VIRGINIA NUCLEAR POWER ASSOC.				1
CYAPC	CONNECTICUT YANKEE ATOMIC POWER CO.				1
DETED	DETROIT EDISON CO.	1			1

TABLE 24. OPERATORS - Abbreviations and Summary — continued

Operator Code	Full Name	Number of Reactors, as of 31 Dec. 2007			
		Operational	Construction	LT Shut Down	Shut Down
DOE DUQU	DEPARTMENT OF ENERGY AND DUQUESNE LIGHT CO.				1
DOE/PRWR	DOE & PUERTO RICO WATER RESOURCES				1
DOMENGY	DOMINION ENERGY KEWAUNEE	1			
DOMIN	DOMINION VIRGINIA POWER	2			1
DPC	DAIRYLAND POWER COOPERATIVE	7			1
DUKE	DUKE POWER CO.	5			1
E.ON	E.ON KERNKRAFT GMBH	58	1		8
EDF	ELECTRICITE DE FRANCE	7			
ELECTRAB	ELECTRABEL M. V. NUCLEAIRE PRODUKTIE	2			1
ELETRONU	ELETRONBRAS TERMONUCLEAR SA - ELETRONUCLEAR				
ErbW	ENBW KRAFTWERKE AG	1			
ENERGYNW	ENERGY NORTHWEST	4			
EnKk	ENBW KERNKRAFT GMBH(SITZ IN OBRIGHEIM)	8			1
ENERGY	ENERGY NUCLEAR	1			
ENTGARKS	ENERGY ARKANSAS, INC.	1			
ENTGS	ENERGY GULF STATES INC.	1			
EPZ	N.V. ELETRICITEITS-PRODUKTIEMAATSCHAPPIJ ZUID-NEDERLAND	2			
ESKOM	ESKOM	14			6
EWN	ENERGIEWERKE NORD GMBH	4			4
EXELON	EXELON GENERATION	3			
FENOC	FIRST ENERGY NUCLEAR OPERATING CO.	2			
FKA	FORMARK KRAFTGRUPP AB	5			
FORTUMPH	FORTUM POWER AND HEAT OY (FORMER IVO)	1			
FPL	FLORIDA POWER & LIGHT CO.	2			
FPLDUANE	FPL ENERGY DUANE ARNOLD	2			
GE	GENERAL ELECTRIC				1
GNP/JVC	GUANDONG NUCLEAR POWER JOINT VENTURE COMPANY LIMITED(GNP/JVC)				
GPU	GENERAL PUBLIC UTILITIES				1
HDR	HEISSDAMPREAKTOR-BETRIEBSGESELLSCHAFT MBH.				1
HEPCO	HOKKAIDO ELECTRIC POWER CO.,INC.		1		
HIFRENSA	HISPANO-FRANCESA DE ENERGIA NUCLEAR, S.A.	2			1

TABLE 24. OPERATORS - Abbreviations and Summary — continued

Operator Code	Full Name	Number of Reactors, as of 31 Dec. 2007			
		Operational	Construction	LT Shut Down	Shut Down
HKG	HOCHTEMPERATUR-KERNKRAFTWERK GMBH				1
HOKURIKU	HOKURIKU ELECTRIC POWER CO.	2			
HQ	HYDRO QUEBEC	1			1
ID	IBERDROLA, S.A.	1			
IMPCO	INDIANA MICHIGAN POWER CO.	2			
INPP	IGNALINA NUCLEAR POWER PLANT	1			1
J-POWER	ELECTRIC POWER DEVELOPMENT CO.,LTD.	1			
JAEA	JAPAN ATOMIC ENERGY AGENCY		1		2
JAPCO	JAPAN ATOMIC POWER CO.	3			1
JAVYS	JADROVA VYRADOVACIA SPOLOCNOST/NUCLEAR DECOMMISSIONING COMPANY, PLC./	1			2
JNPC	JIANGSU NUCLEAR POWER CORPORATION	2			2
KBG	KERNKRAFTWERK-BETRIEBSGESELLSCHAFT MBH				2
KEPCO	KANSAI ELECTRIC POWER CO.	11			
KGB	KERNKRAFTWERKE GUNDREMMINGEN BETRIEBSGESELLSCHAFT MBH	1			1
KGECO	KANSAS GAS AND ELECTRIC CO.	2			
KGK	KERNKRAFTWERK GUNDREMMINGEN GMBH	20			1
KHNP	KOREA HYDRO AND NUCLEAR POWER CO.	1	3		1
KKB	KERNKRAFTWERK BRUNSBUTTEL GMBH	1			
KKG	KERNKRAFTWERK GOESGEN-DAENIKEN AG	1			
KKK	KERNKRAFTWERK KRUMMEL GMBH & CO. OHG	1			
KKL	KERNKRAFTWERK LEIBSTADT	1			
KKN	KERNKRAFTWERK NIEDERAICHBACH GMBH	1			1
KLE	KERNKRAFTWERKE LIPPE-EMS GMBH	1			
KOZNPP	KOZLODUIY NPP-PLC	2	2		4
KWG	GEMEINSCHAFTSKERNKRAFTWERK GROHNDE GMBH & CO. OHG	1			
KWL	KERNKRAFTWERK LINGEN GMBH	6			1
KYUSHU	KYUSHU ELECTRIC POWER CO.,INC.	2			
LANPC	LINGAO NUCLEAR POWER COMPANY LTD.				
LDNPC	LINGDONG NUCLEAR POWER COMPANY LTD.		2		
LHNPC	LIAONING HONGYANHE NUCLEAR POWER CO., LTD. (LHNPC)		1		
LIPA	LONG ISLAND POWER AUTHORITY				1

