



Electricity from Nuclear Power

A 1985 map of
Nuclear Power Plants
in the U.S.

INFO

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In 23 out of the last 28 years one or more dots have been added to the jigsaw points on a map of the United States indicating the locations of its newest operating nuclear power plants.

Today, 31 of the 50 states — or 60 percent of the nation — have at least one operating nuclear power plant.

The first lonely dot appeared in 1957 on the banks of the Ohio River at Shippingport, Pennsylvania, where the Duquesne Light Company began operation of the nation's first nuclear generating station. The 60-megawatt unit, designed and built with the cooperation of the federal government as a demonstration facility, went on to supply 25 years of commercial electricity before it was retired in 1982.

Today, 91 dots representing reactors in service pepper the northeastern and southeastern industrial and population centers, jump to a powerful grid in the northern Illinois-Great Lakes area, then suddenly stop at the Iowa-Nebraska line, disappearing altogether — except for a lone dot in Colorado — before reaching the west coast.

Regionally, the New England states are most dependent on nuclear power for their electricity (33.6%), followed by the South Atlantic (21.6%) and East South Central States (18.1%).

States with the highest percentage of their electrical supply generated by nuclear power are Vermont (73.3), Maine (58.8), South Carolina (55.7), Virginia (49.5) and Connecticut (48.5).

Alabama, Arkansas, Illinois, Maryland, Michigan, Minnesota, Nebraska, New Jersey, Tennessee and Wisconsin — each relies on nuclear power for more than 20 per cent of its electricity.

Illinois claims the most nuclear plants licensed or planned, with 15; followed by 10 in Pennsylvania, the birthplace of nuclear power; 7 each in New York, South Carolina, Alabama and Michigan; 6 each in California and Tennessee and 5 in Florida and North Carolina.

Twenty years ago, there were only a dozen U.S. nuclear power plants, with a combined generating capacity of little more than 1,000 megawatts — the capacity of a single nuclear power plant of current design.

The combined generating capacity of the 91 nuclear power plants operating in the U.S. today is about 75,000 megawatts, far more than any of the 24 other nuclear nations of the world.

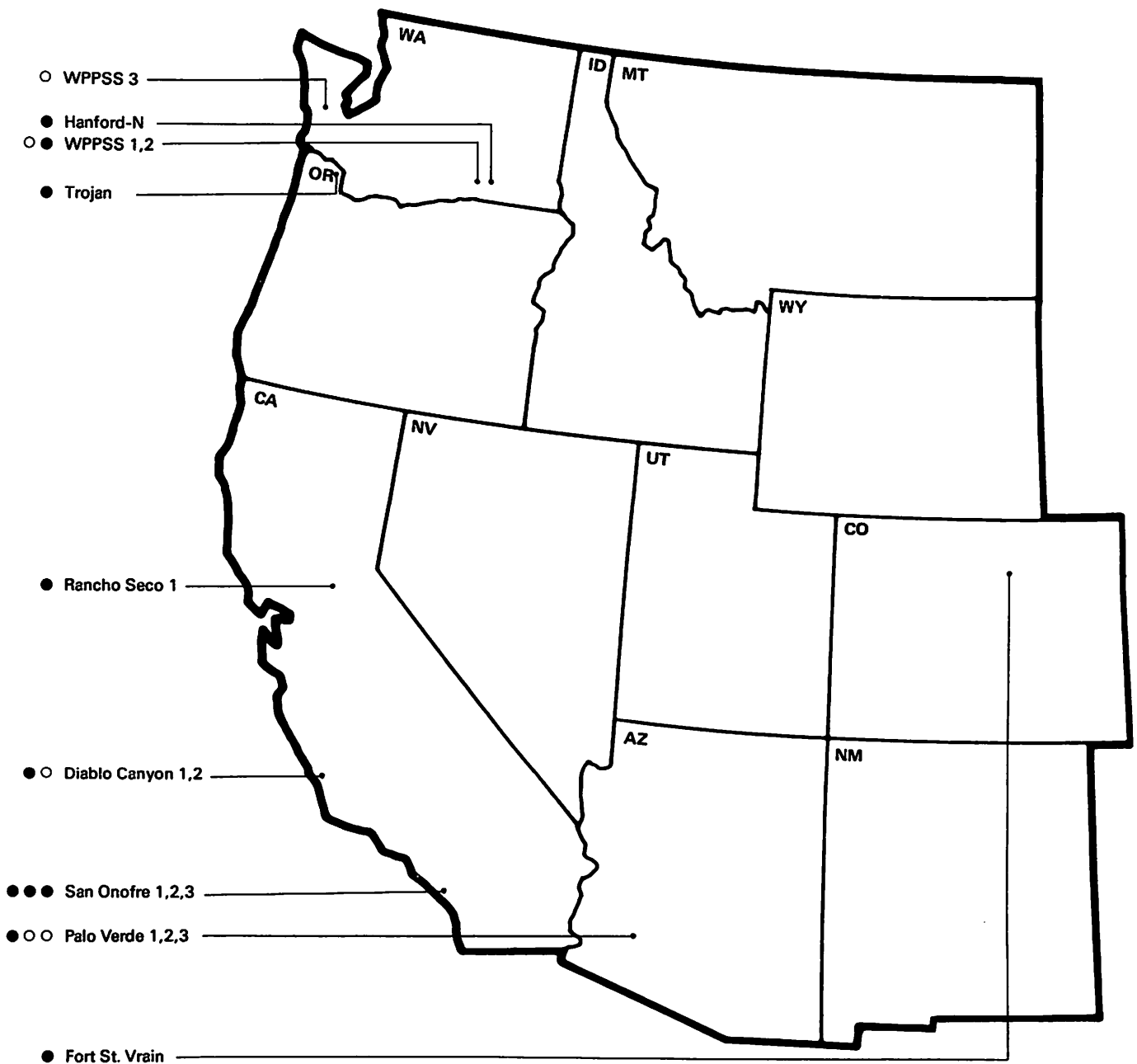
In 1983, America's nuclear power plants produced a record 294 billion kilowatt hours of electricity — 13 per cent of total U.S. electric power.

