

DETR.PD-072/79

TITULO PANORAMA MUNDIAL DE CENTRAIS NUCLEARES - SITUAÇÃO EM 30.6.80

NOTAS CORRELATAS

OBJETIVO
 Catalogar as centrais nucleares existentes atualmente em operação, bem como as em construção e encomendadas.

LISTA DE DISTRIBUIÇÃO

SUPED (1)
 ASPC.PD * (1)
 DETR.PD (2)
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 SEDOTE.PD (1)
 DIAAC.PD * (1)
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SUPPLA
Dir. Tm 07
ASCS. PR

* Apenas folha de rosto

RESUMO E CONCLUSÕES

A partir da situação mundial das centrais nucleares em operação, em construção e encomendadas, publicada pela "NUCLEAR NEWS", de agosto 1980, efetuou-se uma distribuição das mesmas por países e por tipos.

Apresenta-se, também em forma gráfica, essas distribuições em função da potência elétrica e do número de unidades.

Considerando-se o total de centrais em operação, em construção e encomendadas - situação em 30.06.80 -, o panorama por tipos de reatores configura-se da seguinte maneira, em termos da potência elétrica líquida: PWR: 60,9%, BWR: 24,9%, PHWR: 4,9%, GCR+AGR+HTGR: 4,4%, LGR: 3,9%, Outros tipos: 1,0%.

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Nº. CÓPIAS 13

AUTOR (ES)	VISTO	DATA	APROVAÇÃO	VISTO	DATA
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CLASSIFICAÇÃO TAREFA: 00.41

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PANORAMA MUNDIAL DE CENTRAIS NUCLEARES - SITUAÇÃO EM 30.6.80

1. INTRODUÇÃO

Esta Nota Técnica apresenta a situação mundial de centrais nucleares, em 30.06.1980, com potências superiores a 30 MWe.

Baseando-se no periódico "NUCLEAR NEWS" de agosto 1980, no qual são apresentadas, por países, as centrais existentes em operação, as em construção e encomendadas, foram efetuadas as distribuições das centrais nucleares por países, as distribuições por tipos e finalmente, as distribuições por tipo de reator para cada país.

A Tabela 1 mostra as centrais nucleares por países, a Tabela 2 apresenta o total das centrais nucleares por tipos e a Tabela 3A a 3H mostra os diversos tipos de reatores por países.

Tomando-se por base a potência líquida em operação, verifica-se que o PWR com uma potência de 62.521 MWe representa 49,0 % da potência nuclear elétrica total instalada no mundo. A contribuição do BWR é de 28,4% e a dos reatores moderados a grafite e arrefecidos a gás (GCR, AGR e HTGR) perfaz 8,7 %. A contribuição de todos os outros tipos de reatores é de 13,9 %.

Em relação ao número de unidades os PWRs contribuem com 39,5 %, os BWRs com 25,3 %, os arrefecidos a gás com 18,0 % e os restantes com 17,2 % do número total de reatores em operação no mundo.

Em relação as centrais em construção e encomendadas os PWR contribuem com 66,4 %, os BWRs com 23,2 %, os PHWRs com 5,0 % e os restantes com 5,4 % da potência nuclear elétrica total projetada.

Considerando-se o número de unidades, o PWR contribui com 64,2 %, o BWR com 20,8 %, o PHWR com 7,8 % e os restantes com 7,2 % do número total de unidades em construção e encomendadas no mundo.

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Constata-se, desse modo, a predominância marcante da potência elétrica e do número de centrais nucleares PWRs e BWRs em operação, em construção e encomendadas em relação aos outros tipos de reatores.

Levando-se em consideração somente os PWRs e BWRs verifica-se que, em operação, os PWRs contribuem com 63,3 % da potência elétrica e com 60,9 % das unidades instaladas. Em construção e encomendados os percentuais para os PWRs são de 74,1 % e 75,5 % em relação à potência elétrica projetada e ao número de unidades, respectivamente.

Considerando-se o total de centrais em operação, em construção e encomendadas - situação em 30.06.80 -, o panorama por tipos de reatores configura-se da seguinte maneira, em termos da potência elétrica líquida:

	<u>%</u>
PWR	60,9
BWR	24,9
PHWR	4,9
GCR+AGR+HTGR	4,4
LGR	3,9
Outros tipos	1,0

A Figura 1A mostra a distribuição dos tipos de reatores em operação, em construção e encomendadas e as respectivas potências elétricas, e a Figura 1B mostra essas distribuições em relação ao número de unidades. A Figura 2A apresenta a distribuição da potência elétrica por países, enquanto a Figura 2B mostra essa distribuição em relação ao número de unidades.

O Anexo 1 apresenta a lista das centrais nucleares apresentadas pela "NUCLEAR NEWS", de agosto 1980.

TABELA 1

CENTRAIS NUCLEARES POR PAÍSES

PAÍS	EM OPERAÇÃO		EM OPERAÇÃO, EM CONSTRUÇÃO E ENCOMENDADAS	
	Nº DE UNIDADES	POTÊNCIA LÍQUIDA MWe	Nº DE UNIDADES	POTÊNCIA LÍQUIDA MWe
Estados Unidos	71	51.782	178	170.556
Japão	22	14.552	30	20.540
Rússia	28	13.075	41	24.795
Rep.Fed.da Alemanha	12	8.813	30	29.135
França	16	8.238	53	45.768
Inglaterra	33	8.080	43	14.420
Canadá	10	5.476	24	15.356
Suécia	6	3.700	12	9.410
Suiça	4	1.940	7	4.947
Bélgica	3	1.650	7	5.450
Rep.Democ. Alemã	4	1.390	7	2.710
Itália	4	1.387	9	5.295
Tailândia	2	1.208	6	4.924
Finlândia	2	1.080	4	2.160
Espanha	3	1.073	16	13.322
Tchecoslováquia	3	990	11	4.510
Bulgária	2	880	4	1.760
Índia	3	602	8	1.684
Korea	1	564	7	5.498
Holanda	2	493	2	493

Continua:

TABELA 1 (CONT.)

CENTRAIS NUCLEARES POR PAÍSES

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PAÍS	EM OPERAÇÃO		EM OPERAÇÃO, EM CONSTRUÇÃO E ENCOMENDADAS	
	Nº DE UNIDADES	POTÊNCIA LÍQUIDA MWe	Nº DE UNIDADES	POTÊNCIA LÍQUIDA MWe
Argentina	1	335	3	1.627
Paquistão	1	125	1	125
Brasil	-	-	3	3.116
África do Sul	-	-	2	1.844
Hungria	-	-	4	1.760
México	-	-	2	1.308
Luxemburgo	-	-	1	1.250
Romênia	-	-	2	1.040
Iraque	-	-	1	900
Polônia	-	-	2	880
Austria	-	-	1	692
Egito	-	-	1	622
Filipinas	-	-	1	620
Iugoslávia	-	-	1	615
Turquia	-	-	1	440
Líbia	-	-	1	300
TOTAL	233	127.433	526	399.872

PANORAMA MUNDIAL DE CENTRAIS NUCLEARES

Nº DE UNIDADES E POTÊNCIA ELÉTRICA (> 30 MWe)

(NUCLEAR NEWS, AGOSTO 1980)

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TABELA 2

CENTRAIS NUCLEARES POR TIPOS

TIPO DE REATOR	EM OPERAÇÃO		EM OPERAÇÃO, EM CONSTRUÇÃO E ENCOMENDADAS	
	Nº DE UNIDADES	POTÊNCIA LÍQUIDA MWe	Nº DE UNIDADES	POTÊNCIA LÍQUIDA MWe
PWR	92	62.521	280	243.353
BWR	59	36.185	120	99.488
PHWR	13	5.940	36	19.423
GCR+AGR+HTGR	42	11.062	53	17.698
LGR	18	9.760	24	15.760
LMFBR	4	1.433	8	3.578
GCHWR+HWLWR+LWCHW	4	472	5	512
LWBR	1	60	-	60
<p>PWR - Reator a água pressurizada BWR - Reator a água fervente PHWR - Reator pressurizado arrefecido e moderado a água pesada GCR - Reator arrefecido a gás AGR - Reator arrefecido a gás avançado HTGR - Reator a alta temperatura arrefecido a gás LGR - Reator arrefecido a água leve e moderado a grafite LMFBR - Reator rápido regenerador arrefecido a metal líquido GCHWR - Reator arrefecido a gás e moderado a água pesada HWLWR - Reator arrefecido a água leve fervente e moderado a água pesada LWCHW - Reator arrefecido a água leve e moderado a água pesada LWBR - Reator regenerador a água leve</p>				
TOTAL	233	127.433	526	399.872

PANORAMA MUNDIAL DE CENTRAIS NUCLEARES
 Nº DE UNIDADES E POTÊNCIA ELÉTRICA (> 30 MWE)
 (NUCLEAR NEWS, AGOSTO 1980)

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TABELA 3A
 PWR (REATOR A ÁGUA PRESSURIZADA)

PAÍS	EM OPERAÇÃO		EM CONSTRUÇÃO E ENCOMENDADAS	
	Nº DE UNIDADES	POTÊNCIA LÍQUIDA Mwe	Nº DE UNIDADES	POTÊNCIA LÍQUIDA Mwe
Estados Unidos	42	32.719	71	79.899
Japão	9	6.471	3	1.987
França	7	5.730	36	36.330
Rep. Federal da Alemanha	6	5.379	13	15.917
Rússia	8	3.175	8	5.720
Bélgica	3	1.650	4	3.800
Suiça	3	1.620	-	-
Rep. Democ. Alemã	4	1.390	3	1.320
Bulgária	2	880	2	880
Tchecoslováquia	2	880	8	3.520
Suécia	1	800	2	1.800
Korea	1	564	5	4.305
Holanda	1	443	-	-
Finlândia	1	420	1	420
Itália	1	247	2	1.934
Espanha	1	153	9	8.399
Brasil	-	-	3	3.116
África do Sul	-	-	2	1.844
Hungria	-	-	4	1.760
Luxemburgo	-	-	1	1.250

Continua:

PANORAMA MUNDIAL DE CENTRAIS NUCLEARES
 Nº DE UNIDADES E POTÊNCIA ELÉTRICA (>30 MWe)
 (NUCLEAR NEWS, AGOSTO 1980)

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NUCLEBRÁS
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TABELA 3B
 BWR (REATOR A ÁGUA FERVENTE)

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PAÍS	EM OPERAÇÃO		EM CONSTRUÇÃO E ENCOMENDADAS	
	Nº DE UNIDADES	POTÊNCIA LÍQUIDA MWe	Nº DE UNIDADES	POTÊNCIA LÍQUIDA MWe
Estados Unidos	26	17.813	35	38.525
Japão	11	7.722	4	3.701
Rep. Federal da Alemanha	5	3.382	3	3.814
Suécia	5	2.900	4	3.910
Tailândia	2	1.208	2	1.902
Itália	2	990	2	1.934
Finlândia	1	660	1	660
Espanha	1	440	4	3.850
Índia	2	400	-	-
Suiça	1	320	3	3.007
Canadá	1	250	-	-
Rússia	1	50	-	-
Holanda	1	50	-	-
Austria	-	-	1	692
México	-	-	2	1.308
TOTAL	59	36.185	61	63.303

PANORAMA MUNDIAL DE CENTRAIS NUCLEARES
 Nº DE UNIDADES E POTÊNCIA ELÉTRICA (>30 MWe)
 (NUCLEAR NEWS, AGOSTO 1980)

10/35

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TABELA 3C

PHWR (REATOR PRESSURIZADO ARREFECIDO E MODERADO A ÁGUA PESADA)

PAÍS	EM OPERAÇÃO		EM CONSTRUÇÃO E ENCOMENDADAS	
	Nº DE UNIDADES	POTÊNCIA LÍQUIDA MWe	Nº DE UNIDADES	POTÊNCIA LÍQUIDA MWe
Canadá	9	5.226	14	9.880
Argentina	1	335	2	1.292
Índia	1	202	5	1.082
Paquistão	1	125	-	-
Rep. Federal da Alemanha	1	52	-	-
Korea	-	-	1	629
Romênia	-	-	1	600
TOTAL	13	5.940	23	13.483

PANORAMA MUNDIAL DE CENTRAIS NUCLEARES
 Nº DE UNIDADES E POTÊNCIA ELÉTRICA (>30 MWe)
 (NUCLEAR NEWS, AGOSTO 1980)

12/35

NUCLEBRÁS
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TABELA 3E

LGR (REATOR ARREFECIDO A ÁGUA LEVE E MODERADO A GRAFITE)

PAÍS	EM OPERAÇÃO		EM CONSTRUÇÃO E ENCOMENDADAS	
	Nº DE UNIDADES	POTÊNCIA LÍQUIDA MWe	Nº DE UNIDADES	POTÊNCIA LÍQUIDA MWe
Rússia	17	8.900	6	6.000
Estados Unidos	1	860	-	-
TOTAL	18	9.760	6	6.000

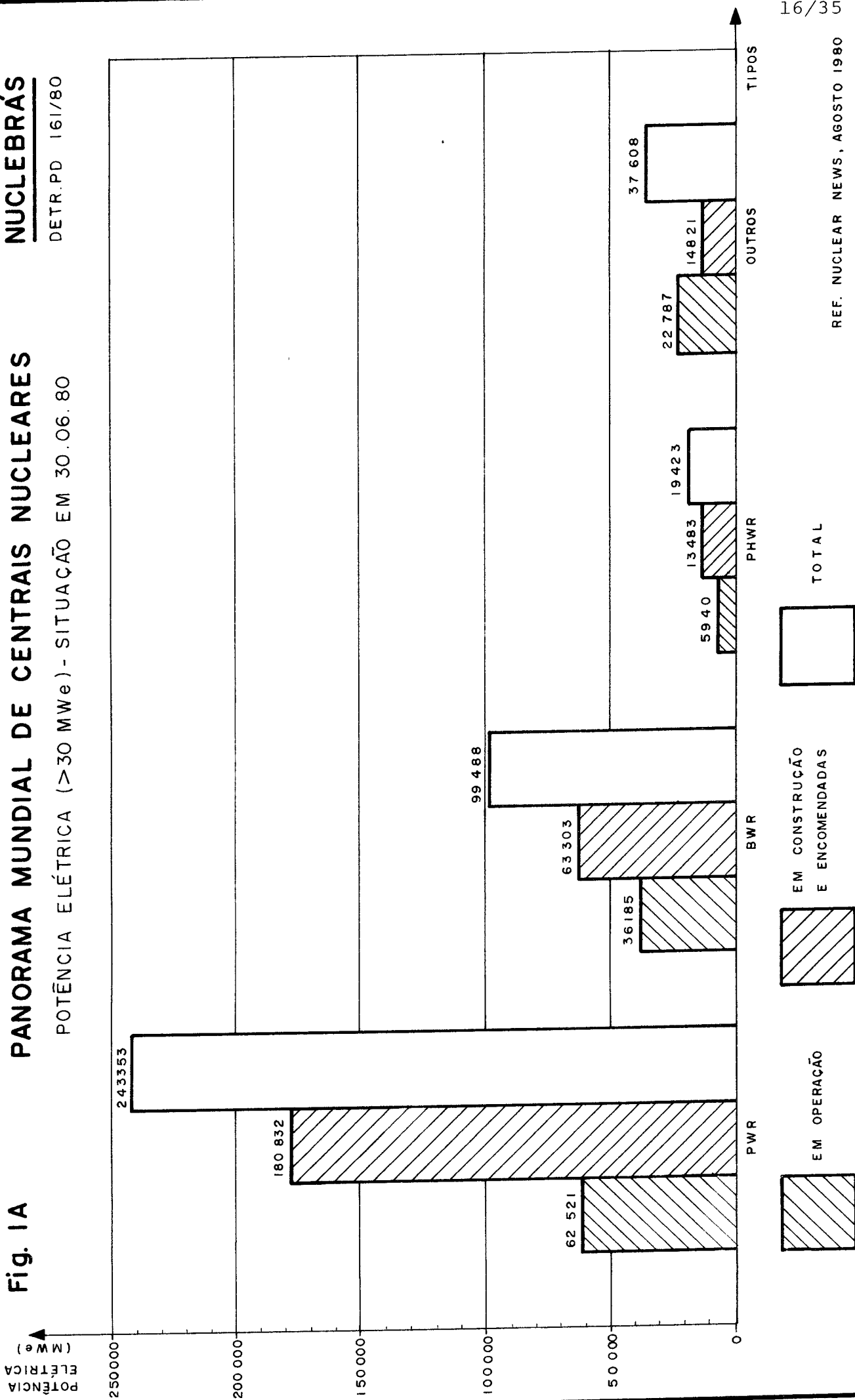
Fig. 1A

PANORAMA MUNDIAL DE CENTRAIS NUCLEARES

NUCLEBRÁS

POTÊNCIA ELÉTRICA (>30 MWe) - SITUAÇÃO EM 30.06.80

DETR.PD 161/80



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PANORAMA MUNDIAL DE CENTRAIS NUCLEARES