TABLE 24. OPERATORS - Abbreviations and Summary — continued

Operator Code	Full Name	Number of Reactors, as of 31 Dec. 2007			
		Operational	Construction	LT Shut Down	Shut Down
MAEC-KAZ	MAEC-KAZATOMPROM, LIMITED LIABILITY COMPANY				
MEL	MAGNOX ELECTRIC LIMITED	4			1
MITE	MINTOPENERGO OF UKRAINE - MINISTRY OF FUEL AND ENERGY OF UKRAINE				22
MYAPC	MAINE YANKEE ATOMIC POWER CO.				4
NASA	NUCLEOELECTRICA ARGENTINA S.A.	2	1		1
NBEPIC	NEW BRUNSWICK ELECTRIC POWER COMMISSION	1			
NDINPC	NINGDE NUCLEAR POWER COMPANY LTD.				
NEK	NUKLERANA ELEKTRARNA KRSKO	1			1
NMPSLLC	NINE MILE POINT NUCLEAR STATION, LLC	2			
NNEGC	NATIONAL NUCLEAR ENERGY GENERATING COMPANY <ENERGOATOM>	15	2		
NOK	NORDOSTSCHWEIZERISCHE KRAFTWERKE	2			
NORTHERN	NORTHERN STATES POWER CO.	17			
NPCL	NUCLEAR POWER CORPORATION OF INDIA LTD.	17	5		
NPPD	NEBRASKA PUBLIC POWER DISTRICT	1			
NPDDCO	NUCLEAR POWER PRODUCTION & DEVELOPEMENT CO. OF IRAN	2	1		3
NPQJVC	NUCLEAR POWER PLANT QINSHAN JOINT VENTURE COMPANY LTD.	2	2		
NUCLENOR	NUCLENOR, S.A.	1			
NUCMAN	NUCLEAR MANAGEMENT CO.	1			1
OH	ONTARIO HYDRO				1
OKG	OKG AKTIEBOLAG	3			
OPG	ONTARIO POWER GENERATION	10			
OPPD	OMAHA PUBLIC POWER DISTRICT			2	1
PAEC	PAKISTAN ATOMIC ENERGY COMMISSION	2	1		
PAKS Zt	PAKS NUCLEAR POWER PLANT LTD	4			
PE	PREUSSELEKTRA KERNKRAFT GMBH&CO KG				1
PGE	PACIFIC GAS & ELECTRIC CO.	2			1
PORTGE	PORTLAND GENERAL ELECTRIC CO.				1
PP&L	PENNSYLVANIA POWER & LIGHT CO.	2			
PROGENGC	PROGRESS ENERGY CAROLINAS, INC.	3			
PROGRESS	PROGRESS ENERGY CORPORATION	2			
PSSCC	PUBLIC SERVICE CO. OF COLORADO				1