On December 31, 1984, when the Nuclear Regulatory Commission granted a low-power operating license to Arizona Public Service Company's Palo Verde 1 nuclear plant, Arizona became the 31st nuclear state. Two more states could soon receive their dots, indicating they have joined the national nuclear power grid. They are Kansas and Texas.

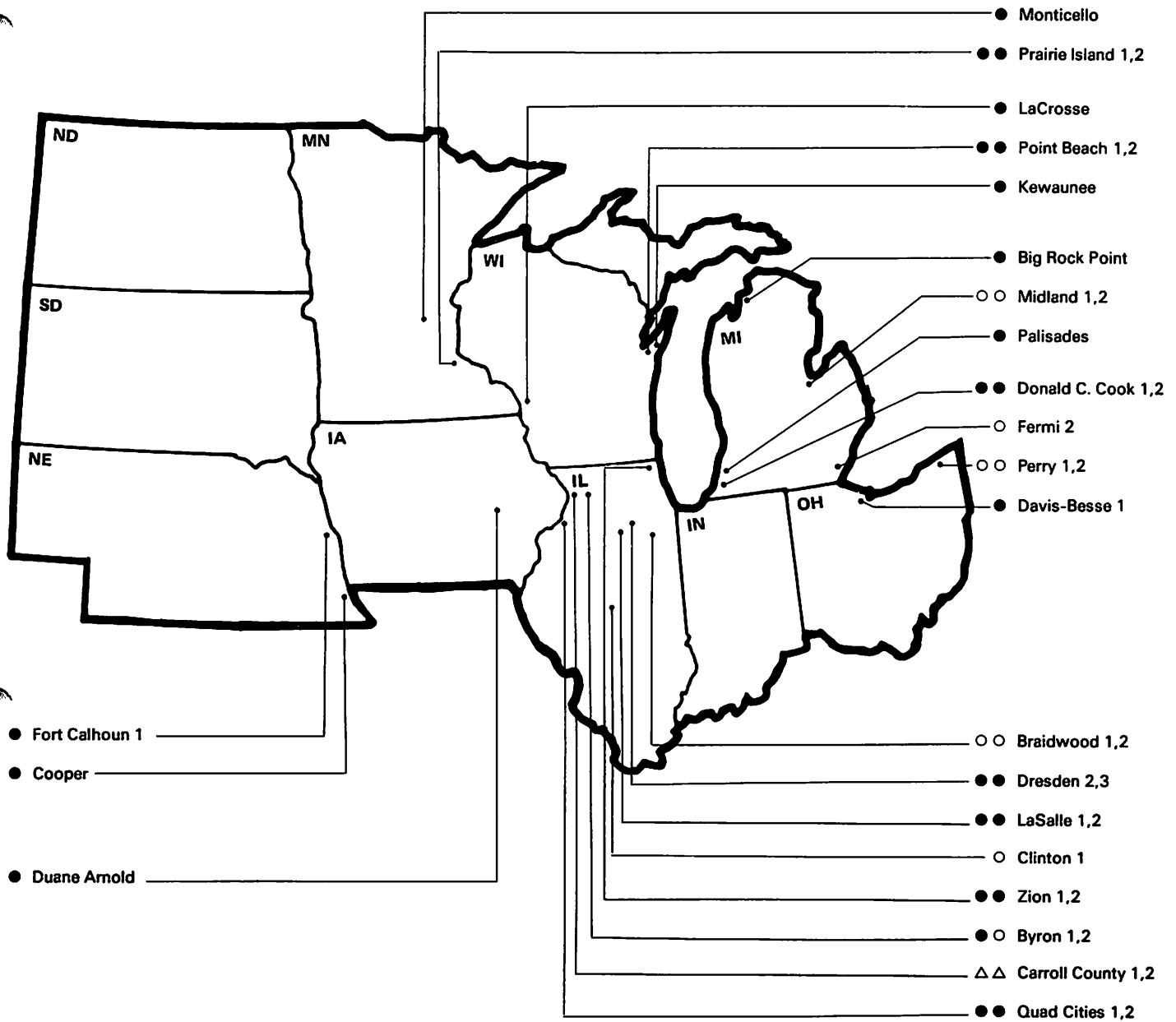
At the end of 1984, there were 36 additional nuclear power plants, representing about 40,000 additional megawatts of capacity, with construction permits.