REACTORES (>30 MWe) - SITUAÇÃO EM 30.06.80

NUCLEBRÁS
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Fig. 1B

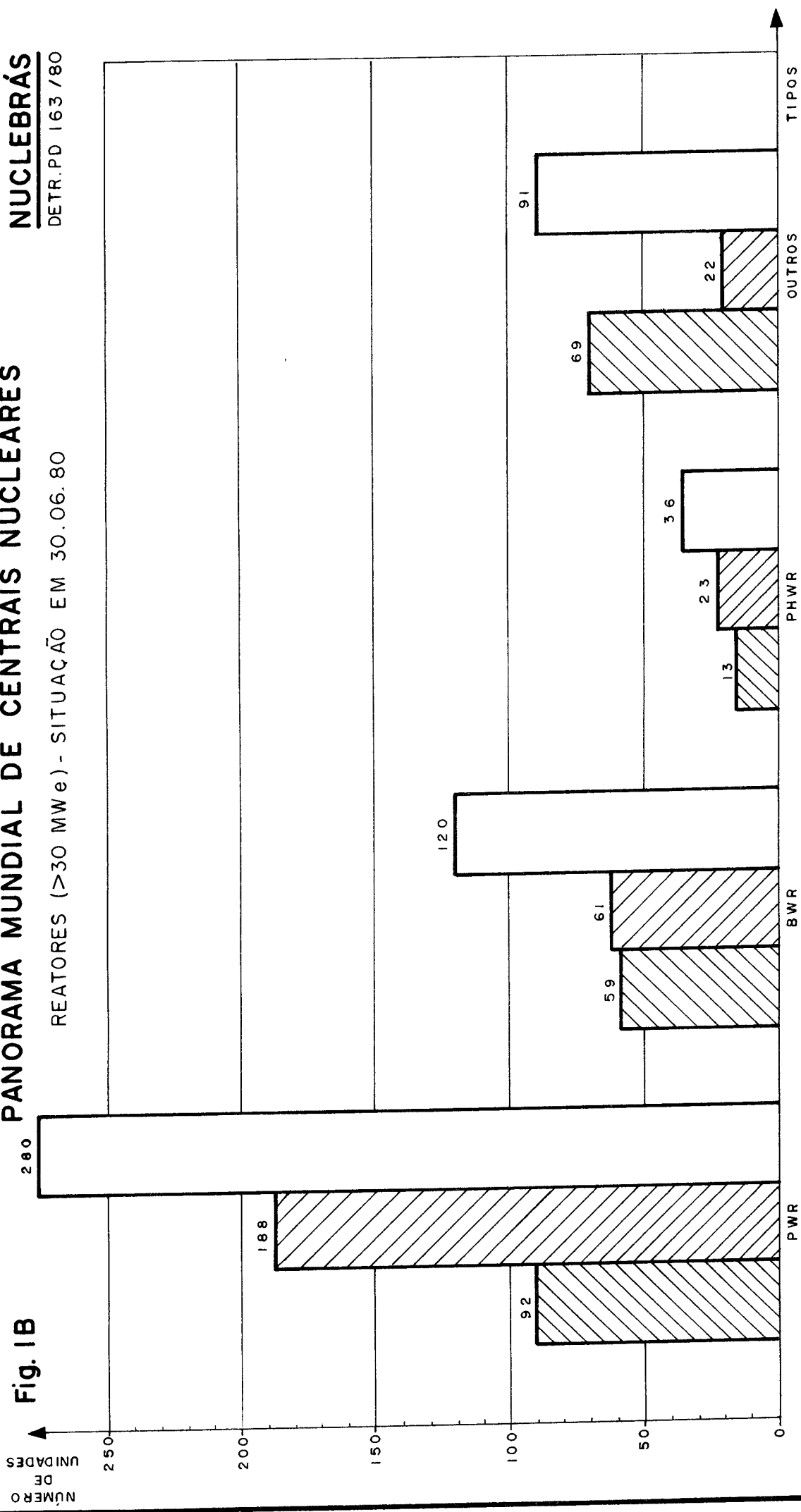


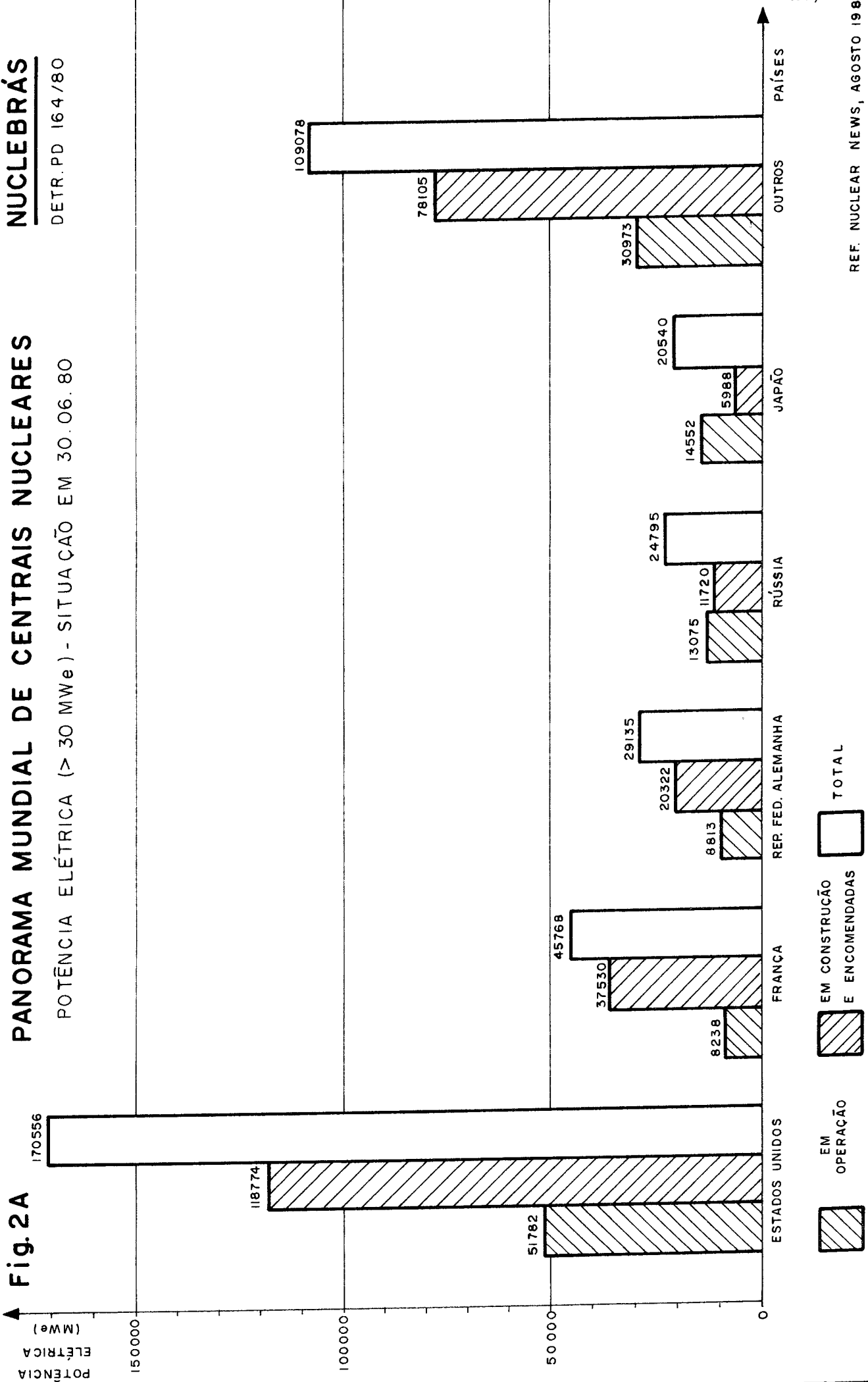
Fig. 2A

PANORAMA MUNDIAL DE CENTRAIS NUCLEARES

POTÊNCIA ELÉTRICA (> 30 MWe) - SITUAÇÃO EM 30.06.80

NUCLEBRÁS

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PANORAMA MUNDIAL DE CENTRAIS NUCLEARES

REACTORES (> 30 MWe) - SITUAÇÃO EM 30.06.80

NUCLEBRÁS

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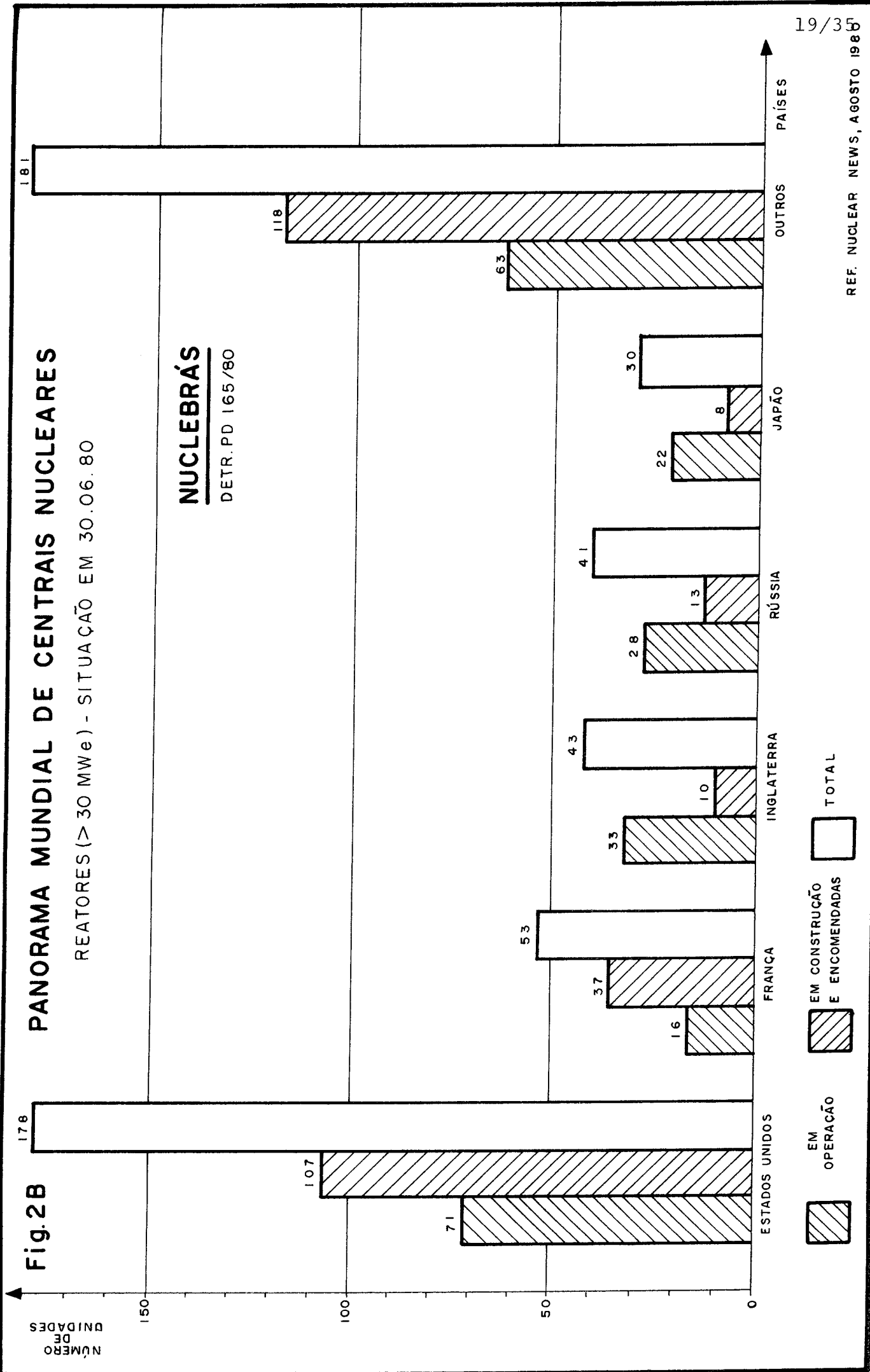


Fig. 2B

NÚMERO DE UNIDADES

EM OPERAÇÃO

EM CONSTRUÇÃO E ENCAMINHADAS

TOTAL

ANEXO

nuclear news

World List of Nuclear Power Plants

Operable, Under Construction, or on Order (30 MWe and Over) as of June 30, 1980

	Net MWe	Type	Reactor Supplier	Generator Supplier	Architect Engineer	Constructor	Con- struc- tion stage (%)	Commercial Operation orig. sched- ule†	actual or ex- pected
Argentina									
Comision Nacional de Energia Atomica									
• Atucha 1 (Lima, Buenos Aires)	335	PHWR	Siemens	KWU	Siemens	Siemens/Imp.	100	6/72	6/74
Atucha 2 (Lima, Buenos Aires)	692	PHWR	KWU	KWU	CNEA/KWU	CNEA/KWU	3		indef.
Embalse (Embalse, Rio Tercero)	600	PHWR	AECL	Italimpianti	AECL/ Italimpianti	Italimpianti/AECL	65	12/79	12/82
Austria									
Gemeinschaftskernkraftwerk Tullnerfeld (GKT)									
Tullnerfeld 1 (Zwentendorf)	692	BWR	KWU/AEG	KWU/Elin	KWU	SO	100	8/76	indef.*
Belgium									
Indivision Doel									
• Doel 1 (Antwerp)	390	PWR	ACECOWEN	COP/TOSI/ ACEC	TE		100	6/73	2/75
• Doel 2 (Antwerp)	390	PWR	ACECOWEN	COP/TOSI/ ACEC	TE		100	3/75	11/75
Société Belgo-Française d'Énergie Nucléaire Mosane (SEMO)									
• Tihange 1 (Huy, Liege)	870	PWR	ACLF	Alstom/Rateau/ La Meuse/ ACEC-JS	EdF/ Electrobel	CFE-Blaton/ADF SPIE-SNTP/C-B	100	12/74	9/75

• Units in commercial operation

† Estimated date of startup, announced at time reactor was ordered

* Completed but not approved for operation

Twice each year Nuclear News sends a questionnaire to each utility or agency on this list, asking for corrections or additions to the information listed. In cases where a response is not received, we do follow up by phone, though such follow-up is not always possible for plants outside the United States.

