

POWER REACTORS OF THE WORLD

This list of nuclear power reactors operating or under construction in countries which are members of the Agency, was prepared from information available in December 1968. Additions or amendments will be recorded in later issues of the Bulletin.

A. POWER REACTORS IN OPERATION

Name	Location	Type	Net output (MWe)	Criticality Date
BELGIUM				
BR-3	Mol (Now testing VULCAIN core)	PWR	10.5	Aug. 1962
CANADA				
NPD	Rolphton	PHWR	22.5	April 1962
CANDU-PHW-200	Douglas Point	PHWR	203	Nov. 1966
FRANCE				
G-2, G-3	Marcoule	GCR	2 × 40	July 1958/ June 1959
CHINON-1 (EDF-1)	Chinon	GCR	70	Sept. 1962
CHINON-2 (EDF-2)	Chinon	GCR	200	Aug. 1964
CHINON-3 (EDF-3)	Chinon	GCR	480	March 1966
CHOOZ (SENA)	Chooz (Electricity production shared equally with Belgium)	PWR	266	Oct. 1966
EL-4	Brennilis	HWGCR	70	Dec. 1966
FEDERAL REPUBLIC OF GERMANY				
KAHL	Grossweilzheim/Kahl (Main)	BWR	15	Nov. 1960
MZFR	Karlsruhe	PHWR	50	Sept. 1965
KRB	Gundremmingen	BWR	237	Aug. 1966

Name	Location	Type	Net Output (MWe)	Criticality Date
AVR	Julich	HTGR	13.2	Aug. 1966
KWL	Lingen (Output includes 80 MWe from conventional superheat)	BWR	252	Feb. 1968
KWO	Obrigheim	PWR	283	Sept. 1968
ITALY				
LATINA (SIMEA)	Latina (Foce Verde)	GCR	200	Dec. 1962
GARIGLIANO (SENN)	Garigliano (Sessa Aurunca)	BWR	150	June 1963
ENRICO FERMI (SELNI)	Trino Vercellese	PWR	247	June 1964
JAPAN				
JPDR	Tokai-Mura	BWR	11.25	Aug. 1963
JAPAN-ATOMIC-1	Tokai-Mura	GCR	166	May 1965
NETHERLANDS				
DODEWAARD	Dodewaard	BWR	51.5	June 1968
SPAIN				
ZORITA-1	Zorita de los Canes	PWR	153	June 1968
SWEDEN				
AGESTA	Agesta	PHWR	10	July 1963
SWITZERLAND				
LUCENS	Lucens	HWGCR	7	Dec. 1966

Name	Location	Type	Net Output (MWe)	Criticality Date
UNITED KINGDOM				
CALDER HALL	Calder Hall	GCR	4 × 50	May 1958/ March 1959
CHAPELCROSS	Chapelcross	GCR	4 × 45	Nov. 1958/ Dec. 1959
DFR	Dounreay	FBR	12.7	Nov. 1959
BERKELEY	Berkeley	GCR	2 × 138	Aug. 1961/ March 1962
BRADWELL	Bradwell	GCR	2 × 150	Aug. 1961/ April 1962
WAGR	Windscale	AGR	30.4	Aug. 1962
HUNTERSTON-A	Hunterston	GCR	2 × 161	Sept. 1963/ March 1964
HINKLEY POINT-A	Hinkley Point	GCR	2 × 262	May 1964/ Oct. 1964
TRAWSFYNYDD	Trawsfynydd	GCR	2 × 250	Sept. 1964/ Dec. 1964
SIZEWELL	Sizewell	GCR	2 × 289	June 1965/ Dec. 1965
DUNGENESS-A	Dungeness	GCR	2 × 275	June 1965/ Sept. 1965
OLDBURY	Oldbury	GCR	2 × 300	Aug. 1967/ Dec. 1967
SCHWR-100	Winfrith	HWLWR	100	Sept. 1967

UNITED STATES OF AMERICA

SHIPPINGPORT	Shippingport	PWR	90	Dec. 1957
DRESDEN-1	Morris (Ill.)	BWR	200	Oct. 1959
YANKEE	Rowe	PWR	175	Aug. 1960
SAXTON	Saxton (Pa.)	PWR	3	April 1962
INDIAN POINT -1	Indian Point (With oil-fired superheater)	PWR	270	Aug. 1962
BIG ROCK POINT	Big Rock Point (Mich.)	BWR	70.4	Sept. 1962
ERR	Elk River	BWR	22	Nov. 1962
HUMBOLDT BAY	Eureka	BWR	68.5	Feb. 1963
ENRICO FERMI	Lagoona Beach	FBR	60.9	Aug. 1963
EBR-2	NRTS, Idaho	FBR	16.5	Nov. 1963
NPR	Richland	LWGR	790	Dec. 1963