When these units are completed, nuclear power will represent about 15 per cent of the nation's entire electric generating capacity and will produce one of every five kilowatt-hours used.

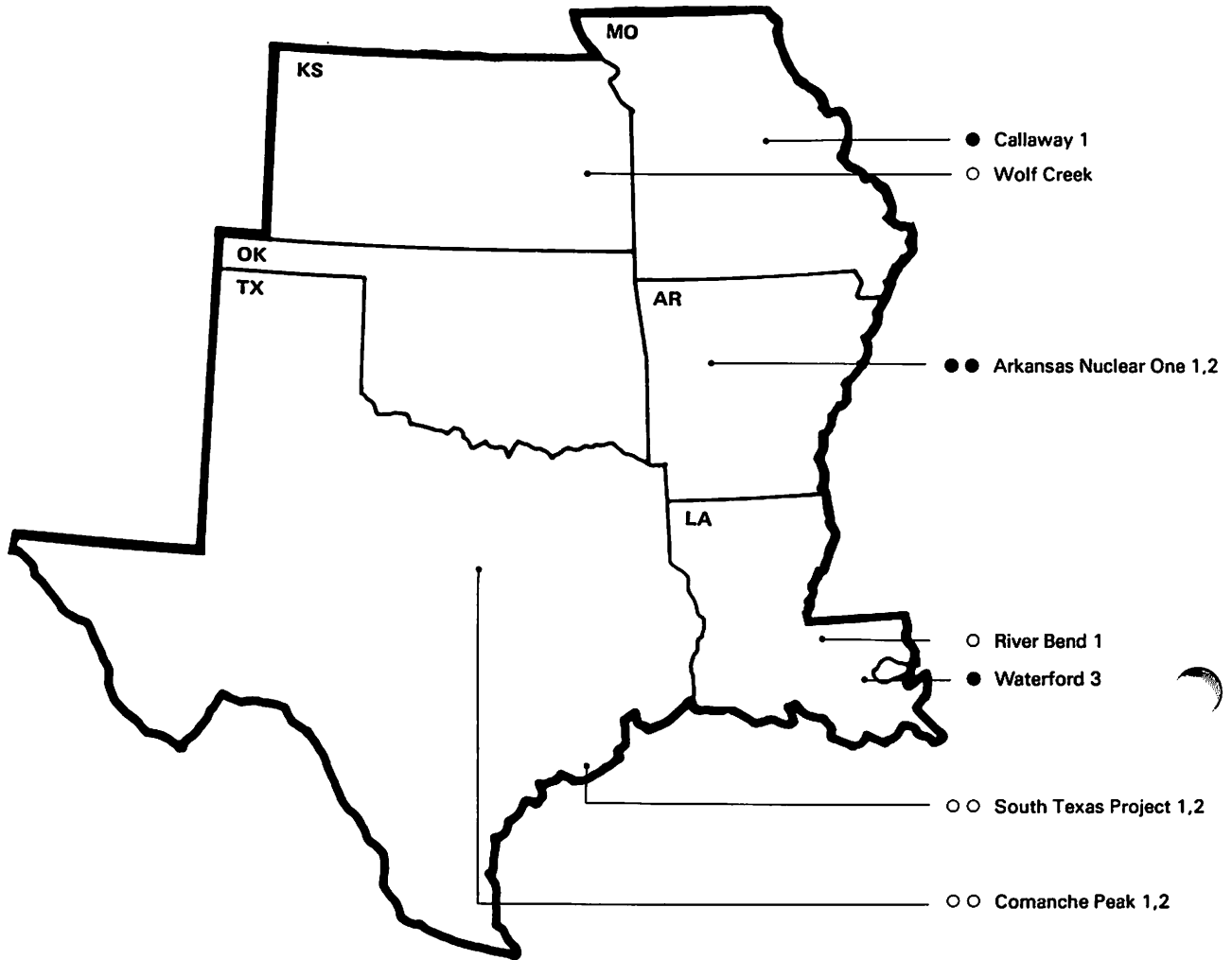
WEST



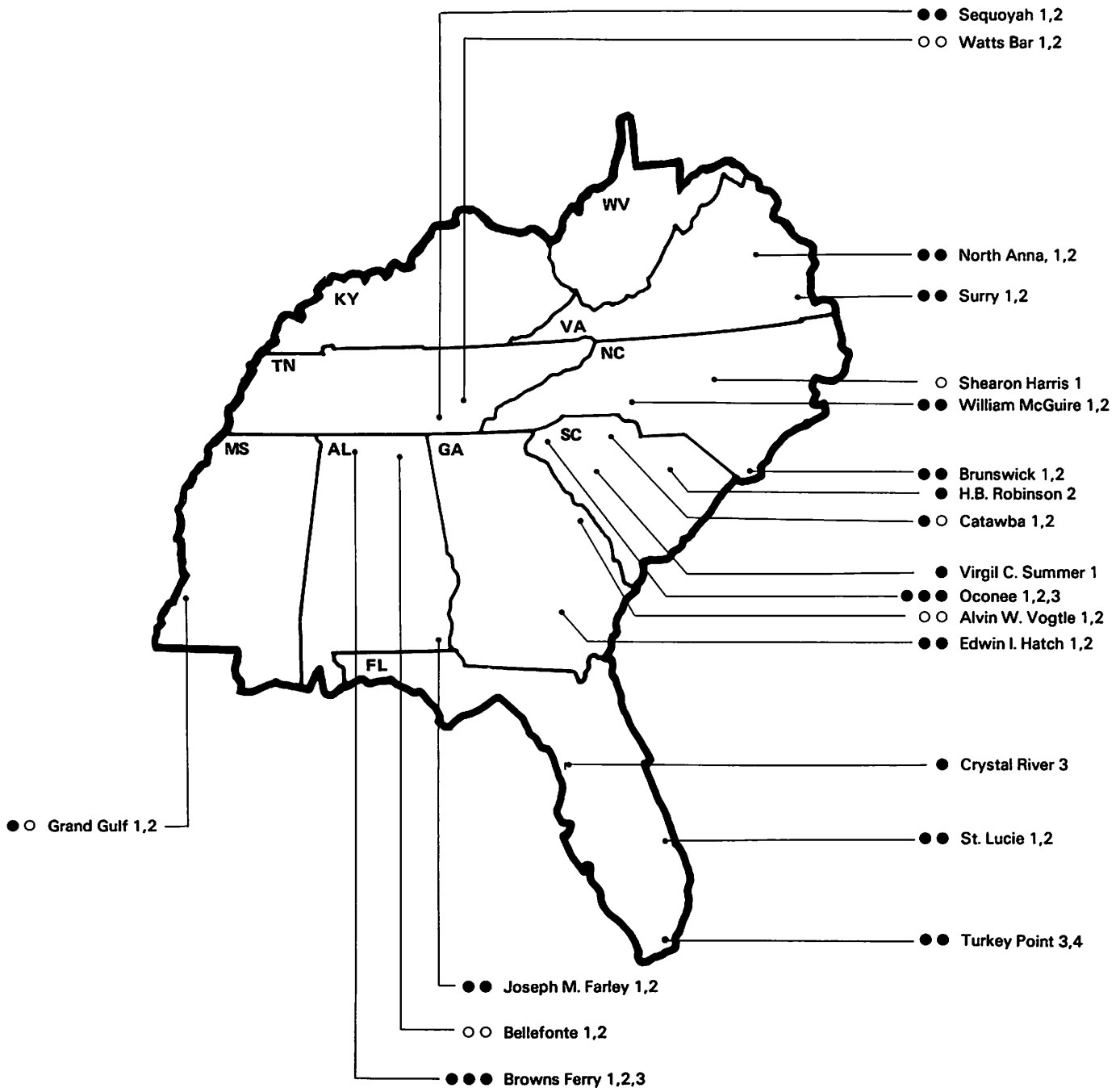
NORTH CENTRAL



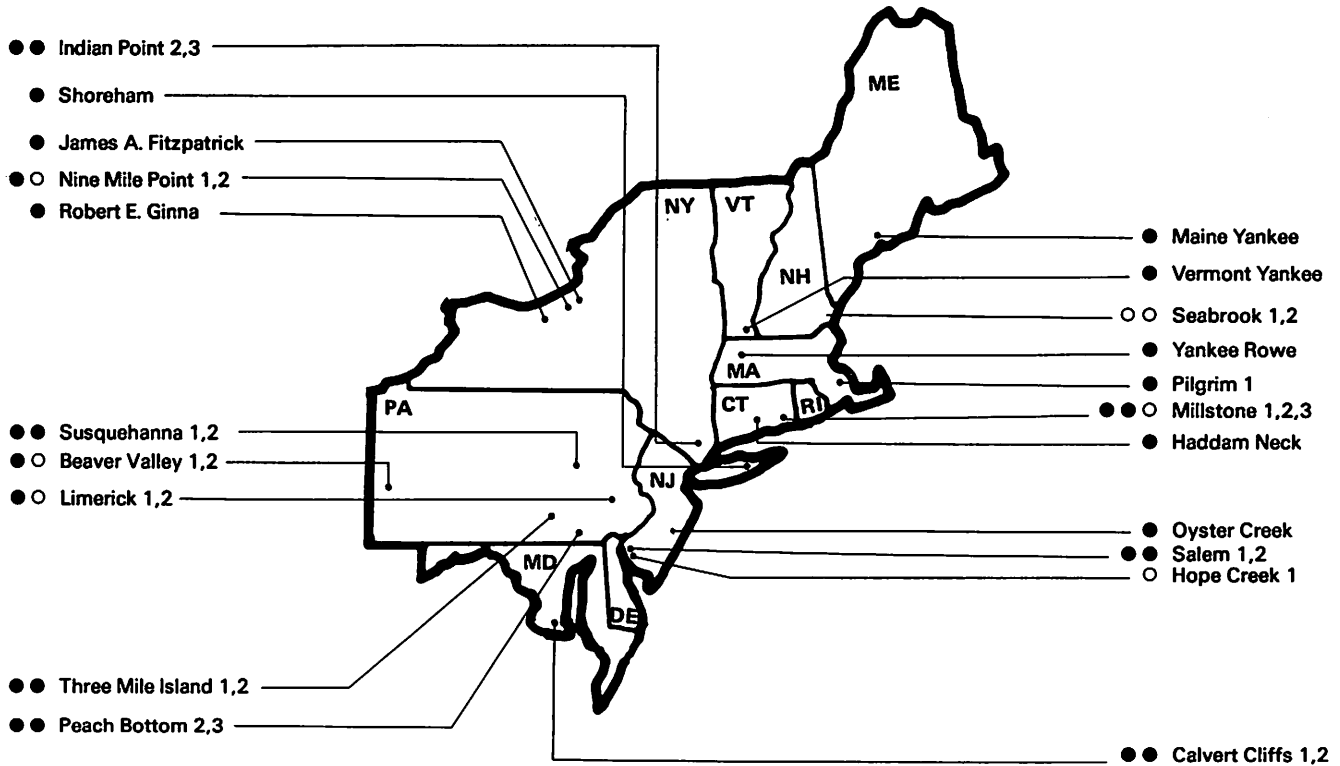
SOUTH CENTRAL



SOUTH EAST



NORTH EAST



NUCLEAR POWER PLANTS IN THE UNITED STATES

January 1, 1985

This state-by-state reactor listing includes units on order, under construction and operating. Reactor status is indicated by: O — order; C — construction permit and bold-face type — operating license.

Reactor types listed are: Pressurized Water Reactor — PWR; Boiling Water Reactor — BWR; High Temperature Gas-cooled Reactor — HTGR and Graphite Reactor — GR.