TABLE 24. OPERATORS - Abbreviations and Summary — continued

Operator Code	Full Name	Number of Reactors, as of 31 Dec. 2007			
		Operational	Construction	LT Shut Down	Shut Down
PSEG	PUBLIC SERVICE ELECTRIC & GAS CO.	1			
PSEGPOWER	PSEG POWER, INC.	2			
QNPC	QINSHAN NUCLEAR POWER COMPANY	1			
RAB	RINGHALS AB	4			
RCPA	RURAL COOPERATIVE POWER ASSOC.			1	
REA	ROSENERGOATOM, CONCERN	31	6	5	6
RWE	RWE POWER AG	2			
SCE	SOUTHERN CALIFORNIA EDISON	2			
SCEG	SOUTH CAROLINA ELECTRIC & GAS CO.	1			1
SE, pic	SLOVENSKE ELEKTRARNE, A.S.	4			
SENA	SOCIETE D'ENERGIE NUCLEAIRE FRANCO-BELGE DES ARDENNES				1
SHIKOKU	SHIKOKU ELECTRIC POWER CO.,INC	3			
SMUD	SACRAMENTO MUNICIPAL UTILITY DISTRICT				1
SNEC	SAXTON NUCLEAR EXPERIMENTAL REACTOR CORPORATION				1
SNN	SOCIETATEA NATIONALA NUCLEARELECTRICA S.A.				1
SNPC	SHANDONG NUCLEAR POWER COMPANY LTD	2			
SOGIN	SOCIETA GESTIONE IMPANTI NUCLEARI S.P.A.				1
SOUTH	SOUTHERN NUCLEAR OPERATING CO.	4			4
STP	STP NUCLEAR OPERATING CO.	2			
TEAS	TEAS				1
TEPCO	TOKYO ELECTRIC POWER CO.,INC.	17			1
TOHOKU	TOHOKU ELECTRIC POWER CO.,INC	4			
TPC	TAI POWER CO.	6	2		
TONPC	THE THIRD QINSHAN JOINTED VENTURE COMPANY LTDA.	2			
TVA	TENNESSEE VALLEY AUTHORITY	6	1		
TVO	TEOLLISUUDEN VOIMA OY	2	1		
TXU	TXU ELECTRIC CO.	2			
UFG	UNION FENOSA GENERATION S.A.				1
UKAEA	UNITED KINGDOM ATOMIC ENERGY AUTHORITY				4
VAK	VERSUCHSATOMKRAFTWERK KAHL GMBH				4
VEPCO	VIRGINIA ELECTRIC POWER CO.	4			1

TABLE 24. OPERATORS - Abbreviations and Summary — continued

Operator Code	Full Name	Number of Reactors, as of 31 Dec. 2007				
		Operational	Construction	LT Shut Down	Shut Down	Planned
WEP	WISCONSIN ELECTRIC POWER CO.	2				
YAE	YANKEE ATOMIC ELECTRIC CO.				1	23
TOTAL		439	33	5	119	50

TABLE 25. NSSS SUPPLIERS - Abbreviations and Summary

NSSS Supplier Code	Full Name	Number of Reactors, as of 31 Dec. 2007			
		Operational	Construction	LTShut Down	Shut Down Planned
A/FW	ASSOCIATION ACEC-FRAMATOMIE ET WESTINGHOUSE.				
ABBATOM	ABBATOM (FORMERLY ASEA-ATOM)	7			1
AC	ALLIS CHALMERS				2
ACECOWEN	ACECOWEN (ACEC-COCKERILL-WESTINGHOUSE)	4			3
ACLF	(ACECOWEN - CREUSOT LOIRE - FRAMATOME)	1			
AECL	ATOMIC ENERGY OF CANADA LTD.	8			2
AECC/DAE	ATOMIC ENERGY OF CANADA LTD. AND DEPARTMENT OF ATOMIC ENERGY(INDIA)	1			
AECC/DHI	ATOMIC ENERGY OF CANADA LTD./DOOSAN HEAVY INDUSTRY & CONSTRUCTION	3			
AEE	ATOMENERGOEXPORT	9			5
AEG	ALLGEMEINE ELEKTRICITAETS-GESELLSCHAFT				1
AEG,GE	ALLGEMEINE ELEKTRICITAETS-GESELLSCHAFT, GENERAL ELECTRIC COMPANY (US)				1
AEG,KWU	ALLGEMEINE ELEKTRICITAETS-GESELLSCHAFT, KRAFTWERK UNION AG				1
AMN/GETS	ANSALDO MECCANICO NUCLEARE SPA / GENERAL ELECTRIC TECHNICAL SERVICES CO				2
APC	ATOMIC POWER CONSTRUCTION LTD.	2			2
AREVA	AREVA, 27-29, RUE LE PELETIER, 75433 PARIS CEDEX 08URL: WWW.AREVA.COM		1		
ASE	ATOMSTROYEXPORT		3		2
ASEASTAL	ASEA-ATOM / STAL-LAVAL	2			1
ASPALDO	ASPALDO				1
AIEE	ATOMENERGOEXPORT				6
B&W	BABCOCK & WILCOX CO.	7			3
BBC	BROWN BOVERI ET CIE	1			
BBK	BROWN BOVERI-KRUPP REAKTORBAU GMBH				1
BBR	BROWN BOVERI REAKTOR GMBH				1
CE	COMBUSTION ENGINEERING CO.	14			1
CEA	COMMISSARIAT A L'ENERGIE ATOMIQUE				1
CGE	CANADIAN GENERAL ELECTRIC	1			1
CNCLNEY	CNIM-CONSTRUCTIONS NAVALES ET INDUSTRIELLES DE MEDITERRANEE CL - CREUSOT LOI	1			
CNNC	CHINA NATIONAL NUCLEAR CORPORATION	4			3
DFEC	DONGFANG ELECTRIC CORPORATION		3		
DHICKAEC	DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO.LTD./KOREA ATOMICENERGY RESEARCH I	2			2