The criterion for listing a unit is that either an order or a letter of intent has been signed for the reactor. In cases where the definition of "letter of intent" may be ambiguous, or where a special situation may exist, the judgment of the utility is followed as to whether a plant should be included in the list.

World List of Nuclear Power Plants, cont'd

	Net MWe	Type	Reactor Supplier	Generator Supplier	Architect Engineer	Constructor	Construction stage (%)	Commercial operation sched-uled†	actual ex-pected
BELGIUM, cont'd									
Société Intercommunale Belge de Gaz et d'Electricité (INTERCOM)									
Tihange 2 (Huy, Liège)	900	PWR	FRAMACECO	Alsthom/Rateau/ La Meuse/AEC	Electrobel	CTAFMC	85	4/80	/82
Tihange 3 (Huy, Liège)	1000	PWR	ACECOWEN	Brown Boveri/ Alsthom/AEC	Electrobel	CTAFMC	20	4/82	5/84
Sociétés Réunies d'Energie du Bassin de l'Escaut (EBES)									
Doel 3 (Antwerp)	900	PWR	FRAMACECO	Alsthom/ La Meuse/AEC	TE		80	2/80	1/82
Doel 4 (Antwerp)	1000	PWR	ACECOWEN	Brown Boveri/ AEC	TE		30	12/82	6/83
Brazil									
Fumas									
Angra 1 (Itaorna)	626	PWR	W	W	G&H/PE	W	93	3/77	/81
Angra 2 (Itaorna)	1245	PWR	KWU	KWU	Nuclen	KWU	7	12/82	8/86
Angra 3 (Itaorna)	1245	PWR	KWU	KWU	Nuclen	KWU	0	6/84	8/87
Bulgaria									
• Kozloduy 1 (Kozloduy)	440	PWR	AEE				100		12/74
• Kozloduy 2 (Kozloduy)	440	PWR	AEE				100		12/75
• Kozloduy 3 (Kozloduy)	440	PWR	AEE				85	/78	/80
• Kozloduy 4 (Kozloduy)	440	PWR	AEE				75	/79	/81
Canada									
New Brunswick Electric Power Commission									
Point Lepreau (Bay of Fundy, N.B.)	630	PHWR	AECL	H-P	AECL/CTL/Utility	Utility	84	10/79	/81
Ontario Hydro									
• Douglas Point (Tiverton, Ont.)	206	PHWR	AECL	AEI	OH/AECL	OH	100	7/65	9/68
• Pickering 1 (Pickering, Ont.)	515	PHWR	AECL	H-P	OH/AECL	OH	100	11/70	7/71
• Pickering 2 (Pickering, Ont.)	515	PHWR	AECL	H-P	OH/AECL	OH	100	10/71	12/71
• Pickering 3 (Pickering, Ont.)	515	PHWR	AECL	H-P	OH/AECL	OH	100	10/72	6/72
• Pickering 4 (Pickering, Ont.)	515	PHWR	AECL	H-P	OH/AECL	OH	100	10/73	6/73
• Bruce 1 (Tiverton, Ont.)	740	PHWR	AECL	H-P	OH/AECL	OH	100	6/77	9/77
• Bruce 2 (Tiverton, Ont.)	740	PHWR	AECL	H-P	OH/AECL	OH	100	9/76	9/77
• Bruce 3 (Tiverton, Ont.)	740	PHWR	AECL	H-P	OH/AECL	OH	100	6/78	2/78
• Bruce 4 (Tiverton, Ont.)	740	PHWR	AECL	H-P	OH/AECL	OH	100	6/79	1/79
Pickering 5 (Pickering, Ont.)	516	PHWR	AECL	H-P	OH/AECL	OH	70	4/80	12/82
Pickering 6 (Pickering, Ont.)	516	PHWR	AECL	H-P	OH/AECL	OH	70	1/81	6/83
Pickering 7 (Pickering, Ont.)	516	PHWR	AECL	H-P	OH/AECL	OH	65	10/81	11/83
Pickering 8 (Pickering, Ont.)	516	PHWR	AECL	H-P	OH/AECL	OH	60	7/82	4/84
Bruce 5 (Tiverton, Ont.)	756	PHWR	AECL	CGE	OH/AECL	OH	45	10/82	7/84
Bruce 6 (Tiverton, Ont.)	756	PHWR	AECL	CGE	OH/AECL	OH	50	7/83	10/83
Bruce 7 (Tiverton, Ont.)	756	PHWR	AECL	CGE	OH/AECL	OH	35	4/84	4/86
Bruce 8 (Tiverton, Ont.)	756	PHWR	AECL	CGE	OH/AECL	OH	30	1/85	1/87
Darlington 1 (Newcastle Twp., Ont.)	881	PHWR	AECL	BBC	OH/AECL	OH	0	8/86	8/89
Darlington 2 (Newcastle Twp., Ont.)	881	PHWR	AECL	BBC	OH/AECL	OH	0	11/85	11/86
Darlington 3 (Newcastle Twp., Ont.)	881	PHWR	AECL	BBC	OH/AECL	OH	0	5/87	11/90
Darlington 4 (Newcastle Twp., Ont.)	881	PHWR	AECL	BBC	OH/AECL	OH	0	2/88	8/91
Hydro Quebec									
• Gentilly 1 (Becancour, Que.)	250	BLWR	AECL	BBC	AECL/SNC/MECO	HQ	100	/71	5/72
• Gentilly 2 (Becancour, Que.)	638	PHWR	AECL	GE	AECL/CTL/HQ	HQ	90	/79	1/83
Czechoslovakia									
• Bohunice 1A (Jaslovské Bohunice)	110	GCHWR					100		12/72
• Bohunice 2A (Jaslovské Bohunice)	440	PWR	AEE				100		12/78
• Bohunice 2B (Jaslovské Bohunice)	440	PWR	AEE				80	/79	3/80
• Bohunice 3 (Jaslovské Bohunice)	440	PWR	AEE				10	/82	
• Bohunice 4 (Jaslovské Bohunice)	440	PWR	AEE				5	/83	
Dukovany 1 (Dukovany)	440	PWR	AEE				5	/82	/83
Dukovany 2 (Dukovany)	440	PWR	AEE				0	/83	/84

	Net MWe	Type	Reactor Supplier	Generator Supplier	Architect Engineer	Constructor	Con- struc- tion stage (%)	Commercial Operation orig. sched- ule†	actual or ex- pected
CZECHOSLOVAKIA, cont'd									
Dukovany 3 (Dukovany)	440	PWR	AEE				0	/83	/84
Dukovany 4 (Dukovany)	440	PWR	AEE				0	/84	/85
Levice 1	440	PWR	AEE						/87
Levice 2	440	PWR	AEE						/88
Egypt									
Egyptian Electricity Authority									
Sidi-Krier-1 (Sidi Krier)	622	PWR	W	W	Gilbert	Jones	0	/83	/88
Finland									
Imatran Voima Osakeyhtio (IVO)									
• Loviisa 1 (Loviisa)	420	PWR	AEE	AEE	IVO	IVO	100	6/76	5/77
• Loviisa 2 (Loviisa)	420	PWR	AEE	AEE	IVO	IVO	98	4/78	8/80
Teollisuuden Voima Osakeyhtio (TVO)									
• TVO-1 (Olkiluoto)	660	BWR	ASEA-Atom	Stal-Laval	ASEA-Atom	ASEA-Atom	100	8/78	7/79
• TVO-2 (Olkiluoto)	660	BWR	ASEA-Atom	Stal-Laval	ASEA-Atom	Jukola	95	8/80	8/80
France									
Centrale Nucleaire Europeene a Neutrons Rapides S.A. (Nersa)									
Creys-Malville (Isere)	1200	LMFBR	Novatome/NIRA	Ansaldo	Nersa	Fou/CdA/PH	45	2/83	12/83
Electricite de France (EdF)									
• Marcoule G2 (Gard)	40	GCR	SACM	Rateau/Alsthom	SACM	CITRA	100		4/59
• Marcoule G3 (Gard)	40	GCR	SACM	Rateau/Alsthom	SACM	CITRA	100		5/60
• Chinon 2 (Indre-et-Loire)	210	GCR	various	Alsthom	EdF/CEA	GTM	100		2/65
• Chinon 3 (Indre-et-Loire)	400	GCR	various	Alsthom	EdF/CEA	GTM	100		8/67
• Monts d'Arree (Finistere)	70	GCHWR	CEA	CEM	Indatom	C-B	100		7/67
• Saint-Laurent-des-Eaux 1 (Loir-et-Cher)	460	GCR	various	Alsthom	EdF	GTM	100		3/69
• Saint-Laurent-des-Eaux 2 (Loir-et-Cher)	515	GCR	various	Alsthom	EdF	GTM	100		8/71
• Bugey 1 (Ain)	540	GCR	various	Rateau/JS	EdF	Dumez	100		4/72
• Phenix (Gard)	233	LMFBR	CEA/EdF/ Novatome	CEM	CEA/Novatome/ EdF	SGE	100		12/73
• Fessenheim 1 (Haut-Rhin)	890	PWR	Fra/CL	Alsthom	EdF	C-B	100	10/75	12/77
• Fessenheim 2 (Haut-Rhin)	890	PWR	Fra/CL	Alsthom	EdF	C-B	100	7/76	3/78
• Bugey 2 (Ain)	920	PWR	Fra/CL	Alsthom	EdF	Bouygues	100	12/76	2/79
• Bugey 3 (Ain)	920	PWR	Fra/CL	Alsthom	EdF	Bouygues	100	8/77	2/79
• Bugey 4 (Ain)	900	PWR	Fra/CL	Alsthom	EdF	Bouygues	100	5/78	7/79
• Bugey 5 (Ain)	900	PWR	Fra/CL	Alsthom	EdF	Bouygues	100	11/78	12/79
Dampierre 1 (Loiret)	900	PWR	Fra/CL	Alsthom	EdF	CM/SeB/ Ballot	100	7/79	7/80
Dampierre 2 (Loiret)	900	PWR	Fra/CL	Alsthom	EdF	CM/SeB/ Ballot	100	1/80	6/81
Dampierre 3 (Loiret)	900	PWR	Fra/CL	Alsthom	EdF	CM/SeB/ Ballot	95	7/80	7/81
Dampierre 4 (Loiret)	900	PWR	Fra/CL	Alsthom	EdF	CM/SeB/ Ballot	80	4/81	12/81
Gravelines B1 (Dunkerque)	920	PWR	Fra/CL	Alsthom	EdF	SGE	100	4/79	7/80
Gravelines B2 (Dunkerque)	920	PWR	Fra/CL	Alsthom	EdF	SGE	100	10/79	12/80
Gravelines B3 (Dunkerque)	920	PWR	Fra/CL	Alsthom	EdF	SGE	100	5/80	5/81
Gravelines B4 (Dunkerque)	920	PWR	Fra/CL	Alsthom	EdF	SGE	90	2/81	11/81
Gravelines C5 (Dunkerque)	920	PWR	Fra/CL	Alsthom	EdF	SGE	5	12/84	12/84
Gravelines C6 (Dunkerque)	920	PWR	Fra/CL	Alsthom	EdF	SGE	2	8/85	8/85
Tricastin 1 (Drome)	920	PWR	Fra/CL	Alsthom	EdF	C-B-C	100	2/79	9/80
Tricastin 2 (Drome)	920	PWR	Fra/CL	Alsthom	EdF	C-B-C	100	8/79	12/80
Tricastin 3 (Drome)	920	PWR	Fra/CL	Alsthom	EdF	C-B-C	100	3/80	5/81
Tricastin 4 (Drome)	920	PWR	Fra/CL	Alsthom	EdF	C-B-C	90	9/80	10/81
Saint-Laurent-des-Eaux B1 (Loir-et-Cher)	880	PWR	Fra/CL	CEM	EdF	GTM	100	1/81	3/81
Saint-Laurent-des-Eaux B2 (Loir-et-Cher)	880	PWR	Fra/CL	CEM	EdF	GTM	80	6/81	9/81
Blayais 1 (Gironde)	920	PWR	Fra/CL	Alsthom	EdF	SB/Dumez	90	2/81	8/81
Blayais 2 (Gironde)	920	PWR	Fra/CL	Alsthom	EdF	SB/Dumez	70	9/81	6/82
Blayais 3 (Gironde)	920	PWR	Fra/CL	Alsthom	EdF	SB/Dumez	30	9/82	12/82