The reactor manufacturers are: Westinghouse — W; General Electric — GE; Babcock & Wilcox — B&W; Combustion Engineering — CE; General Atomic — GA and Allis-Chalmers — AC.

A company having a minimum of a 1.5% share in a jointly-owned reactor is listed with percentage of ownership next to the company name. Where only one name is given, with no percentage, the company owns 100% of the unit.

The operating company of a reactor is listed first where more than one company name is shown, unless indicated otherwise. Where only one name is given, that company operates the unit.

The net megawatt electric (MWe) capacity listed for each reactor is the design electrical rating.

An asterisk (*) indicates that the estimated operating date of the unit has been delayed indefinitely.

For further information, contact Ellen Nunnelee, Economist, AIF, (301) 654-9260.

State, Utility and Ownership	Unit, Status and % Construction Completed	Location	Net MWe	Type/Mfr.	Commercial Operation
ALABAMA					
Alabama Power Co.	Joseph M. Farley 1	Houston County	860	PWR/W	12/77
Alabama Power Co.	Joseph M. Farley 2	Houston County	860	PWR/W	7/81
Tennessee Valley Authority	Browns Ferry 1	Decatur	1,067	BWR/GE	8/74
Tennessee Valley Authority	Browns Ferry 2	Decatur	1,067	BWR/GE	3/75
Tennessee Valley Authority	Browns Ferry 3	Decatur	1,067	BWR/GE	3/77
Tennessee Valley Authority	Bellefonte 1 (C-79%)	Scottsboro	1,213	PWR/B&W	4/89
Tennessee Valley Authority	Bellefonte 2 (C-57%)	Scottsboro	1,213	PWR/B&W	4/91
ARIZONA					
Arizona Public Service Co. 29.1% (Salt River Project 17.5%, El Paso Electric Co. 15.8%, Public Service Co. of New Mexico 10.2%, Southern California Edison Co. 15.8%, Southern California Public Power Authority 5.9%, Los Angeles Dept. of Water & Power 5.7%)	Palo Verde 1 (C-99%)	Wintersburg	1,270	PWR/CE	12/85 ^a
Arizona Public Service Co. 29.1% (Salt River Project 17.5%, El Paso Electric Co. 15.8%, Public Service Co. of New Mexico 10.2%, Southern California Edison Co. 15.8%, Southern California Public Power Authority 5.9%, Los Angeles Dept. of Water & Power 5.7%)	Palo Verde 2 (C-99%)	Wintersburg	1,270	PWR/CE	6/86
Arizona Public Service Co. 29.1% (Salt River Project 17.5%, El Paso Electric Co. 15.8%, Public Service Co. of New Mexico 10.2%, Southern California Edison Co. 15.8%, Southern California Public Power Authority 5.9%, Los Angeles Dept. of Water & Power 5.7%)	Palo Verde 3 (C-93%)	Wintersburg	1,270	PWR/CE	6/87
ARKANSAS					
Arkansas Power & Light Co.	Arkansas Nuclear One — 1	Russellville	850	PWR/B&W	12/74
Arkansas Power & Light Co.	Arkansas Nuclear One — 2	Russellville	912	PWR/CE	3/80

^aReceived low power operating license 12/31/84.