TABLE 25. NSSS SUPPLIERS - Abbreviations and Summary — continued

NSSS Supplier Code	Full Name	Number of Reactors, as of 31 Dec. 2007				
		Operational	Construction	LTShut Down	Shut Down	Planned
DH1KOPC	DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO.LTD./KOREA POWER ENGINEERING COMPA	6	3			5
EE/B&WT	THE ENGLISH ELECTRIC CO. LTD./BABCOCK & WILCOX CO./TAYLOR WOODROW CONSTRU	2				4
FAEA	FEDERAL ATOMIC ENERGY AGENCY	32	6			9
FRAM	FRAMATOME	64	1			2
FRAMACEC	FRAMACECO (FRAMATOME -ACEC-COCKERILL)	2				
GA	GENERAL ATOMIC CORP.					2
GAAA	GROUPEMENT ATOMIQUE ALSACIENNE ATLANTIQUE	47	2			1
GE	GENERAL ELECTRIC CO.					11
GE AEG	GENERAL ELECTRIC COMPANY (US), ALL GEMEINE ELEKTRICITAETS- GESELLSCHAFT					1
GE/GETSC	GENERAL ELECTRIC CO./ GENERAL ELECTRIC TECHNICAL SERVICES CO.	1				
GE/IT	GENERAL ELECTRIC CO./ TOSHIBA CORPORATION	2				
GEC	GENERAL ELECTRIC COMPANY (UK)	2				3
GETSCO	GENERAL ELECTRIC TECHNICAL SERVICES CO.	2				
GNEPRWRA	GENERAL NUCLEAR ENGINEERING & PUERTO RICO WATER RESOURCES AUTHORITY (US)					1
GTM	GRANDS TRAVAUX DE MARSEILLE					1
HITACHI	HITACHI LTD.	10				1
HRB	HOCHTEMPERATUR-REAKTORBAU GMBH					1
IA	INTERNATOM INTERNATIONALE ATOMREAKTORBAU GMBH					1
ICL/FE	INTERNATIONAL COMBUSTION LTD. / FAIREY ENGINEERING LTD.					1
IZ	IZHORSKIYE ZAVODY	2				
KWU	SIEMENS KRAFTWERK UNION AG	20				1
LEVIVIER	LEVIVIER					2
MAEC	MAEC-KAZATOMPROMMANGSHLAK ATOMIC ENERGY COMPLEX					1
MAEP	MINATOMENERGOPROM. MINISTRY OF NUCLEAR POWER AND INDUSTRY	1	2			1
MHI	MITSUBISHI HEAVY INDUSTRIES LTD.	19	1			
NEI/P	NEI/PARSONS	2				
NIAEP	NIZHNY NOVGOROD INSTITUTES ATOMENERGOPROEKTNI ZHNY NOVGOROD SQR. SVOBODY 360					4
NNC	NATIONAL NUCLEAR CORPORATION	2				
NPC	NUCLEAR POWER CO. LTD.	6				
NPCL	NUCLEAR POWER CORPORATION OF INDIA LTD.VIKRAM SARABHAI BHAVAN, ANUSHAKTI NAG	13	3			
OH/AECL	ONTARIO HYDRO / ATOMIC ENERGY OF CANADA LTD.	14		4		