CONTINUED

• Units in commercial operation

† Estimated date of startup, announced at time reactor was ordered

World List of Nuclear Power Plants, cont'd

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	Net MWe	Type	Reactor Supplier	Generator Supplier	Architect Engineer	Constructor	Construction stage (%)	Commercial Operation orig. scheduled	actual or expected
FRANCE, cont'd									
Electricite de France, cont'd									
Blayais 4 (Gironde)	920	PWR	Fra/CL	Alsthom	EdF	SB/Dumez	25	2/83	4/83
Chinon B1 (Indre-et-Loire)	875	PWR	Fra/CL	CEM	EdF	GTM	60	2/82	6/82
Chinon B2 (Indre-et-Loire)	875	PWR	Fra/CL	CEM	EdF	GTM	50	6/82	10/82
Paluel 1 (Seine-Maritime)	1285	PWR	Fra/CL	Alsthom	EdF	CM/Balloy/Chag	40	2/83	2/83
Paluel 2 (Seine-Maritime)	1285	PWR	Fra/CL	Alsthom	EdF	CM/Balloy/Chag	30	5/83	5/83
Paluel 3 (Seine-Maritime)	1285	PWR	Fra/CL	Alsthom	EdF	CM/Balloy/Chag	13	6/84	6/84
Paluel 4 (Seine-Maritime)	1285	PWR	Fra/CL	Alsthom	EdF	CM/Balloy/Chag	0	9/85	9/85
Cruas 1 (Ardeche)	880	PWR	Fra/CL	CEM	EdF	C-B-C	25	7/83	7/83
Cruas 2 (Ardeche)	880	PWR	Fra/CL	CEM	EdF	C-B-C	15	12/83	11/83
Cruas 3 (Ardeche)	880	PWR	Fra/CL	CEM	EdF	C-B-C	5	6/84	5/84
Cruas 4 (Ardeche)	880	PWR	Fra/CL	CEM	EdF	C-B-C	5	12/84	11/84
Saint-Maurice Saint-Alban 1 (Isere)	1285	PWR	Fra/CL	Alsthom	EdF	Bouygues	10	11/84	11/84
Saint-Maurice Saint-Alban 2 (Isere)	1285	PWR	Fra/CL	Alsthom	EdF	Bouygues	2	7/85	10/85
Flamanville 1 (Manche)	1285	PWR	Fra/CL	Alsthom	EdF	SGE/SCREG	1	2/85	1/85
Flamanville 2 (Manche)	1285	PWR	Fra/CL	Alsthom	EdF	SGE/SCREG	0	12/85	12/85
Cattenom 1 (Moselle)	1270	PWR	Fra/CL	Alsthom	EdF	SB/Dumez	3	7/85	7/85
Cattenom 2 (Moselle)	1270	PWR	Fra/CL	Alsthom	EdF	SB/Dumez	0	3/86	3/86
Societe d'Energie Nuclearie Franco-Belge des Ardennes (SENA)									
• SENA (Chooz)	310	PWR	ACECOWEN/Fra	Rateau/C-L	G&H/SPIE	SGE/CITRA	100		4/67
Germany (Democratic Republic)									
• Rheinsberg 1 (Rheinsberg, Granensee region)	70	PWR	AEE				100	/60	5/66
• Nord 1 - 1 (Lubmin, Greifswald region)	440	PWR	AEE				100	12/74	12/73
• Nord 1 - 2 (Lubmin, Greifswald region)	440	PWR	AEE				100	/75	2/75
• Nord 2 - 1	440	PWR	AEE				100	/77	6/78
• Nord 2 - 2	440	PWR	AEE				90	/78	/80
• Magdeburg 1	440	PWR	AEE				1	/80	
• Magdeburg 2	440	PWR	AEE				1	/80	
Germany (Federal Republic)									
Bayernwerk AG									
Grafenrheinfeld KKG (Grafenrheinfeld)	1225	PWR	KWU	KWU	KWU	KWU	90	11/78	8/81
Gemeinschaftskernkraftwerk Neckar (GKN)									
• GKN 1 (Neckarwestheim)	805	PWR	KWU	KWU	KWU	KWU	100	2/76	10/76
• GKN 2 (Neckarwestheim)	805	PWR	KWU	KWU	KWU	KWU	0	/81	/86
Kernkraftwerk Krummel GmbH (KKK)									
Krummel KKK (Geestacht-Krummel/Elbe)	1316	BWR	AEG	KWU	KWU	Hoch/Hammers/Heitkamp/Holzmann	80	9/77	10/82
Kernkraftwerk Lippe-Emsland GmbH									
Emsland (Lingen)	1222	PWR	KWU	KWU	KWU	KWU	0	— late '80s —	
Hochtemperatur-Kernkraftwerk GmbH (HKG)									
THTR 300 (Hamm-Uentrop)	296	HTR	HRB	BBC	BBC/HRB	KTHTR	70	3/77	/83
Kernforschungszentrum Karlsruhe									
• Karlsruhe MZFR (Karlsruhe)	52	PHWR	Siemens	Siemens	Siemens	Hochtief	100		10/62
Kernkraftwerk Brokdorf GmbH									
Brokdorf (Brokdorf)	1290	PWR	KWU	KWU	KWU	KWU	0	9/77	/86
Kernkraftwerk Brunsbuettel GmbH (KKB)									
• Brunsbuettel (Brunsbuettel/Elbe)	771	BWR	AEG	KWU	KWU	KWU	100	4/74	2/77
Kernkraftwerk Hamm GmbH (KKH)									
Hamm (Hamm-Uentrop)	1300	PWR	KWU	KWU	KWU	KWU	0	/81	indef.
Kernkraftwerk Isar (KKI)									
• Isar KKI (Ohu)	870	BWR	KWU	KWU	KWU	KWU	100	11/76	3/79
• Isar II	1227	PWR	KWU	KWU	KWU	KWU	0		1/88
Kernkraftwerk Obrigheim GmbH (KWO)									
• Obrigheim KWO (Obrigheim)	328	PWR	Siemens	Siemens	Siemens	Siemens	100	3/69	3/69
Kernkraftwerk Philippsburg (KKP)									
• KKP 1 (Philippsburg)	864	BWR	KWU	KWU	KWU	KWU	100	/74	2/80
• KKP 2 (Philippsburg)	1281	PWR	KWU	KWU	KWU	KWU	50	/77	/84
• KWS (Wyhl/Rhein)	1284	PWR	KWU	KWU	KWU	KWU	0	/79	indef.

	Net MWe	Type	Reactor Supplier	Generator Supplier	Architect Engineer	Constructor	Con- struc- tion stage (%)	Commercial orig. sched- ule†	actual or ex- pected
FRG, cont'd									
Kernkraftwerk RWE-Bayernwerk GmbH (KRB)									
• KRB I Block A (Gundremmingen)	237	BWR	GE	AEG	GE/AEG/Hoch	GE/AEG/ Hoch	100	11/66	4/67
KRB II Block B (Gundremmingen)	1249	BWR	KWU	KWU	KWU/Hoch	KWU/Hoch	70	6/79	9/83
KRB II Block C (Gundremmingen)	1249	BWR	KWU	KWU	KWU/Hoch	KWU/Hoch	55	6/80	4/83
Kernkraftwerk Stade GmbH (KKS)									
• Stade KKS (Stade)	630	PWR	Siemens	Siemens	Siemens	Siemens	100	4/72	5/72
Kernkraftwerk Sud GmbH (KWS)									
KWS (Wyhl)	1284	PWR	KWU	KWU	KWU	KWU	0	6/79	indef.
Preussische Elektrizitäts AG (PREAG)									
• KWW (Wuergassen)	640	BWR	AEG	AEG/KWU	AEG/KWU	Hochtief	100	2/72	3/72
Kernkraftwerk Unterwieser GmbH (KKU)									
• KKU (Esensham)	1230	PWR	KWU	KWU	KWU	Arge/KKU	100	1/76	10/79
Gemeinschaftkernkraftwerk Grohnde GmbH (KWG)									
KWG (Grohnde)	1294	PWR	KWU	KWU	KWU	Arge/KWG	40	8/79	/84
Rheinisch-Westfälisches Elektrizitätswerk AG (RWE)									
• Biblis A (Worms/Rhein)	1146	PWR	Siemens	KWU	KWU	Hochtief	100	6/74	3/75
• Biblis B (Worms/Rhein)	1240	PWR	Siemens	KWU	KWU	Hochtief	100	8/76	1/77
Biblis C (Worms/Rhein)	1232	PWR	KWU	KWU	KWU	Hochtief	0	/81	indef.
Kaerlich	1227	PWR	BBR	BBC	BBC	Hochtief	45	5/78	/85
Neupotz 1 (Neupotz)	1246	PWR	BBR	BBC	BBC	Hochtief	0	/83	indef.
Schnell-Brüter-Kernkraftwerksgesellschaft (SBK)									
Kalkar SNR-300 (Kalkar)	295	LMFBR	Int/B-N/Nera	KWU	INB	INB/Hoch	48	1/80	6/85

Hungary**Hungarian Electrical Works**

Paks 1 (Paks)	440	PWR	AEE		ERBE		60	/80	/81
Paks 2 (Paks)	440	PWR	AEE		ERBE		30	/80	/83
Paks 3 (Paks)	440	PWR	AEE		ERBE		2		/84
Paks 4 (Paks)	440	PWR	AEE		ERBE		2		/85

India**Atomic Energy Commission, Department of Atomic Energy**

• Tarapur 1 (Bombay)	200	BWR	GE	GE	Bechtel	Bechtel	100	2/69	10/69
• Tarapur 2 (Bombay)	200	BWR	GE	GE	Bechtel	Bechtel	100	2/69	10/69
• RAPP 1 (Kota, Rajasthan)	202	PHWR	CGE	EEC	AECL/MECO	HCC	100	12/69	12/73
RAPP 2 (Kota, Rajasthan)	202	PHWR	L&T	EEC	AECL/MECO	HCC	99	12/73	/80
MAPP 1 (Kalpakkam, Tamil Nadu)	220	PHWR	L&T	BHE	DAE	ECC	92	6/76	/80
MAPP 2 (Kalpakkam, Tamil Nadu)	220	PHWR	L&T	BHE	DAE	ECC	63	6/77	3/82
NAPP 1 (Narora, Uttar Pradesh)	220	PHWR	WIL	BHE	DAE	HCC	28	3/81	12/83
NAPP 2 (Narora, Uttar Pradesh)	220	PHWR	R&C	BHE	DAE	HCC	18	3/82	12/84

Iraq

Iraq 1	900	PWR	Fra				0		
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Italy**Ente Nazionale per l'Energia Elettrica (ENEL)**

• Latina (Borgo Sabotino)	150	GCR	TNPG	Parsons	TNPG	Torno/ McAlp	100		1/64
• Garigliano (Sessa Aurunca)	150	BWR	GE	Ansaldo	Ebasco	Italstrade	100		6/64
• Trino Vercellese (Vercelli)	247	PWR	W	Franco Tosi/ Marelli	G&H	Recchi	100		1/65
Cirene (Latina)	40	LWCHW	NIRA	AMN/ASGEN	ENEL	Torno	20	/77	7/84

• Units in commercial operation

CONTINUED

World List of Nuclear Power Plants, cont'd

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	Net MWe	Type	Reactor Supplier	Generator Supplier	Architect Engineer	Constructor	Construction stage (%)	Commercial Operation orig. scheduled	actual expected
ITALY, cont'd									
Ente Nazionale per l'Energia Elettrica, cont'd									
• Caorso (Caorso, Piacenza)	840	BWR	AMN/GETSCO	AMN/ASGEN	G&H	SOGENE	100	4/75	5/78
ENEL 5 (site not yet approved)	952	PWR	EI/W	Franco Tosi/Marelli	Bechtel		0	/80	indef.
ENEL 8 (Montalto di Castro)	982	BWR	AMN/Getesco	AMN/ASGEN	G&H		9	/81	12/85
ENEL 6 (Montalto di Castro)	982	PWR	EI/W	Tosi/Marelli	Bechtel		9	/81	12/85
ENEL 7 (site not approved)	952	BWR	AMN/Getesco	AMN/ASGEN	G&H		9	/81	indef.
Japan									
Chubu Electric Power Co.									
• Hamaoka 1 (Hamaoka-cho, Shizuoka-Pref.)	516	BWR	Toshiba	Hitachi	Toshiba	Takenaka/Kajima	100	11/74	3/76
• Hamaoka 2 (Hamaoka-cho, Shizuoka-Pref.)	814	BWR	Toshiba	Hitachi	Chubu	Takenaka/Kajima	100	3/78	11/78
Chugoku Electric Power Co., Inc.									
• Shimane (Kashima-cho, Shimane-Pref.)	439	BWR	Hitachi	Hitachi	Hitachi	Kajima	100	11/73	3/74
Japan Atomic Power Co. Ltd. (JAPC)									
• Tokai 1 (Tokai Mura)	159	GCR	GEC	GEC	GEC	Shimizu	100		7/66
• Tsuruga (Tsuruga)	340	BWR	GE	GE	Ebasco	Takenaka	100		3/70
• Tokai 2 (Tokai Mura)	1067	BWR	GE	GE	Ebasco	Shimizu	100	8/77	11/78
Kansai Electric Power Co., Inc.									
• Mihama 1 (Mihama-cho)	320	PWR	W	MHI/MEL	KEPCO/Gilbert	Maeda/Kum/Obay	100		11/70
• Mihama 2 (Mihama-cho)	470	PWR	MHI	MHI/MEL	KEPCO/MAPI	Maeda/Kum/Obay	100		7/72
• Takahama 1 (Takahama-cho)	780	PWR	W	MHI/MEL	KEPCO/Gilbert	Maeda/Haz/Taisei	100	8/74	11/74
• Takahama 2 (Takahama-cho)	780	PWR	MHI	MHI/MEL	KEPCO/MAPI	Maeda/Haz/Taisei	100	7/75	11/75
• Mihama 3 (Mihama-cho)	780	PWR	MHI	MHI/MEL	KEPCO/MAPI	Haz/Taisei	100	7/76	12/76
• Ohi 1 (Ohi-cho)	1122	PWR	W	MHI/MEL	KEPCO/Gilbert	Kum/Obay	100	7/76	3/79
• Ohi 2 (Ohi-cho)	1122	PWR	W	MHI/MEL	KEPCO/Gilbert	Kum/Obay	100	1/77	12/79
Kyushu Electric Power Co., Inc.									
• Genkai 1 (Genkai, Saga)	559	PWR	MHI	MHI/MEL	MAPI	Obay	100	7/75	10/75
• Genkai 2 (Genkai, Saga)	559	PWR	MHI	MHI/MEL	MAPI	Obay	100	3/81	3/81
• Sendai 1 (Sendai, Kagoshima)	890	PWR	MHI	MHI/MEL	MAPI	Obay	30.9	7/84	7/84
Power Reactor & Nuclear Fuel Development Corp. (PNC)									
• Fugen, ATR (Tsuruga)	200	LWCHW	Hitachi/MHI	Toshiba	PNC/EPDC	Maeda/Kajima	100	12/76	3/79
• Monju (Tsuruga)	300	LMFBR			PNC		0	10/78	4/85
• Ikata 1 (Ikata-cho, Ehime Pref.)	538	PWR	MHI	MHI/MEL	MAPI	MHI/Taisei	100	4/77	9/77
• Ikata 2 (Ikata-cho, Ehime Pref.)	538	PWR	MHI	MHI/MEL	MAPI	MHI/Taisei	73	10/81	3/82
Tohoku Electric Power Co., Inc.									
• Onagawa (Oshikagun)	500	BWR	Toshiba	Toshiba	Toshiba	Kajima	30	12/75	10/83
Tokyo Electric Power Co.									
• Fukushima Daiichi 1 (Fukushima)	439	BWR	GE/Toshiba	GE/Hitachi	Ebasco	Kajima	100		3/71
• Fukushima Daiichi 2 (Fukushima)	760	BWR	GE	GE/Toshiba	Ebasco	Kajima	100		7/74
• Fukushima Daiichi 3 (Fukushima)	760	BWR	Toshiba	Toshiba	Toshiba	Kajima	100		3/76
• Fukushima Daiichi 4 (Fukushima)	760	BWR	Hitachi	Hitachi	Hitachi	Kajima	100	6/76	10/78
• Fukushima Daiichi 5 (Fukushima)	760	BWR	Toshiba	Toshiba	Toshiba	Kajima	100	12/75	4/78
• Fukushima Daiichi 6 (Fukushima)	1067	BWR	GE	GE/Toshiba	Ebasco	Kajima	100	10/76	10/79
• Fukushima Daini 1 (Fukushima)	1067	BWR	Toshiba	Toshiba	Toshiba	Kajima	79.2	5/82	5/82
• Fukushima Daini 2 (Fukushima)	1067	BWR	Hitachi	Hitachi	Hitachi	Kajima	31.4	8/83	1/84
• Kashiwajiki Kariwa 1 (Niigata)	1067	BWR	Toshiba	Toshiba	Toshiba		10.5	12/84	10/85
Korea									
Korea Electric Co.									
• Ko-Ri 1 (Ko-Ri, near Pusan City)	564	PWR	W	GEC	Gilbert	W	100	12/75	4/78
• Ko-Ri 2 (Ko-Ri, near Pusan City)	605	PWR	W	GEC	Gilbert	W	31	11/79	2/83
• Korea Nuclear 5 (Ko-Ri, near Pusan City)	900	PWR	W	GEC	Bechtel	Utility	18	9/84	9/84
• Korea Nuclear 6 (Ko-Ri, near Pusan City)	900	PWR	W	GEC	Bechtel	Utility	18	9/85	9/85
• Korea Nuclear 7 (Young Kwang-Kun)	950	PWR	W	W	Bechtel	Utility	3	3/86	3/86