Name	Location	Type	Net Output (MWe)	Criticality Date
PATHFINDER	Sioux Falls	BWR + nucl. superheat	58.5	March 1964
PEACH BOTTOM-1	Peach Bottom	HTGR	40	March 1966
LACBWR	Genoa (Wisc.)	BWR	50	July 1967
SAN ONOFRE	San Onofre	PWR	430	June 1967
CONNECTICUT YANKEE	Haddam Neck	PWR	462	July 1967
UNION OF SOVIET SOCIALIST REPUBLICS				
APS	Obninsk	LWGR	5	May 1954
ATOMS ON WHEELS	Obninsk	PWR	1.5	1961
SIBERIAN	Troitsk	LWGR	6 × 100	Sept. 1958/ Dec. 1962
ARBUS	Melekess	OMR	0.50	June 1963
URAL-1	Beloyarsk	BWR + nucl. superheat	94	Sept. 1963
WWER-I	Novo Voronezh	PWR	196	Dec. 1963
VK-50 (Ulyanovsk)	Melekess	BWR	70	April 1965
URAL-II	Beloyarsk	BWR + nucl. superheat	200	Oct. 1967

B. POWER REACTORS UNDER CONSTRUCTION

Name	Location	Type	Net Output (MWe)	Criticality Date
ARGENTINA				
ATUCHA	Atucha (North of Buenos Aires)	PHWR	319	1972
BULGARIA				
KOZLODUY	Kozloduy	PWR (WWER-II type)	2 × 400	1973/1974

Name	Location	Type	Net Output (MWe)	Criticality Date
CANADA				
CANDU-PHW-500	Pickering near Toronto	PHWR	2 × 505	1970/1971
CANDU-BLW-250 (GENTILLY)	Pointes aux Roches (Quebec)	HWLWR	257	1971
CANDU-PHW-500	Pickering near Toronto	PHWR	2 × 505	1971/1973
CANDU-PHW-500	Pickering near Toronto	PHWR	2 × 505	1971/1973
CZECHOSLOVAKIA				
A-1	Bohunice	HWGCR	150	1969
FRANCE				
SAINT LAURENT DES EAUX -(EDF-4)	Saint Laurent des Eaux	GCR	480	1969
SAINT LAURENT DES EAUX-2	Saint Laurent des Eaux	GCR	515	1970
BUGNY-1 (EDF-5)	Bugey near Lyon	GCR	487	1970/1971
FEDERAL REPUBLIC OF GERMANY				
HDR	Grosswelzheim/Kahl (Main)	BWR + nucl. superheat	25	1969
KNK	Karlsruhe	SZR	20	1969
AKB	Niederaichbach	HWGCR	100	1969
HTR-G	Geesthacht	HTGR	25	1971
KKS	Stadez near Hamburg	PWR	630	1972
WUERGASSEN	Kreiss Hörter	BWR	612	1972
INDIA				
TARAPUR	Tarapur	BWR	2 × 190	1969
RAJASTHAN-1	Rana Pratap Sagar	PHWR	200	1969
KALPAKKAN-1	Kalpakkan near Madras	PHWR	200	1971
RAJASTHAN-2	Rana Pratap Sagar	PHWR	200	1972
ITALY				
CIRENE	Latina	HWLWR	35	1971

Name	Location	Type	Net Output (MWe)	Criticality Date
JAPAN				
JAPAN ATOMIC-2	Tsuruga	BWR	322	1969
KANSAI-1	Tsuruga Peninsula	PWR	340	1970
TOKYO-1	Fukushima	BWR	400	1970
CHUBU-1	Hamaokacho	BWR	350	1972
KANSAI-2		PWR	500	1972
TOKYO-2	Fukushima	BWR	784	1973
PAKISTAN				
KANUPP	Paradise Point near Karachi	PHWR	125	1971
SPAIN				
SANTA MARIA LA GARONA	Santa Maria la Garona	BWR	440	1969
VANDELLOS	Vandellos (Electricity to be shared with France)	GCR	500	1972
ZORITA-2	Zorita de los Canes	PWR	450	1972
SWEDEN				
R-4/EVA	Marviken (To be raised to 193 MWe with nuclear superheat)	BHWR	140	1969
OKG	Oskarshamn	BWR	440	1970
SWITZERLAND				
BEZNAU-I (NOK)	Beznau near Döttingen	PWR	350	1969
AKM	Mühleberg	BWR	306.2	1971
BEZNAU-II (NOK)	Beznau near Döttingen	PWR	350	1972
UNITED KINGDOM				
WYLFA	Wylfa	GCR	2 × 590	1969
PFR	Dounreay	FBR	250	1970
DUNGENESS B	Dungeness	AGR	2 × 600	1971