TABLE 25. NSSS SUPPLIERS - Abbreviations and Summary — continued

NSSS Supplier Code	Full Name	Number of Reactors, as of 31 Dec. 2007				
		Operational	Construction	LTShut Down	Shut Down	Planned
PAA	PRODUCTION AMALGAMATION 'ATOMMASH', VOLGODONSK	4				
PAIP	PRODUCTION AMALGAMATION IZHORSKY PLANT ATOMMASH, VOLGODONSK, RUSSIA	11				
PPC	PWR POWER PROJECTS	1				
RDM	ROTTERDAMSE DROOGDOK MAATSCHAPPIJ (RDM) IN ROTTERDAM (NL)				1	
S/KWU	SIEMENS/KRAFTWERK UNION AG	1				
SACM	SOCIETE ALSACIENNE DE CONSTRUCTIONS MECANIQUES				2	
SIEM.KWU	SIEMENS AG. KRAFTWERK UNION AG				2	
SIEMENS	SIEMENS AG. POWER GENERATION -FRG	1	1		1	
SKODA	SKODA CONCERN NUCLEAR POWER PLANT WORKS	10			1	
T/H/FM	TOSHIBA / HITACHI / FUJI ELECTRIC HOLDINGS / MITSUBISHI HEAVY INDUSTRIES			1		
TNPG	THE NUCLEAR POWER GROUP LTD.	6				8
TOSHIBA	TOSHIBA CORPORATION	17				
UEC	UNITED ENGINEERS AND CONTRACTORS					1
UKAEA	UNITED KINGDOM ATOMIC ENERGY AUTHORITY					9
VARIOUS	VARIOUS					4
WH	WESTINGHOUSE ELECTRIC CORPORATION AND SIEMENS	71	1		11	2
WH/MHI	WESTINGHOUSE ELECTRIC CORPORATION / MITSUBISHI HEAVY INDUSTRIES LTD.	1				
not specified			3			1
TOTAL		439	33	5	119	50

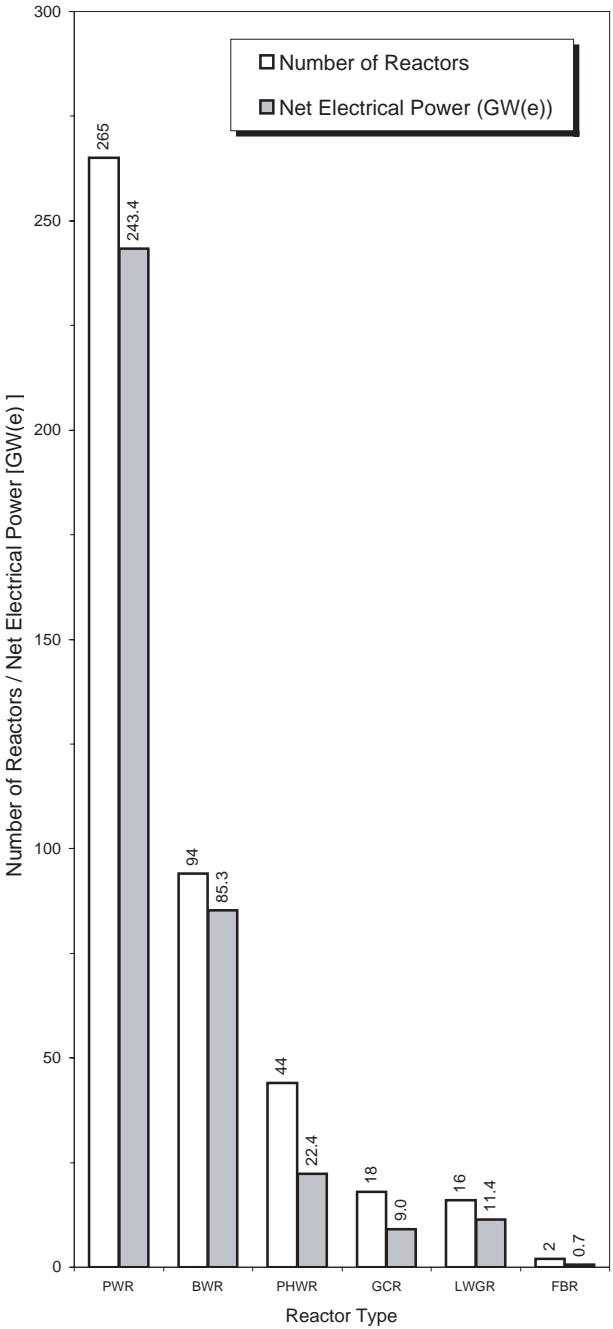


Figure 1. Nuclear reactors by type and net electrical power (as of 31 Dec. 2007)