	Net MWe	Type	Reactor Supplier	Generator Supplier	Architect Engineer	Constructor	Con- struc- tion stage (%)	Commercial Operation orig. sched- ule† or ex- pected
KOREA, cont'd								
Korea Electric Co., cont'd								
Korea Nuclear 8 (Young Kwang-Kun)	950	PWR	W	W	Bechtel	Utility	3	3/87 3/87
Wolsung 1 (Wolsung-Kun)	629	PHWR	AECL	Parsons	AECL/Canatom/AC	AECL	66	1/82 10/82
Libya								
Libya 1	300	PWR	AEE				0	indef.
Luxembourg								
Luxembourg Nuclear Power Company (SENU)								
Remerschen (Remerschen)	1250	PWR	BBR	BBR	BBC	BBC	0	1/82 indef.
Mexico								
Comision Federal de Electricidad (CFE)								
Laguna Verde 1 (Laguna Verde, Veracruz)	654	BWR	GE	Mitsubishi	Ebasco	CFE/Ebasco	35	6/77 5/82
Laguna Verde 2 (Laguna Verde, Veracruz)	654	BWR	GE	Mitsubishi	Ebasco	CFE/Ebasco	21	6/78 5/83
Netherlands								
Gemeenschappelijke Kernenergiecentrale								
Nederland NV (GKN)								
• Dodewaard (Dodewaard, Betuwe)	50	BWR	RDM	Stork	GKN	BAM	100	1/69 1/69
NV Provinciale Zeeuwse Energie								
Maatschappij (PZEM)								
• Borssele (Borssele)	443	PWR	KWU/RDM	KWU/Stork	KWU	KWU/ Bredero	100	7/73 10/73
Pakistan								
Pakistan Atomic Energy Commission								
• Kanupp (near Karachi)	125	PHWR	CGE	Hitachi	CGE	CGE	100	6/71 12/72
Philippines								
Philippine National Power Corp.								
PNPP 1 (Morong, Bataan Luzon)	620	PWR	W	W	B&R	W	19	7/83 9/84
Poland								
Zarnowiec 1 (Zarnowiec)	440	PWR	AEE				0	/85 /85
Zarnowiec 2 (Zarnowiec)	440	PWR	AEE				0	/86 /86
Rumania								
Rumania-1 (Olt)	440	PWR	AEE				0	/80 /83
Rumania-2 (Cernavoda)	600	PHWR	AECL				0	/87 /87
South Africa								
Electricity Supply Commission (ESCOM)								
Koeberg 1 (Koeberg)	922	PWR	Fra	Alsthom		SB	45	12/82 1/83
Koeberg 2 (Koeberg)	922	PWR	Fra	Alsthom		SB	25	12/83 1/84

CONTINUED

• Units in commercial operation

World List of Nuclear Power Plants, cont'd

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	Net MWe	Type	Reactor Supplier	Generator Supplier	Architect Engineer	Constructor	Con-struction stage (%)	Commercial orig. sched-ule†	actual or ex-pected
Spain									
Fuerzas Electricas de Cataluna, S.A.									
Asco 1 (Asco, Tarragona)	880	PWR	W	W/ENB	Bechtel/Initec/IyP	NUCEA	88	7/77	6/81
Fuerzas Electricas de Cataluna, S.A., Empresa Nacional Hidroelectrica Ribagorzana, Hidroelectrica de Cataluna, S.A., and Fuerzas Hidroelectrica del Segre, S.A.									
Asco 2 (Asco, Tarragona)	880	PWR	W	W/ENB	Bechtel/Initec/IyP	NUCEA	62	12/77	6/82
Centrales Nucleares del Norte, SA (NUCLENOR)									
• Santa Maria de Garona (Santa Maria de Garona, Burgos)	440	BWR	GE	GE	Ebasco	GE	100	2/70	3/71
Compania Sevillana de Electricidad SA, Hidroelectrica Espanola SA									
Valdecaballeros 1 (Badajoz)	975	BWR	GE	GE	EA	AETEA	0	/81	/86
Valdecaballeros 2 (Badajoz)	975	BWR	GE	GE	EA	AETEA	0	/82	/87
Compania Sevillana de Electricidad SA, Hidroelectrica Espanola SA, and Union Electrica SA									
Almaraz 1 (Almaraz, Caceres)	930	PWR	W	W	EA/G&HE	EyT	98	11/76	/80
Almaraz 2 (Almaraz, Caceres)	930	PWR	W	W	EA/G&HE	EyT	85	12/77	/82
Electra de Viesgo									
Santillan (Santander)	970	BWR	GE	GE			0	/82	
Electricas Reunidas de Zaragoza SA, Energia e Industrias Aragonesas SA, Union Electrica SA									
Trillo 1 (Trillo, Guad.)	997	PWR	KWU	KWU/ENSA/ E. N. Bazan	EA	ETOCEA	0	6/82	1/86
Empresa Nacional Hidroelectrica del Ribagorzana SA, and three other utilities									
Vandellos 2 (Tarragona)	982	PWR	W	W	Initec/Bechtel	VANEA	5	12/81	/86
FENOSA (Fuerzas Electricas del Noroeste, S.A.)									
Regodola (Lugo)	1000	PWR	KWU	KWU					
Hidroelectrica Espanola SA									
Cofrentes (Cofrentes, Valencia)	930	BWR	GE	GE/GEE	EA/SEN/ G&H	EyT/others	64	7/78	10/82
Hispano-Francesa de Energia Nuclear, SA (HIFRENDA)									
• Vandellos (Tarragona)	480	GCR	GC	Alsthom/J-S	SOCIA	GC	100	9/72	7/72
Iberduero SA									
Lemoniz 1 (Lemoniz, Vizcaya)	900	PWR	W	W	Iber/Bech/ Sen/Initec	Iberduero	96	12/76	5/81
Lemoniz 2 (Lemoniz, Vizcaya)	900	PWR	W	W	Iber/Bech/ Sen/Initec	Iberduero	55	7/78	12/83
Union Electrica (UE)									
• Jose Cabrera (near Madrid)	153	PWR	W	W	G&H	EyT	100	7/68	8/69
Sweden									
Oskarshamnsvverkets Kraftgrupp AB (OKG)									
• Oskarshamn 1 (Oskarshamn)	440	BWR	ASEA-Atom	Stal-Laval		Armerad-Betong	100		2/72
• Oskarshamn 2 (Oskarshamn)	570	BWR	ASEA-Atom	BBC/Stal-Laval		Armerad-Betong	100	8/74	12/74
Oskarshamn 3 (Oskarshamn)	1060	BWR	ASEA-Atom	Stal-Laval			0	12/83	/86
Statens Vattenfallsverk (SSPB)									
• Ringhals 1 (Varberg)	750	BWR	ASEA-Atom	EE	ASEA-Atom/SSPB	SSPB	100	6/73	2/76
• Ringhals 2 (Varberg)	800	PWR	W	Stal-Laval	SSPB/G&H/S-L	SSPB	100	7/74	5/75
Forsmark 1 (Uppsala)	900	BWR	ASEA-Atom	Stal-Laval	A-A/SSPB/S-L	SSPB	100	7/78	/80
Ringhals 3 (Varberg)	900	PWR	W	Stal-Laval	VBB-TE/S-L	SSPB	100	12/77	/80
Ringhals 4 (Varberg)	900	PWR	W	Stal-Laval	VBB-TE/S-L	SSPB	95	7/79	/81
Forsmark 2 (Uppsala)	900	BWR	ASEA-Atom	Stal-Laval	A-A/SSPB/S-L	SSPB	90	7/80	/81
Forsmark 3 (Uppsala)	1050	BWR	ASEA-Atom	Stal-Laval	A-A/SSPB/S-L	SSPB	5	/82	10/85

CONTINUED

• Units in commercial operation † Estimated date of startup, announced at time reactor was ordered

World List of Nuclear Power Plants, cont'd

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	Net MWe	Type	Reactor Supplier	Generator Supplier	Architect Engineer	Constructor	Construction stage (%)	Commercial operation orig. sched-ule†	Commercial operation actual or expected
SWEDEN, cont'd									
Sydsvenka Kraft AB									
• Barseback 1 (Malmo)	570	BWR	ASEA-Atom	Stal-Laval	A-A/S-L/SK/VBB	SCG	100	7/75	7/75
• Barseback 2 (Malmo)	570	BWR	ASEA-Atom	Stal-Laval	A-A/S-L/SK/VBB	SCG	100	7/77	7/77
Switzerland									
Bernische Kraftwerke AG (BKW)									
• Muhleberg (near Berne)	320	BWR	GETSCO	BBC	BBC/E&B/ GETSCO	BBC/ GETSCO	100		10/72
Kernkraftwerk Graben AG (KWG)									
Graben 1 (Graben)	1140	BWR	GETSCO	BBC	BBC/GETSCO	BBC/ GETSCO	0	12/79	indef.
Kernkraftwerk Leibstadt AG									
Leibstadt (Leibstadt)	942	BWR	GETSCO	BBC	BBC/GETSCO/ EW	BBC/ GETSCO	75	10/78	12/81
Nordostschweizerische Kraftwerke AG (NOK)									
• Beznau 1 (Doettingen)	350	PWR	W	BBC	G&H/BBC	Zschokke	100	12/69	12/69
• Beznau 2 (Doettingen)	350	PWR	W	BBC	G&H/BBC	Zschokke	100	3/72	3/72
Kernkraftwerk Gosgen-Daniken AG									
• Gosgen (Daniken, SO)	920	PWR	KWU	KWU	KWU	KWU	100	11/77	11/79
Kernkraftwerk Kaiseraugst AG									
Kaiseraugst (Kaiseraugst)	925	BWR	GETSCO	BBC	MCING/BBC/ GETSCO	BBC/ GETSCO	0	7/8	7/89
Taiwan									
Taiwan Power Co.									
• Chin-shan 1 (Shihmin Hsiang)	604	BWR	GE	W	Ebasco	TPC	100	12/75	12/78
• Chin-shan 2 (Shihmin Hsiang)	604	BWR	GE	W	Ebasco	TPC	100	12/76	9/79
• Kuosheng 1 (Kuosheng)	951	BWR	GE	W	Bechtel	TPC	91	10/78	10/81
• Kuosheng 2 (Kuosheng)	951	BWR	GE	W	Bechtel	TPC	65	10/79	10/82
• Maanshan 1 (Maanshan)	907	PWR	W	GE	Bechtel	TPC	-18	4/81	4/84
• Maanshan 2 (Maanshan)	907	PWR	W	GE	Bechtel	TPC	8	4/82	4/85
Turkey									
Akkuyu (Akkuyu)	440	PWR	AEE				0		/87
United Kingdom									
Central Electricity Generating Board (CEGB)									
• Berkeley 1 (Gloucestershire)	138	GCR	TNPG	AEI	TNPG	JL-Bal	100		6/62
• Berkeley 2 (Gloucestershire)	138	GCR	TNPG	AEI	TNPG	JL-Bal	100		10/62
• Bradwell 1 (Essex)	150	GCR	TNPG	Par (UK)	TNPG	McAlpine	100		6/62
• Bradwell 2 (Essex)	150	GCR	TNPG	Par (UK)	TNPG	McAlpine	100		11/62
• Trawsfynydd 1 (Wales)	250	GCR	APC	RW	APC	NCC	100		2/65
• Trawsfynydd 2 (Wales)	250	GCR	APC	RW	APC	NCC	100		3/65
• Dungeness A1 (Kent)	275	GCR	TNPG	Par (UK)/AEI	TNPG	McAlpine	100		9/65
• Dungeness A2 (Kent)	275	GCR	TNPG	Par (UK)/AEI	TNPG	McAlpine	100		12/65
• Sizewell A1 (Suffolk)	290	GCR	EE/BW/TW	EE	EE/BW/TW	TW	100		1/66
• Sizewell A2 (Suffolk)	290	GCR	EE/BW/TW	EE	EE/BW/TW	TW	100		3/66
• Hinkley Point A1 (Somerset)	250	GCR	EE/BW/TW	EE	EE/BW/TW	TW	100		5/65
• Hinkley Point A2 (Somerset)	250	GCR	EE/BW/TW	EE	EE/BW/TW	TW	100		5/65
• Oldbury 1 (Gloucestershire)	300	GCR	TNPG	AEI/Par (UK)	TNPG	McAlpine	100		1/68
• Oldbury 2 (Gloucestershire)	300	GCR	TNPG	AEI/Par (UK)	TNPG	McAlpine	100		1/68
• Wylfa 1 (Anglesey)	590	GCR	EE/B&W/TW	EE	EE/B&W/TW	TW	100		11/71
• Wylfa 2 (Anglesey)	590	GCR	EE/B&W/TW	EE	EE/B&W/TW	TW	100		1/72
• Hinkley Point B1 (Somerset)	625	AGR	NPC	AEI/GEC	NPC	NPC	100	12/72	6/76
• Hinkley Point B2 (Somerset)	625	AGR	NPC	AEI/GEC	NPC	NPC	100	12/73	1/77
Dungeness B R21 (Kent)	600	AGR	APC	Par (UK)	APC	APC	100	7/0	7/81
Dungeness B R22 (Kent)	600	AGR	APC	Par (UK)	APC	APC	98	7/1	7/82
Hartlepool R1 (Durham)	625	AGR	NPC	GEC	NPC	NPC	95	7/4	7/81
Hartlepool R2 (Durham)	625	AGR	NPC	GEC	NPC	NPC	95	7/4	7/82
Heysham R1 (Lancashire)	625	AGR	NPC	GEC	NPC	NPC	95	7/5	7/81
Heysham R2 (Lancashire)	625	AGR	NPC	GEC	NPC	NPC	95	7/5	7/82
Heysham B1	660	AGR	NPC		CEGB	NPC	0		7/86
Heysham B2	660	AGR	NPC		CEGB	NPC	0		7/87