State, Utility and Ownership	Unit, Status and % Construction Completed	Location	Net MWe	Type/Mfr.	Commercial Operation
CALIFORNIA					
Pacific Gas and Electric Co.	Diablo Canyon 1	Avila Beach	1,084	PWR/W	2/85 ^a
Pacific Gas and Electric Co.	Diablo Canyon 2 (C-99%)	Avila Beach	1,106	PWR/W	8/85
Sacramento Municipal Utility District	Rancho Seco 1	Clay Station	918	PWR/B&W	4/75
Southern California Edison Co. 80% (San Diego Gas and Electric Co. 20%)	San Onofre 1	San Clemente	436	PWR/W	1/68
Southern California Edison Co. 75% (San Diego Gas and Electric Co. 20%, Riverside Public Utilities 1.8%, Anaheim Electrical Division 3.2%)	San Onofre 2	San Clemente	1,070	PWR/CE	8/83
Southern California Edison Co. 75% (San Diego Gas and Electric Co. 20%, Riverside Public Utilities 1.8%, Anaheim Electrical Division 3.2%)	San Onofre 3	San Clemente	1,080	PWR/CE	4/84
COLORADO					
Public Service Company of Colorado	Fort St. Vrain	Platteville	330	HTGR/GA	1/79
CONNECTICUT					
Connecticut Yankee Atomic Power Co. [Consisting of: Northeast Utilities (Connecticut Light and Power Co. 34.5%, Western Massachusetts Electric Co. 9.5%), New England Power Co. 15%, Boston Edison Co. 9.5%, United Illuminating Co. 9.5%, Central Maine Power Co. 6%, Public Service Co. of New Hampshire 5%, Commonwealth Energy System 4.5%, Montaup Electric Co. 4.5%, Central Vermont Public Service Corp. 2%]	Haddam Neck	Haddam Neck	582	PWR/W	1/68
Northeast Utilities (Connecticut Light and Power Co. 81%, Western Massachusetts Electric Co. 19%)	Millstone 1	Waterford	660	BWR/GE	12/70
Northeast Utilities (Connecticut Light and Power Co. 81%, Western Massachusetts Electric Co. 19%)	Millstone 2	Waterford	870	PWR/CE	12/75
Northeast Utilities [(Connecticut Light and Power Co. 52.6%, Western Massachusetts Electric Co. 12.2%), New England Power Co. 12.2%, Montaup Electric Co. 4%, Public Service Co. of New Hampshire 2.8%, United Illuminating Co. 3.7%, Massachusetts Municipal Wholesale Electric Co. 4.8%, Central Maine Power Co. 2.5%, Central Vermont Public Service Corp. 1.7%, Others 3.5%]	Millstone 3 (C-94%)	Waterford	1,150	PWR/W	5/86
FLORIDA					
Florida Power Corp. 90% (Seminole Electric Coop. 1.7%, Orlando Utilities Commission 1.6%, Others 6.7%)	Crystal River 3	Red Level	880	PWR/B&W	3/77
Florida Power & Light Co.	Turkey Point 3	Turkey Point	666	PWR/W	12/72
Florida Power & Light Co.	Turkey Point 4	Turkey Point	666	PWR/W	9/73
Florida Power & Light Co.	St. Lucie 1	St. Lucie County	822	PWR/CE	12/76
Florida Power & Light Co. 85.1% (Florida Municipal Power Agency 8.8%, Orlando Utilities Commission 6.1%)	St. Lucie 2	St. Lucie County	786	PWR/CE	8/83

^aReceived full power operating license 11/2/84.

