Nuclear News

OFFICIAL FILE

World List of Nuclear Power Plants

Exhibit No. 11

Witness

Date 9/26/00 Reporter

Operable, Under Construction, or on Order (30 MWe and Over) as of December 31, 1999

	Net MWe	Type	Construction stage (%)	Operation: init. criticality	Operation: commercial start	Reactor Supplier	Generator Supplier	Architect Engineer	Constructor
Argentina									
Nucleoelectrica Argentina SA									
• Atucha 1 (Lima, Buenos Aires)	335	PHWR	100	1/74	6/74	Siemens	Siemens	Siemens	Siemens
Atucha 2 (Lima, Buenos Aires)	692	PHWR	80	.....	.....	Siemens	Siemens	Utility/Siemens	Utility/Siemens
• Embalse (Rio Tercero, Cordoba)	600	PHWR	100	3/83	1/84	AECL	Ansaldo	AECL/Italimpianti	AECL/Italimpianti
Armenia									
Ministry of Energy of RA, Department of Atomic Energy									
• Metzamor 2 (Metsamor, Armenia)	376	PWR	100	/75	5/80	MNE	.....	.....	.....
Belgium									
Electrabel									
• Doel 1 (Doel, East Flanders)	392	PWR	100	7/74	2/75	ACECOWEN	COP/Tosi/ACEC	TEE	Franki/Engema
• Doel 2 (Doel, East Flanders)	392	PWR	100	8/75	12/75	ACECOWEN	COP/Tosi/ACEC	TEE	Franki/Engema
• Doel 3 (Doel, East Flanders)	970	PWR	100	6/82	10/82	FRAMACECO	Alsthom-Atlantique/ACEC	TEE	AMGC
• Doel 4 (Doel, East Flanders)	1001	PWR	100	3/85	7/85	ACECOWEN	Alsthom-Atlantique/ACEC	TEE	TVBB
• Tihange 1 (Huy, Liege)	955	PWR	100	2/75	10/75	ACLF	Alsthom/Rateau/LaMeuse/ACEC/J-S	TEE/EdF	CFE-Blaton/ADF SB-SNTP/C-B
• Tihange 2 (Huy, Liege)	955	PWR	100	10/82	2/82	FRAMACECO	Alsthom/Rateau/LaMeuse/ACEC	TEE	CTAFMC
• Tihange 3 (Huy, Liege)	1015	PWR	100	6/85	9/85	ACECOWEN	Brown Boveri/Alsthom/ACEC	TEE	CTAFMC
Brazil									
Eletronuclear–Eletrobras Termonuclear SA									
• Angra 1 (Itaorna, Rio de Janeiro)	626	PWR	100	3/82	1/85	W	W	G&H	W
Angra 2 (Itaorna, Rio de Janeiro)	1245	PWR	100	2/00	5/00	KWU	KWU	KWU/Electronuclear	KWU/Electronuclear
Angra 3 (Itaorna, Rio de Janeiro)	1245	PWR	35	4/00	5/06	KWU	KWU	KWU/Electronuclear	KWU/Electronuclear

CONTINUED

• Units in commercial operation

Once 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 try to follow up by phone, facsimile, or e-mail, though this 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 exists, the judgment of the utility is followed as to whether a plant should be included.

The total number of units and aggregate generating capacity for each country is given in a table on page 16. Breakdowns by reactor type are given after the listing for each country with more than one type. For units in the United States, the power rating is taken to be the maximum dependable capacity (MDC) net rating.

Many of the supplier and service firms, and reactor types, are abbreviated here to conserve space. The full names are indexed on page 16, alphabetically by abbreviation.

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Nuclear Power Plants No Longer In Service