CONTINUED

• Units in commercial operation

World List of Nuclear Power Plants, cont'd

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	Net MWe	Type	Reactor Supplier	Generator Supplier	Architect Engineer	Constructor	Construction stage (%)	Commercial Operation orig. sched-ule†	Commercial Operation actual or expected
UNITED KINGDOM cont'd									
South of Scotland Electricity Board									
• Hunterston A1 (Ayrshire)	160	GCR	GEC	GEC	GEC	Mowlem	100		5/64
• Hunterston A2 (Ayrshire)	160	GCR	GEC	GEC	GEC	Mowlem	100		9/64
• Hunterston B1 (Ayrshire)	625	AGR	TNPG	Par (UK)	TNPG	TNPG	100	3/73	6/76
• Hunterston B2 (Ayrshire)	625	AGR	TNPG	Par (UK)	TNPG	TNPG	100	9/73	5/77
• Torness Point 1	660	AGR	NPC				0		1/87
• Torness Point 2	660	AGR	NPC				0		1/88
British Nuclear Fuels Ltd.									
• Calder Hall 1 (Cumbria)	50	GCR	UKAEA	Par (UK)	UKAEA	TW	100		9/56
• Calder Hall 2 (Cumbria)	50	GCR	UKAEA	Par (UK)	UKAEA	TW	100		9/56
• Calder Hall 3 (Cumbria)	50	GCR	UKAEA	Par (UK)	UKAEA	TW	100		9/56
• Calder Hall 4 (Cumbria)	50	GCR	UKAEA	Par (UK)	UKAEA	TW	100		9/56
• Chapel Cross 1 (Dumfriesshire)	50	GCR	UKAEA	Par (UK)	UKAEA	TW	100		11/58
• Chapel Cross 2 (Dumfriesshire)	50	GCR	UKAEA	Par (UK)	UKAEA	TW	100		11/58
• Chapel Cross 3 (Dumfriesshire)	50	GCR	UKAEA	Par (UK)	UKAEA	TW	100		11/58
• Chapel Cross 4 (Dumfriesshire)	50	GCR	UKAEA	Par (UK)	UKAEA	TW	100		11/58
United Kingdom Atomic Energy Authority (UKAEA)									
• Windscale (Cumbria)	32	AGR	UKAEA	EE	UKAEA	UKAEA	100		2/63
• Winfrith SGHWR (Dorset)	92	HWLWR	UKAEA	AEI/RPL	UKAEA	Turriff	100		2/68
• Dounreay PFR (Highland)	250	LMFBR	UKAEA/TNPG	EE	UKAEA	NPC	100	10/73	8/76

United States NORTHEAST

Baltimore Gas & Electric Co.									
• Calvert Cliffs 1 (Lusby, Md.)	850	PWR	C-E	GE	Bechtel	Bechtel	100	1/73	5/75
• Calvert Cliffs 2 (Lusby, Md.)	850	PWR	C-E	W	Bechtel	Bechtel	100	1/74	4/77
Boston Edison Co.									
• Pilgrim 1 (Plymouth, Mass.)	670	BWR	GE	GE	Bechtel	Bechtel	100	10/71	12/72
• Pilgrim 2 (Plymouth, Mass.)	1150	PWR	C-E	GE	Bechtel	Bechtel	0	8/80	indef.
Connecticut Yankee Atomic Power Co.									
• Haddam Neck (Haddam Neck, Conn.)	575	PWR	W	W	S&W	S&W	100	11/67	1/68
Consolidated Edison Co.									
• Indian Point 2 (Indian Point, N.Y.)	873	PWR	W	W	UE&C	Wedco	100	6/69	7/74
Duquesne Light Co.									
• Beaver Valley 1 (Shippingport, Pa.)	833	PWR	W	W	S&W	S&W	100	6/73	4/77
• Beaver Valley 2 (Shippingport, Pa.)	833	PWR	W	W	S&W	S&W	38	10/78	5/86
Duquesne Light Co. and U.S. Department of Energy									
• Shippingport (Shippingport, Pa.)	60	LWBR	W	W	S&L		100		12/77
Jersey Central P&L Co.									
• Oyster Creek 1 (Forked River, N.J.)	620	BWR	GE	GE	B&R/GE	B&R	100	2/68	12/69
• Forked River 1 (Forked River, N.J.)	1120	PWR	C-E	BB	B&R	S&W	5.6	1/76	5/86
Long Island Lighting Co.									
• Shoreham (Brookhaven, N.Y.)	820	BWR	GE	GE	S&W	Utility	80	7/75	3/83
Maine Yankee Atomic Power Co.									
• Maine Yankee (Wiscasset, Me.)	790	PWR	C-E	W	S&W	S&W	100		12/72
Metropolitan Edison Co.									
• Three Mile Island 1 (Goldsboro, Pa.)	792	PWR	B&W	GE	Gilbert	UE&C	100	9/71	9/74
• Three Mile Island 2 (Goldsboro, Pa.)	880	PWR	B&W	W	B&R	UE&C	100	5/73	12/78

NOTE: Jamesport-1 and -2, Sterling, Greenwood-2 and -3, Erie-1 and -2, Davis-Besse-2 and -3, and Haven-1 have been removed from this list. These units have all been canceled. Indian Point-1, idle since late 1974, has also been removed. Consolidated Edison Company decided in February 1980 to decommission this plant (NIV, April 1980, p. 41). Also removed from the list is the PNPP-2 (Philippines), which has been canceled.

The Clinch River breeder reactor plant has been retained in this list. Although the Carter Administration has proposed that the facility not be built, the fate of the plant is still being debated by the U.S. Congress. Also retained in this list is Humboldt Bay-3, which was taken out of service in July 1976 for refueling, maintenance, seismic modification, and a study of the geology of the area to answer questions posed by the NRC staff. Geologic studies were still being conducted as the data for this table were being compiled.

	Net MWe	Type	Reactor Supplier	Generator Supplier	Architect Engineer	Constructor	Con- struc- tion stage (%)	Commercial Operation orig. sched- uled or ex- pected
U.S.—NORTHEAST, cont'd								
New York State Electric & Gas Corporation and Long Island Lighting Company								
NYSEG-1 (New Haven or Stuyvesant, N.Y.)	1250	PWR	C-E		S&W	S&W	0	4/91 indef.
NYSEG-2 (New Haven or Stuyvesant, N.Y.)	1250	PWR	C-E		S&W	S&W	0	4/93 indef.
Niagara Mohawk Power Corp.								
• Nine Mile Point 1 (Scriba, N.Y.)	610	BWR	GE	GE	Utility	S&W	100	11/68 12/69
• Nine Mile Point 2 (Scriba, N.Y.)	1080	BWR	GE	GE	S&W	S&W	37	7/78 10/86
Northeast Utilities								
• Millstone 1 (Waterford, Conn.)	660	BWR	GE	GE	Ebasco	Ebasco	100	6/69 12/70
• Millstone 2 (Waterford, Conn.)	870	PWR	C-E	GE	Bechtel	Bechtel	100	4/74 12/75
• Millstone 3 (Waterford, Conn.)	1150	PWR	W	GE	S&W	S&W	33	5/79 5/86
• Montague 1 (Montague, Mass.)	1150	BWR	GE	GE	S&W	S&W	0	4/81 indef.
• Montague 2 (Montague, Mass.)	1150	BWR	GE	GE	S&W	S&W	0	1/83 indef.
Pennsylvania Power & Light Co.								
• Susquehanna 1 (Berwick, Pa.)	1050	BWR	GE	GE	Bechtel	Bechtel	77	5/79 1/82
• Susquehanna 2 (Berwick, Pa.)	1050	BWR	GE	GE	Bechtel	Bechtel	48	5/81 1/83
Philadelphia Electric Co.								
• Peach Bottom 2 (Peach Bottom, Pa.)	1065	BWR	GE	GE	Bechtel	Bechtel	100	7/71 7/74
• Peach Bottom 3 (Peach Bottom, Pa.)	1065	BWR	GE	GE	Bechtel	Bechtel	100	7/73 12/74
• Limerick 1 (Pottstown, Pa.)	1055	BWR	GE	GE	Bechtel	Bechtel	60.4	8/78 4/85
• Limerick 2 (Pottstown, Pa.)	1055	BWR	GE	GE	Bechtel	Bechtel	36	1/80 4/87
Power Authority of the State of New York								
• Indian Point 3 (Indian Point, N.Y.)	965	PWR	W	W	UE&C	Wedco	100	7/71 8/76
• James A. FitzPatrick (Scriba, N.Y.)	821	BWR	GE	GE	S&W	S&W	100	1/73 7/75
Public Service Co. of New Hampshire								
• Seabrook 1 (Seabrook, N.H.)	1150	PWR	W	GE	UE&C	UE&C	37	11/79 12/83
• Seabrook 2 (Seabrook, N.H.)	1150	PWR	W	GE	UE&C	UE&C	7	8/81 7/85
Public Service Electric & Gas Co.								
• Salem 1 (Salem, N.J.)	1090	PWR	W	W	Utility	UE&C	100	7/71 6/77
• Salem 2 (Salem, N.J.)	1115	PWR	W	W	Utility	UE&C	100	7/73 1/81
• Hope Creek 1 (Salem, N.J.)	1070	BWR	GE	GE	Bechtel	Bechtel	24	3/75 12/86
• Hope Creek 2 (Salem, N.J.)	1070	BWR	GE	GE	Bechtel	Bechtel	24	3/77 12/89
Rochester Gas & Electric Corp.								
• Robert E. Ginna (Ontario, N.Y.)	490	PWR	W	W	Gilbert	Bechtel	100	11/69 3/70
Vermont Yankee Nuclear Power Corp.								
• Vermont Yankee (Vernon, Vt.)	514	BWR	GE	GE	Ebasco	Ebasco	100	10/70 11/72
Yankee Atomic Electric Co.								
• Yankee (Rowe, Mass.)	175	PWR	W	W	S&W	S&W	100	1/61 6/61
MIDWEST								
Cincinnati Gas & Light Co.								
• Zimmer 1 (Moscow, Ohio)	810	BWR	GE	W	S&L	Kaiser	94	7/75 7/81
The Cleveland Electric Illuminating Co.								
• Perry 1 (North Perry, Ohio)	1205	BWR	GE	GE	Gilbert	Kaiser	50.6	7/79 5/84
• Perry 2 (North Perry, Ohio)	1205	BWR	GE	GE	Gilbert	Kaiser	35.9	7/80 5/88
Commonwealth Edison Company								
• Dresden 1 (Morris, Ill.)	200	BWR	GE	GE	Bechtel	Bechtel	100	7/60 8/60
• Dresden 2 (Morris, Ill.)	800	BWR	GE	GE	S&L	UE&C	100	2/69 8/70
• Dresden 3 (Morris, Ill.)	800	BWR	GE	GE	S&L	UE&C	100	2/70 10/71
• LaSalle 1 (Seneca, Ill.)	1078	BWR	GE	GE	S&L	Utility	97.5	10/75 6/81
• LaSalle 2 (Seneca, Ill.)	1078	BWR	GE	GE	S&L	Utility	77	10/76 6/82
• Zion 1 (Zion, Ill.)	1100	PWR	W	W	S&L	Utility	100	4/72 6/73
• Zion 2 (Zion, Ill.)	1100	PWR	W	W	S&L	Utility	100	5/73 12/73
• Byron 1 (Byron, Ill.)	1120	PWR	W	W	S&L	Utility	68	10/78 10/83
• Byron 2 (Byron, Ill.)	1120	PWR	W	W	S&L	Utility	55	10/79 10/84
• Braidwood 1 (Braidwood, Ill.)	1120	PWR	W	W	S&L	Utility	56	10/79 10/85
• Braidwood 2 (Braidwood, Ill.)	1120	PWR	W	W	S&L	Utility	43	10/80 10/86
• Carroll County-1 (Savanna, Ill.)	1120	PWR	W	W	S&L	Utility	0	7/87 10/92
• Carroll County-2 (Savanna, Ill.)	1120	PWR	W	W	S&L	Utility	0	7/88 10/93

CONTINUED

• Units in commercial operation

† Estimated date of startup, announced at time reactor was ordered

cp — construction permit issued

lwa — limited work authorization issued

World List of Nuclear Power Plants, cont'd

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	Net MWe	Type	Reactor Supplier	Generator Supplier	Architect Engineer	Constructor	Construction stage (%)	Commercial Operation orig. sched-ule†	actual or ex-pected
U.S.—MIDWEST, cont'd									
Commonwealth Edison Co. and Iowa-Illinois Gas & Electric Co.									
• Quad-Cities 1 (Cordova, Ill.)	800	BWR	GE	GE	S&L	Utility	100	3/70	8/72
• Quad-Cities 2 (Cordova, Ill.)	800	BWR	GE	GE	S&L	Utility	100	3/71	10/72
Consumers Power Co.									
• Big Rock Point (Charlevoix, Mich.)	63	BWR	GE	GE	Bechtel	Bechtel	100	12/62	12/62
• Palisades (South Haven, Mich.)	740	PWR	C-E	W	Bechtel	Bechtel	100	7/70	12/71
• Midland 1 (Midland, Mich.)	530 ^a	PWR	B&W	GE	Bechtel	Bechtel	63	5/78	7/84
• Midland 2 (Midland, Mich.)	805	PWR	B&W	GE	Bechtel	Bechtel	63	5/79	12/83
Dairyland Power Cooperative									
• La Crosse BWR (Genoa, Wis.)	50	BWR	Allis	Allis	S&L	Maxon	100	10/66	11/69
Detroit Edison Co.									
• Fermi 2 (Newport, Mich.)	1100	BWR	GE	EE	Utility	Daniel	80	7/74	3/82
Illinois Power Co.									
• Clinton 1 (Clinton, Ill.)	950	BWR	GE	GE	S&L	Baldwin	68	6/80	12/82
• Clinton 2 (Clinton, Ill.)	950	BWR	GE	GE	S&L	Baldwin	0-cp	6/83	indef.
Indiana & Michigan Electric Co.									
• Donald C. Cook 1 (Bridgman, Mich.)	1054	PWR	W	GE	AEPSC	AEPSC	100	4/72	8/75
• Donald C. Cook 2 (Bridgman, Mich.)	1094	PWR	W	BB	AEPSC	AEPSC	100	4/73	6/78
Iowa Electric Light & Power Co.									
• Duane Arnold (Palo, Iowa)	545	BWR	GE	GE	Bechtel	Bechtel	100	12/73	5/74
Iowa Power & Light Co.									
• Central Iowa (Vandalia, Iowa)	1270	PWR	B&W		Bechtel		0		indef.
Kansas Gas & Electric Co. and Kansas City Power & Light Co.									
• Wolf Creek (Burlington, Kan.)	1150	PWR	W	GE	Bech/S&L	Daniel	61	4/81	4/83
Nebraska Public Power District									
• Cooper (Brownville, Neb.)	778	BWR	GE	W	B&R	B&R	100	4/71	7/74
Northern Indiana Public Service Co.									
• Bailly N-1 (Baillytown, Ind.)	645	BWR	GE	GE	S&L	Braun	1	3/76	6/87
Northern States Power Co.									
• Monticello (Monticello, Minn.)	536	BWR	GE	GE	Bechtel	Bechtel	100	5/70	7/71
• Prairie Island 1 (Red Wing, Minn.)	520	PWR	W	W	FPS	Utility	100	5/72	12/73
• Prairie Island 2 (Red Wing, Minn.)	520	PWR	W	W	FPS	Utility	100	5/74	12/74
Omaha Public Power District									
• Fort Calhoun 1 (Fort Calhoun, Neb.)	457	PWR	C-E	GE	G&H	G&H	100	6/71	9/73
Public Service Indiana									
• Marble Hill 1 (Jefferson County, Ind.)	1130	PWR	W	W	S&L	Utility	27.7	7/82	7/86
• Marble Hill 2 (Jefferson County, Ind.)	1130	PWR	W	W	S&L	Utility	11.3	7/84	7/87
Toledo Edison Co.									
• Davis-Besse 1 (Oak Harbor, Ohio)	906	PWR	B&W	GE	Bechtel	Bechtel	100	12/74	11/77
Union Electric Co.									
• Callaway 1 (Fulton, Mo.)	1150	PWR	W	GE	Bechtel	Daniel	66	10/81	10/82
• Callaway 2 (Fulton, Mo.)	1150	PWR	W	GE	Bechtel	Daniel	0.5	4/83	4/87
Wisconsin Electric Power Co.									
• Point Beach 1 (Two Creeks, Wis.)	497	PWR	W	W	Bechtel	Bechtel	100	4/70	12/70
• Point Beach 2 (Two Creeks, Wis.)	497	PWR	W	W	Bechtel	Bechtel	100	4/71	10/72
Wisconsin Public Services Corporation									
• Kewaunee (Carlton, Wis.)	535	PWR	W	W	FPS	FPS	100	6/72	6/74