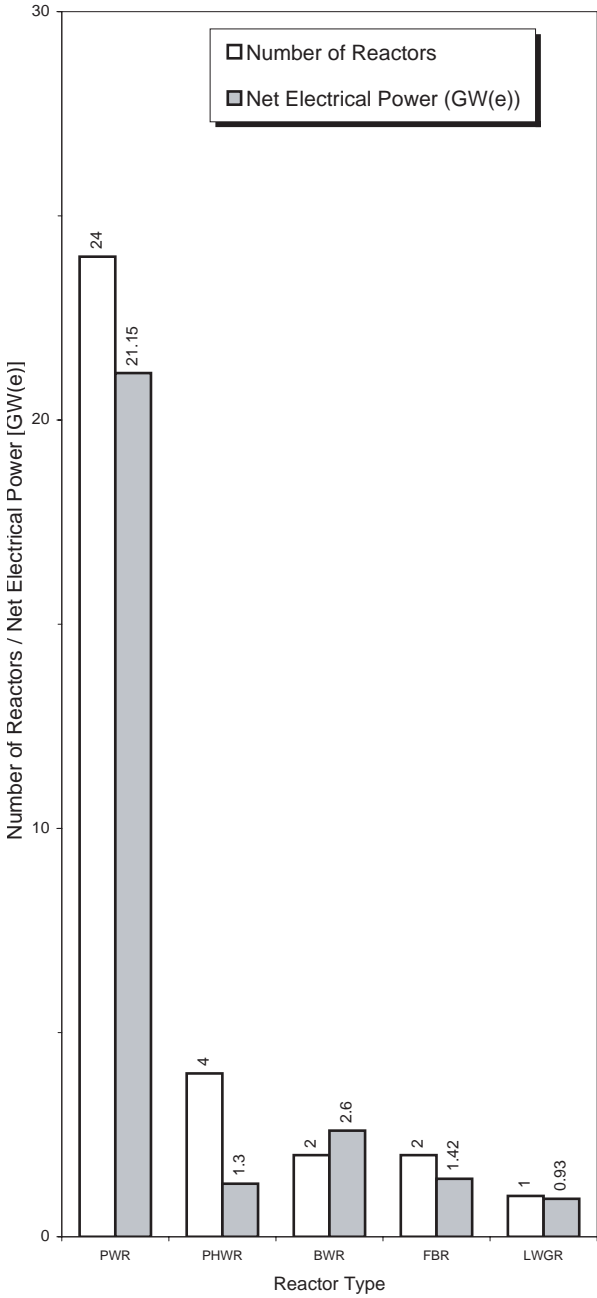


Figure 2. Reactors under construction by type and net electrical power (as of 31 Dec. 2007)