Name	Location	Type	Net Output (Mwe)	Criticality Date
HINKLEY POINT-B	Hinkley Point	AGR	2 × 626	1972
HUNTERSTON-B	Hunterston	AGR	2 × 600	1972/1973
SEATON CAREW	Seaton Carew near Hartlepod	AGR	2 × 625	1973/1974
UNITED STATES OF AMERICA				
OYSTER CREEK-1	Oyster Creek	BWR	640	1969
NINE MILE POINT	Scriba	BWR	600	1969
INDIAN POINT-II	Indian Point	PWR	916-1020	1969
DRESDEN-2	Morris (Ill.)	BWR	715-809	1969
MILLSTONE POINT-1	Waterford (Conn.)	BWR	600-675	1969
ROBERT EMMA GINNA	Brookwood (NY)	PWR	450	1969
PALISADES-1	South Haven	PWR	710-800	1970
DRESDEN-3	Morris (Ill.)	BWR	715-809	1970
QUAD CITIES-1	Cordova (Ill.)	BWR	715-809	1970
HB ROBINSON-2	Hartsville (S. Carol.)	PWR	760	1970
TURKEY POINT-3	Turkey Point (Fla.)	PWR	760	1970
BROWNS FERRY-1	Decatur (Ala.)	BWR	1098-1152	1970
MONTICELLO	Monticello (Minn.)	BWR	471-545	1970
POINT BEACH-1	Two Creeks (Wisc.)	PWR	480-524	1970
FT. CALHOUN	Fort Calhoun (Neb.)	PWR	480	1970
QUAD CITIES-2	Cordova (Ill.)	BWR	715-809	1971
TURKEY POINT-4	Turkey Point (Fla.)	PWR	760	1971
BROWNS FERRY-2	Decatur (Ala.)	BWR	1098-1152	1971
OCONEE-1	Clemson (S. Carol.)	PWR	914	1971
FORT ST. VRAIN	Fort St. Vrain (Col.)	HTGR	330	1972
DIABLO CANYON-1	Diablo Canyon (Calif.)	PWR	1060	1971
INDIAN POINT-3	Indian Point (NY)	PWR	965-1033	1971
PEACH BOTTOM-2	Peach Bottom (Pa.)	BWR	1100	1971
POINT BEACH-2	Two Creeks (Wisc.)	PWR	480-524	1971
PILGRAM	Plymouth (Mass.)	BWR	650-638	1971
SURRY-1	Hog Island (Va.)	PWR	815-847	1971
VERMONT YANKEE	Vernon (Vt.)	BWR	540	1971
THREE-MILE ISLAND	Goldsboro (Pa.)	PWR	845-871	1971
SALEM-I	Salem (N.J.)	PWR	1050	1972
COOPER-1	Brownville (Nebr.)	BWR	801	1972
MAINE YANKEE	Bailei Point (Maine)	PWR	823-845	1972
OCONEE-2	Clemson (S. Carol.)	PWR	914	1972

Name	Location	Type	Net Output (MWe)	Criticality Date
RUSSELLVILLE	Russellville (Ark.)	PWR	850-880	1972
KEWAUNEE	Point Beach (Wisc.)	PWR	559-582	1972
PRAIRIE ISLAND-1	Red Wing (Minn.)	PWR	559-582	1972
CRYSTAL RIVER-3	Tampa (Fla.)	PWR	855	1972
SURRY-2	Hog Island (Va.)	PWR	815-847	1972
OCONEE-3	Clemson (S. Carol.)	PWR	914	1973
PEACH BOTTOM-3	Peach Bottom (Pa.)	BWR	1100	1973
PANCHO SECO	Sacramento (Cal.)	BWR	850	1973
SALEM-2	Lower Alloways Creek (NJ.)	PWR	1050	1973
CRYSTAL RIVER-4	Tampa (Fla.)	PWR	855	1974
PRAIRIE ISLAND-2	Red Wing (Minn.)	PWR	559-582	1974
UNION OF SOVIET SOCIALIST REPUBLICS				
WWER-II	Novo-Voronezh	PWR	365	1969
BN-350	Shevchenko (Caspian Sea) (Initially rated 300 MWe, electricity output halved to allow desalted water production 120×10^6 liters/day)	FBR	150	1969
CHUKOTA	Bilibin (Siberia)	LWGR	4×12	1970

LIST OF ABBREVIATIONS

AGR	- Advanced gas cooled, graphite moderated reactor
BHWR	- Boiling heavy water moderated and cooled reactor
BWR	- Boiling light water moderated and cooled reactor
FBR	- Fast breeder reactor
GCR	- Gas cooled, graphite moderated reactor
HTGR	- High temperature gas cooled, graphite moderated reactor
HWGCR	- Heavy water moderated, gas cooled reactor
HWLWR	- Heavy water moderated, light water cooled reactor
HWOR	- Heavy water moderated organic cooled reactor
LWGCR	- Light water moderated, gas cooled reactor
LWGR	- Light water cooled, graphite moderated reactor
OMR	- Organic moderated and cooled reactor
PHWR	- Pressurized heavy water moderated and cooled reactor
PWR	- Pressurized light water moderated and cooled reactor
SGR	- Sodium cooled, graphite moderated reactor
SZR	- Sodium cooled, zirconium hydride moderated reactor

At the Techfilm Festival 1968 the Granat Grand Prix was awarded to the Agency film "The Nuclear Challenge" which reviewed peaceful atomic work in many parts of the world.