SOUTH

Alabama Power Company

• Joseph M. Farley 1 (Dothan, Ala.)	860	PWR	W	W	SS/Bechtel	Daniel	100	4/75	12/77
• Joseph M. Farley 2 (Dothan, Ala.)	860	PWR	W	W	SS/Bechtel	Daniel	90	4/76	11/80
Arkansas Power & Light Co.									
• Nuclear One 1 (Russellville, Ark.)	836	PWR	B&W	W	Bechtel	Bechtel	100	7/72	12/74
• Nuclear One 2 (Russellville, Ark.)	912	PWR	C-E	GE	Bechtel	Bechtel	100	12/75	3/80

^a Midland-1 and -2 have the same size reactors; part of Unit 1's steam will be used in a nearby chemical facility

	Net MWe	Type	Reactor Supplier	Generator Supplier	Architect Engineer	Constructor	Con- struc- tion stage (%)	Commercial Operation orig. sched- ule† or ex- pected
U.S.—SOUTH, cont'd								
Carolina Power & Light Co.								
• Robinson 2 (Hartsville, S.C.)	665	PWR	W	W	Ebasco	Ebasco	100	5/70 3/71
• Brunswick 1 (Southport, N.C.)	790	BWR	GE	GE	UE&C	Brown	100	3/75 3/77
• Brunswick 2 (Southport, N.C.)	790	BWR	GE	GE	UE&C	Brown	100	3/74 11/75
Shearon Harris 1 (Newhill, N.C.)	900	PWR	W	W	Ebasco	Daniel	31	3/77 3/85
Shearon Harris 2 (Newhill, N.C.)	900	PWR	W	W	Ebasco	Daniel	4	3/78 3/88
Shearon Harris 3 (Newhill, N.C.)	900	PWR	W	W	Ebasco	Daniel	<1	3/79 3/94
Shearon Harris 4 (Newhill, N.C.)	900	PWR	W	W	Ebasco	Daniel	<1	3/80 3/92
Duke Power Co.								
• Oconee 1 (Seneca, S.C.)	860	PWR	B&W	GE	Utility/Bech	Utility	100	5/71 7/73
• Oconee 2 (Seneca, S.C.)	860	PWR	B&W	GE	Utility/Bech	Utility	100	5/72 9/74
• Oconee 3 (Seneca, S.C.)	860	PWR	B&W	GE	Utility/Bech	Utility	100	6/73 12/74
McGuire 1 (Cornelius, N.C.)	1180	PWR	W	W	Utility	Utility	97	3/76 8/80
McGuire 2 (Cornelius, N.C.)	1180	PWR	W	W	Utility	Utility	68	3/77 4/82
Catawba 1 (Clover, S.C.)	1145	PWR	W	GE	Utility	Utility	65	3/79 7/83
Catawba 2 (Clover, S.C.)	1145	PWR	W	GE	Utility	Utility	47	3/80 1/85
Perkins 1 (Mocksville, N.C.)	1280	PWR	C-E	GE	Utility	Utility	0	1/81 indef.
Perkins 2 (Mocksville, N.C.)	1280	PWR	C-E	GE	Utility	Utility	0	1/82 indef.
Perkins 3 (Mocksville, N.C.)	1280	PWR	C-E	GE	Utility	Utility	0	1/83 indef.
Cherokee 1 (Gaffney, S.C.)	1280	PWR	C-E	GE	Utility	Utility	14	9/82 1/90
Cherokee 2 (Gaffney, S.C.)	1280	PWR	C-E	GE	Utility	Utility	7	9/83 1/92
Cherokee 3 (Gaffney, S.C.)	1280	PWR	C-E	GE	Utility	Utility	0	9/84 indef.
Florida Power & Light Co.								
• Turkey Point 3 (Florida City, Fla.)	666	PWR	W	W	Bechtel	Bechtel	100	8/70 12/72
• Turkey Point 4 (Florida City, Fla.)	666	PWR	W	W	Bechtel	Bechtel	100	8/71 9/73
• St. Lucie 1 (Hutchinson Island, Fla.)	777	PWR	C-E	W	Ebasco	Ebasco	100	1/73 12/76
• St. Lucie 2 (Hutchinson Island, Fla.)	777	PWR	C-E	W	Ebasco	Ebasco	47	9/79 5/83
Florida Power Corporation								
• Crystal River 3 (Red Level, Fla.)	825	PWR	B&W	W	Gilbert	Jones	100	9/72 3/77
Georgia Power Co.								
• Edwin I. Hatch 1 (Baxley, Ga.)	786	BWR	GE	GE	SS/Bechtel	Utility	100	4/73 12/75
• Edwin I. Hatch 2 (Baxley, Ga.)	786	BWR	GE	GE	Bechtel	Utility	100	4/76 8/79
Vogtle 1 (Waynesboro, Ga.)	1100	PWR	W	GE	SS/Bechtel	Utility	5	2/78 /85
Vogtle 2 (Waynesboro, Ga.)	1100	PWR	W	GE	SS/Bechtel	Utility	5	2/79 /88
Gulf States Utilities Co. (See also Southwest)								
River Bend 1 (St. Francisville, La.)	940	BWR	GE	GE	S&W	S&W	15.6	10/79 4/84
River Bend 2 (St. Francisville, La.)	940	BWR	GE	GE	S&W	S&W	0	10/81 indef.
Louisiana Power & Light Co.								
Waterford 3 (Taft, La.)	1165	PWR	C-E	W	Ebasco	Ebasco	82	1/77 late 82
Mississippi Power & Light Co.								
Grand Gulf 1 (Port Gibson, Miss.)	1250	BWR	GE	Allis	Bechtel	Bechtel	85	9/79 4/82
Grand Gulf 2 (Port Gibson, Miss.)	1250	BWR	GE	Allis	Bechtel	Bechtel	22.8	9/81 9/86
South Carolina Electric & Gas Co.								
Virgil C. Summer 1 (Parr, S.C.)	900	PWR	W	GE	Gilbert	Daniel	95	10/77 6/81
Tennessee Valley Authority								
• Browns Ferry 1 (Decatur, Ala.)	1067	BWR	GE	GE	Utility	Utility	100	10/70 8/74
• Browns Ferry 2 (Decatur, Ala.)	1067	BWR	GE	GE	Utility	Utility	100	10/71 3/75
• Browns Ferry 3 (Decatur, Ala.)	1067	BWR	GE	GE	Utility	Utility	100	10/72 3/77
Sequoyah 1 (Daisy, Tenn.)	1148	PWR	W	W	Utility	Utility	100	10/73 /80
Sequoyah 2 (Daisy, Tenn.)	1148	PWR	W	W	Utility	Utility	92	4/74 6/81
Watts Bar 1 (Spring City, Tenn.)	1177	PWR	W	W	Utility	Utility	87	10/76 9/81
Watts Bar 2 (Spring City, Tenn.)	1177	PWR	W	W	Utility	Utility	71	4/77 6/82
Bellefonte 1 (Scottsboro, Ala.)	1213	PWR	B&W	BB	Utility	Utility	67	7/77 9/83
Bellefonte 2 (Scottsboro, Ala.)	1213	PWR	B&W	BB	Utility	Utility	52	4/78 6/84
Hartsville A1 (Hartsville, Tenn.)	1233	BWR	GE	BB	Utility	Utility	29	4/79 7/86
Hartsville A2 (Hartsville, Tenn.)	1233	BWR	GE	BB	Utility	Utility	18	4/80 7/87
Hartsville B1 (Hartsville, Tenn.)	1233	BWR	GE	BB	Utility	Utility	17	10/79 indef.
Hartsville B2 (Hartsville, Tenn.)	1233	BWR	GE	BB	Utility	Utility	7	10/80 indef.
Phipps Bend 1 (Surgoinville, Tenn.)	1233	BWR	GE	BB	Utility	Utility	14	4/82 indef.
Phipps Bend 2 (Surgoinville, Tenn.)	1233	BWR	GE	BB	Utility	Utility	4	4/83 indef.
Yellow Creek 1 (Iuka, Miss.)	1285	PWR	C-E	GE	Utility	Utility	13	4/83 11/85
Yellow Creek 2 (Iuka, Miss.)	1285	PWR	C-E	GE	Utility	Utility	14	4/84 4/88
Tennessee Valley Authority, Commonwealth Edison Co., and DOE								
Clinch River Breeder Reactor Plant (Oak Ridge, Tenn.)	350	LMFBR	W	GE	B&R	S&W	0	/80 indef.

• Units in commercial operation

† Estimated date of startup, announced at time reactor was ordered

CONTINUED

World List of Nuclear Power Plants, cont'd

	Net MWe	Type	Reactor Supplier	Generator Supplier	Architect Engineer	Constructor	Construction stage (%)	Commercial orig. sched-ule†	Commercial actual or expected
U.S.—SOUTH, cont'd									
Virginia Electric & Power Co.									
• Surry 1 (Gravel Neck, Va.)	775	PWR	W	W	S&W	S&W	100	3/71	12/72
• Surry 2 (Gravel Neck, Va.)	775	PWR	W	W	S&W	S&W	100	3/72	5/73
• North Anna 1 (Mineral, Va.)	850	PWR	W	W	S&W	S&W	100	3/74	6/78
• North Anna 2 (Mineral, Va.)	850	PWR	W	W	S&W	S&W	99.4	7/75	8/80
• North Anna 3 (Mineral, Va.)	934	PWR	B&W	W	S&W	S&W	8.8	3/77	4/87
• North Anna 4 (Mineral, Va.)	934	PWR	B&W	W	S&W	S&W	13	3/78	4/88

SOUTHWEST

Arizona Public Service Co.									
Palo Verde 1 (Wintersburg, Ariz.)	1270	PWR	C-E	GE	Bechtel	Bechtel	66.3	5/81	5/83
Palo Verde 2 (Wintersburg, Ariz.)	1270	PWR	C-E	GE	Bechtel	Bechtel	35.5	11/82	5/84
Palo Verde 3 (Wintersburg, Ariz.)	1270	PWR	C-E	GE	Bechtel	Bechtel	9.7	5/84	5/86
Houston Lighting & Power Company									
Allens Creek 1 (Wallis, Tex.)	1200	BWR	GE	GE	Ebasco	Ebasco	0	6/80	/87
South Texas Project 1 (Palacios, Tex.)	1250	PWR	W	W	Brown	Brown	40	10/80	4/84
South Texas Project 2 (Palacios, Tex.)	1250	PWR	W	W	Brown	Brown	9	3/82	4/86
Public Service Co. of Oklahoma									
Black Fox 1 (Inola, Okla.)	1150	BWR	GE	GE	B&V	Utility	0-lwa	4/82	7/85
Black Fox 2 (Inola, Okla.)	1150	BWR	GE	GE	B&V	Utility	0-lwa	4/84	7/88
Texas Utilities Generating Company									
Comanche Peak 1 (Glen Rose, Tex.)	1150	PWR	W	Allis	G&H	B&R	82	1/80	/81
Comanche Peak 2 (Glen Rose, Tex.)	1150	PWR	W	Allis	G&H	B&R	48	1/82	/83

WEST AND NORTHWEST

Pacific Gas & Electric Co.									
• Humboldt Bay 3 (Eureka, Calif.)	63	BWR	GE	GE	Bechtel	Bechtel	100	/63	8/63
• Diablo Canyon 1 (Avila Beach, Calif.)	1084	PWR	W	W	Utility	Utility	99.2	5/72	/81
• Diablo Canyon 2 (Avila Beach, Calif.)	1106	PWR	W	W	Utility	Utility	98	7/74	/81
Portland General Electric Co.									
• Trojan (Prescott, Ore.)	1130	PWR	W	GE	Bechtel	Indep	100	9/74	5/76
• Pebble Springs 1 (Arlington, Ore.)	1260	PWR	B&W	GE	Bechtel	Indep	0	7/80	9/88
• Pebble Springs 2 (Arlington, Ore.)	1260	PWR	B&W	GE	Bechtel	Indep	0	6/83	9/90

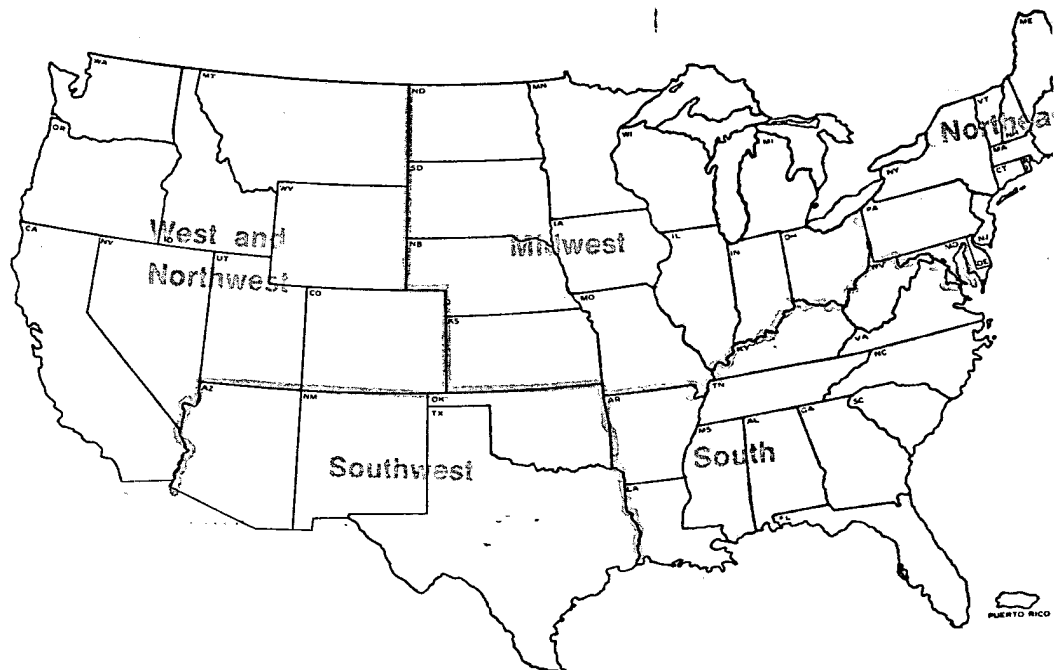
NORTHEAST: Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont.

SOUTH: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia.

MIDWEST: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin.

SOUTHWEST: Arizona, New Mexico, Oklahoma, Texas.

WEST AND NORTHWEST: California, Colorado, Idaho, Montana, Nevada, Oregon, Utah, Washington, Wyoming.