	Net MWe	Type	started	closed
Armenia				
Armenia 1 (Metsamor, Armenia)	440	PWR	10/77	2/89
Canada				
Douglas Point (Tiverton, Ont.)	216	PHWR	9/68	5/84
Gentilly 1 (Becancour, Que.)	250	PHWR	5/72	6/77
France				
Bugey 1 (Loyettes, Ain)	540	GCR	7/72	6/94
Chinon A1 (Chinon, Indre-et-Loire)	70	GCR	2/64	4/73
Chinon A2 (Chinon, Indre-et-Loire)	210	GCR	2/65	6/85
Chinon A3 (Chinon, Indre-et-Loire)	480	GCR	8/66	6/90
Creys-Malville (Bouvesse, Isere)	1200	LMFBR	1/86	12/98
Chooz A (Chooz, Ardennes)	310	PWR	4/67	10/91
Marcoule G2 (Marcoule, Gard)	38	GCR	4/59	2/80
Marcoule G3 (Marcoule, Gard)	38	GCR	4/60	6/84
Monts d'Arree (Brenilis, Finistere)	70	GCHWR	6/68	7/85
Saint-Laurent A1 (Saint-Laurent-des-Eaux, Loir-et-Cher)	480	GCR	8/69	4/90
Saint-Laurent A2 (Saint-Laurent-des-Eaux, Loir-et-Cher)	515	GCR	11/71	5/92
Germany				
Gundremmingen A (Gundremmingen, Ba.)	237	BWR	4/67	1/80
Lingen (Lingen, Nied.)	256	BWR	10/68	5/79
Niederaichbach (Landshut, Ba.)	100	GCHWR	1/73	8/74
Nord 1 (Lubmin, Mecklenburg-West Pomerania)	408	PWR	7/74	12/90
Nord 2 (Lubmin, Mecklenburg-West Pomerania)	408	PWR	4/75	2/90
Nord 3 (Lubmin, Mecklenburg-West Pomerania)	408	PWR	5/78	2/90
Nord 4 (Lubmin, Mecklenburg-West Pomerania)	408	PWR	11/79	6/90
Rheinsberg 1 (Rheinsberg, Brandenberg)	70	PWR	10/66	10/90
THTR-300 (Hamm-Uentrop, N.-W.)	296	HTGR	6/87	10/89
Waergassen (Lauenforde, Nied.)	640	BWR	12/72	5/95
Italy				
Caorso (Caorso, Piacenza)	860	BWR	12/81	6/90
Garigliano (Sessa Aurunca, Campania)	150	BWR	6/64	3/82
Latina (Borgo Sabotino, Latina)	153	GCR	1/64	12/87
Trino Vercellese (Trino, Vercelli)	260	PWR	1/65	6/90
Japan				
Tokai 1 (Tokai-Mura, Ibaraki)	159	GCR	7/66	3/98
Kazakhstan				
BN-350 (Aktau, Mangyshlak)	135	LMFBR	7/73	4/99
Netherlands				
Dodewaard (Dodewaard, Gelderland)	55	BWR	1/69	3/97
Russia				
Beloyarskiy 1 (Zarechnyy, Sverdlovsk)	102	LGR	4/64	/83
Beloyarskiy 2 (Zarechnyy, Sverdlovsk)	146	LGR	12/69	1/90
Novovoronezhskiy 1 (Novovoronezh, Voronezh)	265	PWR	12/64	2/88
Novovoronezhskiy 2 (Novovoronezh, Voronezh)	336	PWR	4/70	8/90
Troitsk A (Troitsk, Chelyabinsk)	100	LGR	9/58	/89
Troitsk B (Troitsk, Chelyabinsk)	100	LGR	12/59	/89
Troitsk C (Troitsk, Chelyabinsk)	100	LGR	12/60	/89
Troitsk D (Troitsk, Chelyabinsk)	100	LGR	12/61	11/90
Troitsk E (Troitsk, Chelyabinsk)	100	LGR	12/62	11/90
Troitsk F (Troitsk, Chelyabinsk)	100	LGR	12/63	11/90
Slovakia				
Bohunice A1 (Trnava, Zapadoslovensky)	104	GCHWR	12/72	5/79
Spain				
Vandellos 1 (Vandellos, Tarragona)	480	GCR	8/72	10/89
Ukraine				
Chernobyl 2 (Pripyat, Kiev)	950	LGR	5/79	8/91
Chernobyl 4 (Pripyat, Kiev)	950	LGR	4/84	4/86
United Kingdom				
Berkeley 1 (Berkeley, Gloucester)	138	GCR	11/62	3/89
Berkeley 2 (Berkeley, Gloucester)	138	GCR	11/62	10/88
Dounreay PFR (Dounreay, Highland)	250	LMFBR	8/76	3/94
Hunterston A1 (Ayrshire, Strathclyde)	160	GCR	3/64	3/90
Hunterston A2 (Ayrshire, Strathclyde)	160	GCR	9/64	12/89
Trawsfynydd 1 (Gwynedd, Wales)	195	GCR	3/65	2/91
Trawsfynydd 2 (Gwynedd, Wales)	195	GCR	4/65	2/91
Winfrith SGHWR (Winfrith Heath, Dorset)	92	HWLWR	2/68	9/90
United States				
Big Rock Point (Charlevoix, Mich.)	67	BWR	11/65	8/97
BONUS (Rincon, P.R.)	72	BWR	8/64	6/68
Dresden 1 (Morris, Ill.)	200	BWR	7/60	10/78
Fermi 1 (Monroe, Mich.)	61	LMFBR	8/66	11/72
Fort St. Vrain (Platteville, Colo.)	330	HTGR	1/79	8/89
Haddam Neck (Haddam Neck, Conn.)	590	PWR	1/68	12/96
Hallam (Hallam, Nebr.)	75	LMGMR	11/63	9/64
Hanford-N (Richland, Wash.)	860	LGR	7/66	2/89
Humboldt Bay 3 (Eureka, Calif.)	63	BWR	8/63	7/76
Indian Point 1 (Buchanan, N.Y.)	257	PWR	1/63	10/74
LaCrosse (Genoa, Wis.)	50	BWR	11/69	4/87
Maine Yankee (Wiscasset, Me.)	860	PWR	12/72	8/97
Millstone-1 (Waterford, Conn.)	660	BWR	6/71	8/98
Pathfinder (Sioux Falls, S.D.)	59	BWR	7/66	10/67
Peach Bottom 1 (Peach Bottom, Pa.)	40	HTGR	6/67	11/74
Rancho Seco (Clay Station, Calif.)	913	PWR	4/75	6/89
San Onofre 1 (San Clemente, Calif.)	436	PWR	1/68	11/92
Shippingport (Shippingport, Pa.)	60	PWR/LWBR	12/57	10/82
Shoreham (Brookhaven, N.Y.)	809	BWR	—*	5/89
Three Mile Island 2 (Londonderry Twp., Pa.)	792	PWR	12/78	3/79
Trojan (Prescott, Ore.)	1095	PWR	5/76	11/92
Yankee (Rowe, Mass.)	167	PWR	7/61	9/91
Zion 1 (Zion, Ill.)	1040	PWR	12/73	1/98
Zion 2 (Zion, Ill.)	1040	PWR	9/74	1/98

*The Shoreham unit achieved criticality and produced power, but closed before it could begin commercial operation.