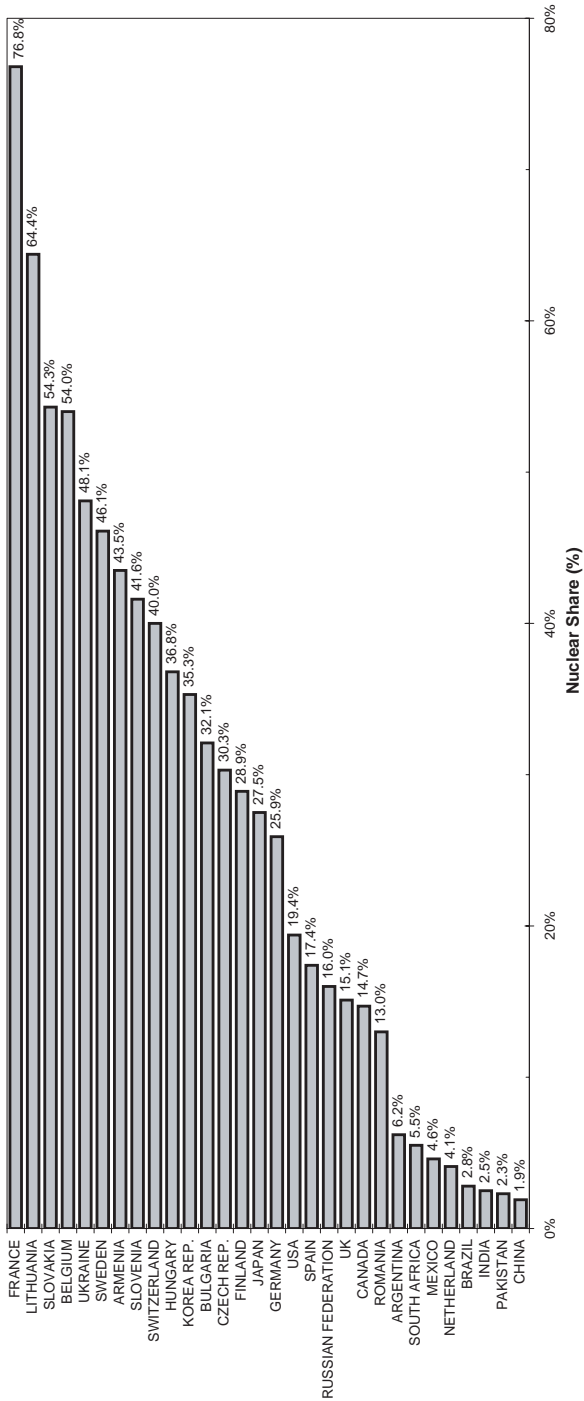


Figure 3. Nuclear share of electricity generation (as of 31 Dec. 2007)

Note: The nuclear share of electricity supplied in Taiwan, China was 19.3% of the total.

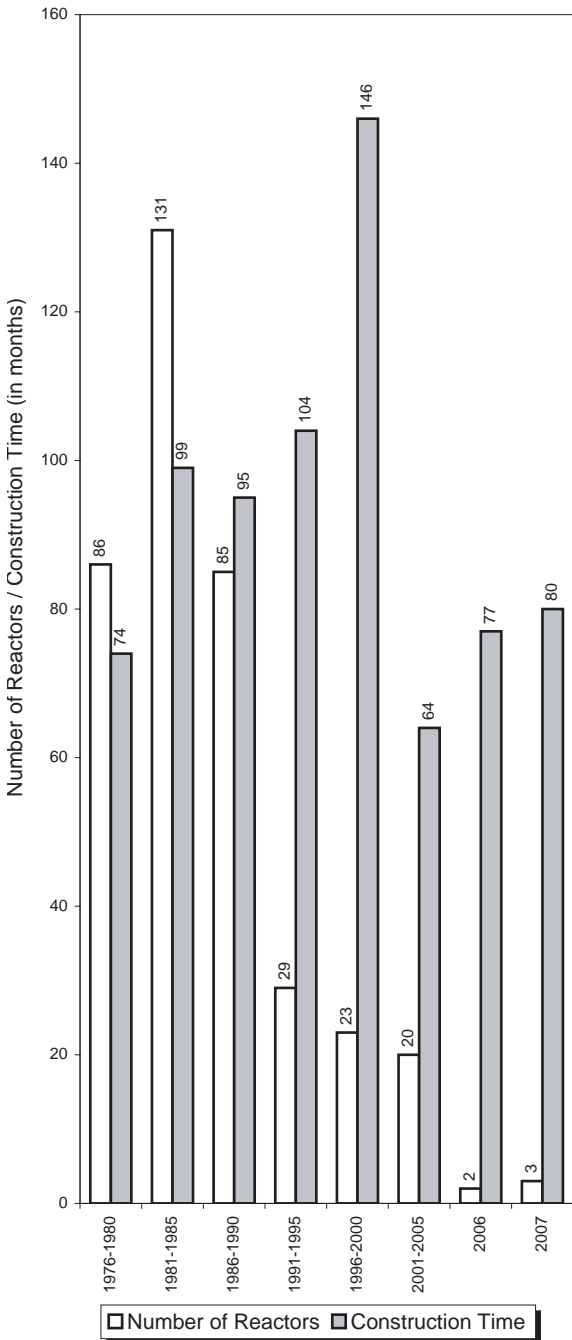


Figure 4. Worldwide median construction time span (as of 31 Dec. 2007)