	Net MWe	Type	Reactor Supplier	Generator Supplier	Architect Engineer	Constructor	Construction stage (%)	Commercial Operation orig. sched-ule†	actual or expected
U.S.—WEST AND NORTHWEST, cont'd									
Public Service Company of Colorado									
• Fort St. Vrain (Platteville, Colo.)	330	HTGR	GA	GE	S&L	GA	100	4/72	1/79
Puget Sound Power & Light Co.									
Skagit 1 (Sedro Wooley, Wash.)	1288	BWR	GE	W	Bechtel	Bechtel	0	7/81	indef.
Skagit 2 (Sedro Wooley, Wash.)	1288	BWR	GE	W	Bechtel	Bechtel	0		indef.
Sacramento Municipal Utility District									
• Rancho Seco (Clay Station, Calif.)	913	PWR	B&W	W	Bechtel	Bechtel	100	5/73	4/75
Southern California Edison and San Diego Gas & Electric Co.									
• San Onofre 1 (San Clemente, Calif.)	436	PWR	W	W	Bechtel	Bechtel	100		1/68
San Onofre 2 (San Clemente, Calif.)	1100	PWR	C-E	GEC	Bechtel	Bechtel	92	6/75	12/81
San Onofre 3 (San Clemente, Calif.)	1100	PWR	C-E	GEC	Bechtel	Bechtel	63	6/75	2/83
Washington Public Power Supply System									
• Hanford-N (Richland, Wash.)	860	LGR	GE	GE	B&R	B&R	100		7/66
WNP-2 (Richland, Wash.)	1100	BWR	GE	W	B&R	B&R	84.9	9/77	1/83
WNP-1 (Richland, Wash.)	1250	PWR	B&W	W	UE&C	UE&C	41.4	9/80	6/85
WNP-3 (Satsop, Wash.)	1240	PWR	C-E	W	Ebasco	Ebasco	23.4	3/82	6/86
WNP-4 (Richland, Wash.)	1250	PWR	B&W	W	UE&C	UE&C	16.9	3/82	6/86
WNP-5 (Satsop, Wash.)	1240	PWR	C-E	W	Ebasco	Ebasco	10.9	3/83	6/87
U.S. Total (178 units)	170 556								

USSR

Ministry of Electric Power

• Siberian 1 (Troitsk)	100	LGR					100		12/58
• Siberian 2 (Troitsk)	100	LGR					100		12/58
• Siberian 3 (Troitsk)	100	LGR					100		12/58
• Siberian 4 (Troitsk)	100	LGR					100		12/58
• Siberian 5 (Troitsk)	100	LGR					100		12/58
• Siberian 6 (Troitsk)	100	LGR					100		12/58
• Beloyarsk 1 (Sverdlovsk region)	100	LGR					100		4/64
• Beloyarsk 2 (Sverdlovsk region)	200	LGR					100		10/67
• Novo-Voronezh 1 (Voronezh)	210	PWR					100		10/64
• Novo-Voronezh 2 (Voronezh)	365	PWR					100		12/69
• Novo-Voronezh 3 (Voronezh)	440	PWR					100		6/72
• Kola 1 (near Murmansk)	440	PWR					100		10/73
• Kola 2 (near Murmansk)	440	PWR					100	7/4	12/74
• Kola 3 (near Murmansk)	440	PWR							/80
• Kola 4 (near Murmansk)	440	PWR							/80
• Novo-Voronezh 4 (Voronezh)	440	PWR					100		4/73
• Novo-Voronezh 5 (Voronezh)	1000	PWR					100		/80
• BN-600 (Sverdlovsk region)	600	LMFBR						12/72	/80
• Armenia 1 (Ararat Valley)	400	PWR					100	7/5	7/6
• Armenia 2 (Ararat Valley)	400	PWR					100	7/5	/80
• Leningrad 1 (near Leningrad)	1000	LGR					100	7/3	7/4
• Leningrad 2 (near Leningrad)	1000	LGR					100	7/5	12/75
• Leningrad 3 (near Leningrad)	1000	LGR							/80
• Leningrad 4 (near Leningrad)	1000	LGR							/81
• Kursk 1	1000	LGR					100	12/76	7/6
• Kursk 2	1000	LGR					100	7/77	7/9
• Kursk 3	1000	LGR							/80
• Kursk 4	1000	LGR							/80
• West-Ukrainian 1 (Rovno)	440	PWR					100		7/6
• West-Ukrainian 2 (Rovno)	440	PWR							/80
• South-Ukrainian 1	1000	PWR							/80

CONTINUED

• Units in commercial operation

† Estimated date of startup, announced at time reactor was ordered

CP — construction permit issued

lwa — limited work authorization issued

World List of Nuclear Power Plants, cont'd

USSR, cont'd

Ministry of Electric Power, cont'd

	Net MWe	Type	Reactor Supplier	Generator Supplier	Architect Engineer	Constructor	Construction stage (%)	Commercial orig. sched-ule†	Operation or expected
Smolensk 1	1000	LGR						177	/81
Smolensk 2	1000	LGR						178	
• Chernobyl 1	1000	LGR					100	177	178
• Chernobyl 2	1000	LGR					100	179	179
Chernobyl 3	1000	PWR							182
Chernobyl 4	1000	PWR							182
Kalanin 1	1000	LGR						178	
Kalanin 2	1000	LGR						180	

Scientific Research Institute for Atomic Reactors

• VK-50 (Dimitrovgrad)	50	BWR					100		1/66
State Committee on Atomic Energy									
• BN-350 (Shevchenko)	350	LMFBR					100		173

Yugoslavia

Savske Elektrane (Slovenia) and Elektroprivreda (Croatia)

Krsko (Krsko)	615	PWR	W	W	Gilbert	W/local	75	12/78	/83
Non-U.S. Total (348 units)	229 316								

WORLD TOTAL (526 units)

399 872

Abbreviations used in this table

A-A: ASEA-Atom (Sweden)
AC: Acres Canatom (Canada)
ACEC: Ateliers de Constructions Electriques de Charleroi S A (Belgium)
ACECO: ACEC with COP (Belgium)
ACECOWEN: ACECO with Westinghouse (Belgium)
ACLIF group: ACECO Creusot-Loire Framatome Westinghouse Electric Energy Systems Europe (France)
ADF: Auxeltra-Delens-Francois
AEL: Atomic Energy of Canada Ltd
AEE: Atomenergoexport (USSR) (formerly TPE Technoproexport)
AEG: Allgemeine Electricitaets-Gesellschaft Aeg-Telefunken (W. Germany)
AEI: Associated Electric Industries Ltd (U.K.)
AEPS: American Electric Power Service Corp (U.S.)
AETEA: Agroman. EyT. EA (Spain)
AGR: advanced gas-cooled reactor
Allis: Allis-Chalmers (U.S.)
Allisithm: Ste Generale de Constructions Electriques et Mechaniques (France)
AMN: Ansaldo Meccanico Nucleare SpA (Italy)
APC: Atomic Power Construction Ltd (U.K.)
Argo KKU: Dyckerhoff & Widmann AG Wayss & Freitag AG Heggdamp (FRG)
ASGEN: Ansaldo San Giorgio Compagnia Genera e Italy)
Aux: Auxin Ingenieria Espanola SA (Spain)
Baf: Balfour Beatty & Co (U.K.)
BAM: Bataalsche Aarneming Maatschappij NV (The Netherlands)
BBC: Brown Boveri et Cie (Switzerland)
BBR: Babcock-Brown Boveri Reaktor GmbH (W. Germany)
Becht: Bechtel Corporation (U.S.)
BHE: Bharat Heavy Electrical (India)
BLWR: same as BWR
BND: British Nuclear Design & Construction Ltd (U.K.)
BR: Burns & Roe, Inc (U.S.)
BAV: Black & Veatch (U.S.)
B&W: Babcock & Wilcox Co (U.S.)
BRAUN: C F Braun & Co (U.S.)
Brown: Brown & Root Inc (U.S.)
BWR: boiling water reactor
C-B: Campenon-Bernard (France)
CA: Condotte d'Acqua (Italy)
C-E: Combustion Engineering Inc (U.S.)
CEA: Commissariat a l'Energie Atomique (France)
CEM: Compagnie Electro Mechanique (France)
CFE: Cie d'Enterprises CFE S A (Belgium)
CGE: Canadian General Electric
Chag: Chagnaud (France)
Cie GE: Cie Generale d'Electricite (France)
CITRA: Compagnie Industrielle de Travaux (France)
CL: Creusot-Loire (France)
CM: Chantiers Modernes (France)
CNO: Construtora Noberto Odebrecht (Brazil)

COP/TOSI/ACEC: Cockerill Ougree-Providence-Franco Tosi SpA Ateliers de Constructions Electriques de Charleroi SA (Belgium)
CTAFMC: CFE Travaux, Astrobel General Contractors, Francois et Fils, Maurice Delens, Campenon Bernard (Belgium)
CTL: Canatom Ltd (Canada)
DAE: Department of Atomic Energy (India)
Daniel: Daniel Construction Co (U.S.)
D-L: Delatre-Lavvievier (France)
DOE: Department of Energy (U.S.)
EA: Empresarios Agrupados (Spain)
E&B: Emch & Berger (Switzerland)
Ebasco: Ebasco Services Inc (U.S.)
ECC: Engineering Construction Corp (India)
EE: English Electric Co Ltd (U.K.)
EEC: English Electric Co Ltd (Canada)
EEW: English Electric and G Wimpey Group (U.K.)
EI: Elettroenergie Italiana (Italy)
Elin: Elin Union AG (W. Germany)
ENB: Empresa Nacional Bazan (Spain)
ERBE: Hungarian Company for Power Plant Investment
ETOCESA: Entrecanales y Ocesa (Spain)
EW: ElectroWatt Ltd (Switzerland)
EyT: Entrecanales y Tavora SA (Spain)
Fou: Fougerolle (France)
FPS: Fluor Power Services (U.S.)
Fra: Framatome Societe Franco-Americaine de Constructions Atomiques SA (France)
FRAMACECO: Framatome with ACECO (Belgium)
GA: General Atomic Company (U.S.)
GAA: Groupement pour les Activites Atomiques et Avancees (France)
GC: Groupement Constructeurs Francais (France)
GCHWR: gas-cooled, heavy-water-moderated reactor
GCR: gas-cooled reactor
GE: General Electric Co (U.S.)
GEC: General Electric Co (U.K.)
GETSCO: General Electric Technical Services Co
G&H: Gibbs & Hill, Inc (U.S.)
G&HE: Gibbs & Hill Espanola SA (Spain)
Gilbert: Gilbert Associates Inc (U.S.)
GilCom: Gilbert Commonwealth (U.S.)
GKW: Gemeinschaftskraftwerk Wasser GmbH (FRG)
GTM: Grands Travaux de Marseille (France)
Haz: Hazama Gumi Co (Japan)
HCC: Hindustan Construction Co (India)
Hoch: Hochtief AG (W. Germany)
H-P: Howden-Parsons (Canada)
HO: Hydro-Quebec (Canada)
HRB: Hochtemperatur-Reaktorbau GmbH (W. Germany)
HTGR: high-temperature gas-cooled reactor
HWLWR: heavy-water-moderated boiling light-water-cooled reactor
Iber: Iberduero SA (Spain)
Imp: Impresit
INB: Internationale Natrium Brutreaktorbau GmbH (W. Germany)
INITEC: Empresa Nacional de Ingenieria y Tecnologia SA (Spain)
Int: Interatom (W. Germany)
IyP: Informas y Proyectos SA (Spain)
JL: John Lang Construction Ltd (U.K.)
Jones: J A Jones Construction Co (U.S.)
J-S: Jeumont-Schneider (France)
Kaiser: Kaiser Engineers (U.S.)
KTHTR: Konsortium THTR—Brown, Boveri et Cie AG. Hochtemperatur-Reaktorbau GmbH Nukem GmbH (W. Germany)
Kum: Kumagaya Gumi Co (Japan)
KWLWR: Kraftwerk Union AG (W. Germany)
L&T: Larsen & Toubro (India)

LGR: light-water cooled, graphite-moderated reactor
LMFBR: liquid metal fast breeder reactor
LWBR: light-water breeder reactor
LWCHW: light-water-cooled, heavy-water-moderated reactor
MAPI: Mitsubishi Atomic Power Industries, Inc (Japan)
Maxon: Maxon Construction Company (U.S.)
McAlp: Sir Robert McAlpine & Sons Ltd (U.K.)
MCING: Motor-Columbus Consulting Engineers Inc (Switzerland)
MECO: Montreal Engineering Co (Canada)
MEL: Mitsubishi Electric Corporation (Japan)
MHI: Mitsubishi Heavy Industries, Ltd (Japan)
NCC: Nuclear Civil Constructors (U.K.)
Nera: Neraatom NV (The Netherlands)
Nera: Centrale Nucleaire Europeenne A Neutrons Rapides (France)
NIRA: Nucleare Italiana Reattori Avanzati (Italy)
NPC: Nuclear Power Co Ltd (U.K.)
Nucleon: Nuclebras Engenharia SA (Brazil)
NWK: Nordwestdeutsche Kraftwerke AG (FRG)
Obay: Obayashi Gumi Co (Japan)
OH: Ontario Hydro (Canada)
OPS: Offshore Power Systems (U.S.)
Par (U.K.): C A Parsons and Co Ltd (U.K.)
Parsons: Ralph M. Parsons Co (U.S.)
PE: Promon Engenharia SA (Brazil)
PH: Philip Holzman (W. Germany)
PHWR: pressurized heavy-water-moderated and -cooled reactor
PWR: pressurized water reactor
Rateau: Rateau, Ste. (France)
R & C: Richardson & Cruddas (I), (India)
RDM: Rotterdamse Droogdok Maatschappij (The Netherlands)
RPL: Reyrolle Parsons Ltd (U.K.)
RW: Richardson Westgarth Ltd. (U.K.)
SACM: Societe Alsacienne de Constructions Mechaniques (France)
SB: Spie Batignolles SA (France)
SCG: Skanska Cementgjuteriet
Seb: Sarngrat et Brice (France)
SEN: Sener, SA (Spain)
SGE: Societe Generale d'Enterprises (France)
SK: Sydsvenska Kraft AB (Sweden)
S&L: Sargent & Lundy Engineers (U.S.)
SL: Stal-Laval Turbin AB (Sweden)
SNC: Surveyer, Nemiger & Chenevert Inc (Canada)
SO: Siemens Osterreich (Austria)
SOCI: Societe pour l'Industrie Atomique (France)
SOGENE: Societa Generale per Lavoro e Pubbliche Utilita (Italy)
SR: Stearns-Roger Corp (U.S.)
SS: Southern Services, Inc (U.S.)
SSPB: Swedish State Power Board
Stork: Koninklijke Machinefabriek Stork (The Netherlands)
S&W: Stone & Webster Engineering Corp (U.S.)
T&B: Townsend & Bottom, Inc
TE: Traction-Electricite
THTR: thorium high-temperature reactor
TNPO: The Nuclear Power Group (U.K.)
TPC: Taiwan Power Company
TR: Tecnicas Reunidas SA (Spain)
TW: Taylor Woodrow Construction Ltd (U.K.)
UE&C: United Engineers & Constructors (U.S.)
VANEA: Vandellós-Empresarios Agrupados (Spain)
VBB: AB Vattenbyggnadsbyran
VME: Verenigde Machinefabrieken NV (The Netherlands)
W: Westinghouse Electric Corporation (U.S.)
Wedco: a subsidiary of Westinghouse Electric Corporation (U.S.)
WIL: Walchandnagar Industries Ltd (India)
Zachry: H B Zachry Company (U.S.)