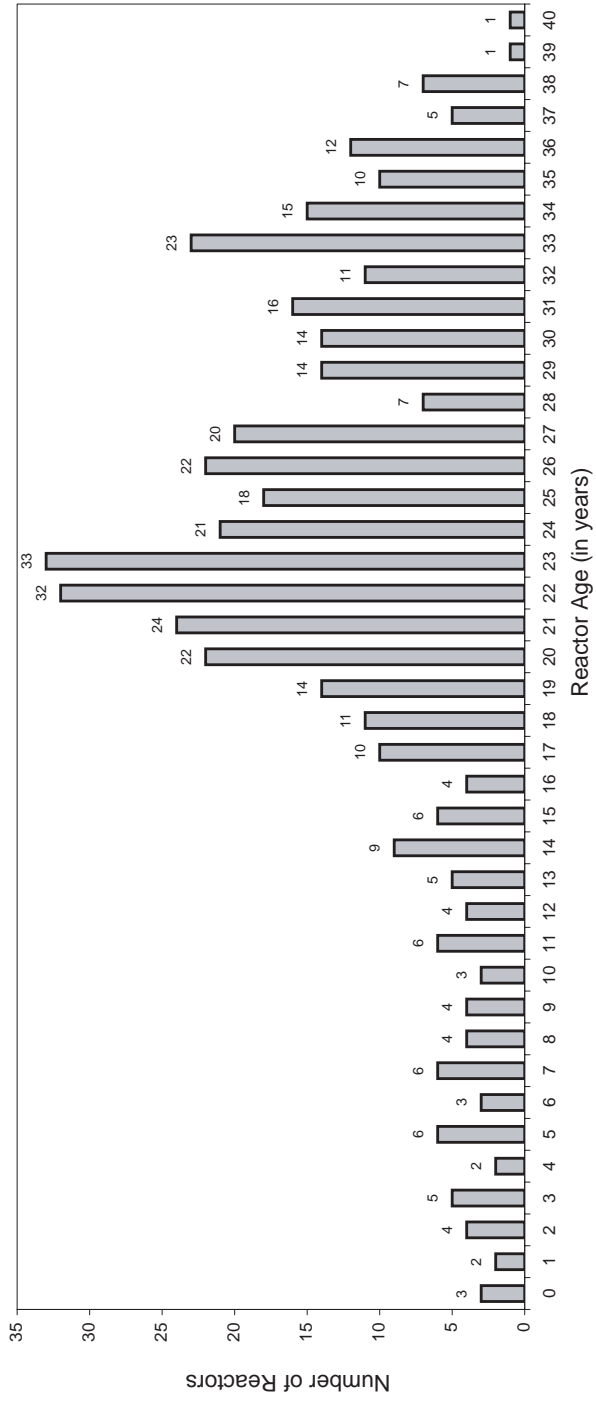


Figure 5. Number of reactors in operation by age (as of 31 Dec. 2007)

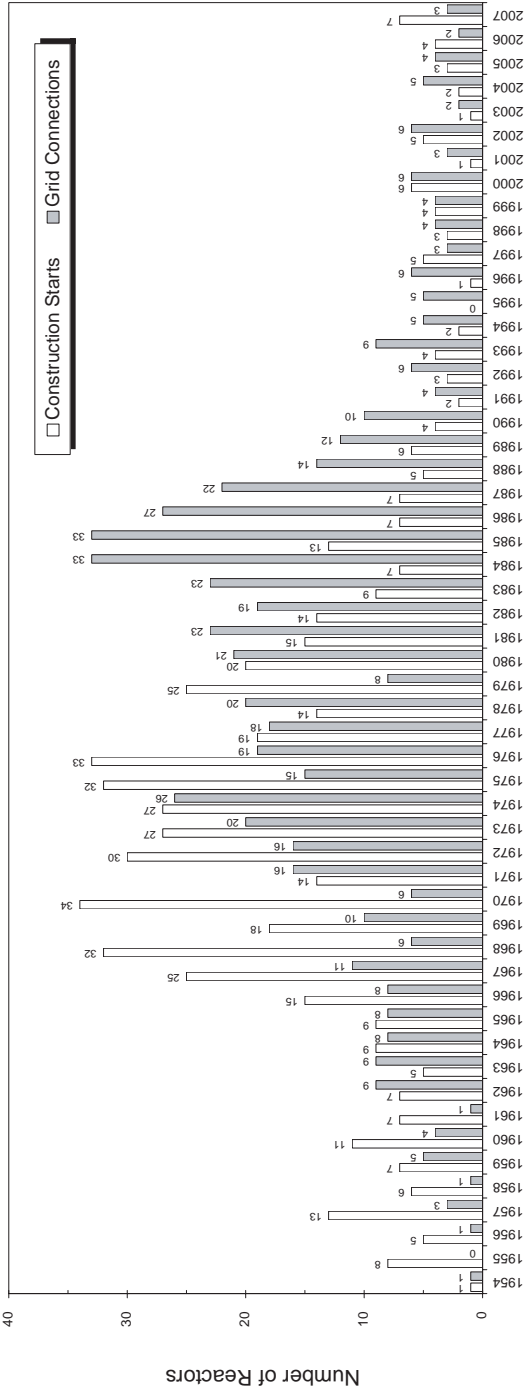


Figure 6. Annual construction starts and connections to the grid (1954 — 2007)

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