State, Utility and Ownership	Unit, Status and % Construction Completed	Location	Net MWe	Type/Mfr.	Commercial Operation
GEORGIA					
Georgia Power Co. 50.1% (Oglethorpe Power Corp. 30%, Municipal Electric Authority of Georgia 17.7%, City of Dalton 2.2%)	Edwin I. Hatch 1	Baxley	786	BWR/GE	12/75
Georgia Power Co. 50.1% (Oglethorpe Power Corp. 30%, Municipal Electric Authority of Georgia 17.7%, City of Dalton 2.2%)	Edwin I. Hatch 2	Baxley	790	BWR/GE	9/79
Georgia Power Co. 45.7% (Oglethorpe Power Corp. 30%, Municipal Electric Authority of Georgia 22.7%, City of Dalton 1.6%)	Alvin W. Vogtle 1 (C-73%)	Waynesboro	1,100	PWR/W	3/87
Georgia Power Co. 45.7% (Oglethorpe Power Corp. 30%, Municipal Electric Authority of Georgia 22.7%, City of Dalton 1.6%)	Alvin W. Vogtle 2 (C-50%)	Waynesboro	1,100	PWR/W	9/88
ILLINOIS					
Commonwealth Edison Co.	Dresden 2	Morris	794	BWR/GE	8/70
Commonwealth Edison Co.	Dresden 3	Morris	794	BWR/GE	10/71
Commonwealth Edison Co.	Zion 1	Zion	1,040	PWR/W	10/73
Commonwealth Edison Co.	Zion 2	Zion	1,040	PWR/W	9/74
Commonwealth Edison Co. 75% (Iowa-Illinois Gas and Electric Co. 25%)	Quad Cities 1	Cordova	789	BWR/GE	8/72
Commonwealth Edison Co. 75% (Iowa-Illinois Gas and Electric Co. 25%)	Quad Cities 2	Cordova	789	BWR/GE	10/72
Commonwealth Edison Co.	LaSalle 1	Seneca	1,078	BWR/GE	1/84
Commonwealth Edison Co.	LaSalle 2	Seneca	1,078	BWR/GE	10/84
Commonwealth Edison Co.	Braidwood 1 (C-80%)	Braidwood	1,120	PWR/W	4/86
Commonwealth Edison Co.	Braidwood 2 (C-54%)	Braidwood	1,120	PWR/W	4/87
Commonwealth Edison Co.	Byron 1	Byron	1,120	PWR/W	1/85 ^a
Commonwealth Edison Co.	Byron 2 (C-67%)	Byron	1,120	PWR/W	4/86
Commonwealth Edison Co. 75% (Interstate Power Co. 10%, Iowa-Illinois Gas and Electric Co. 15%)	Carroll County 1 (O)	Savanna	1,120	PWR/W	0/2000
Commonwealth Edison Co. 75% (Interstate Power Co. 10%, Iowa-Illinois Gas and Electric Co. 15%)	Carroll County 2 (O)	Savanna	1,120	PWR/W	0/2001
Illinois Power Co. 80% (Soyland Power Coop. 10.5%, Western Illinois Power Coop. 9.5%)	Clinton 1 (C-88%)	Clinton	950	BWR/GE	11/86
IOWA					
Iowa Electric Light and Power Co. 70% (Central Iowa Power Coop. 20%, Corn Belt Power Coop. 10%)	Duane Arnold	Palo	538	BWR/GE	2/75
KANSAS					
Kansas Gas and Electric Co. 47% (Kansas City Power & Light Co. 4.7%, Kansas Electric Power Coop. 6%)	Wolf Creek (C-99%)	Burlington	1,150	PWR/W	6/85
LOUISIANA					
Gulf States Utilities Co. 70% (Cajun Electric Power Coop. 30%)	River Bend 1 (C-95%)	St. Francisville	940	BWR/GE	12/85
Louisiana Power & Light Co.	Waterford 3	Taft	1,104	PWR/CE	3/85 ^b

^aReceived low power operating license 10/31/84.

^bReceived low power operating license 12/18/84.

State, Utility and Ownership	Unit, Status and % Construction Completed	Location	Net MWe	Type/Mfr.	Commercial Operation
MAINE					
Maine Yankee Atomic Power Co. [Consisting of: Central Maine Power Co. 38%, New England Power Co. 20%, Northeast Utilities (Connecticut Light and Power Co. 8%, Hartford Electric Light Co. 4%, Western Massachusetts Electric Co. 3%), Bangor Hydro-Electric Co. 7%, Maine Public Service Co. 5%, Public Service Co. of New Hampshire 5%, Commonwealth Electric Co. 4%, Montaup Electric Co. 4%, Central Vermont Public Service Corp. 2%]	Maine Yankee	Wiscasset	825	PWR/CE	12/72
MARYLAND					
Baltimore Gas and Electric Co.	Calvert Cliffs 1	Lusby	845	PWR/CE	5/75
Baltimore Gas and Electric Co.	Calvert Cliffs 2	Lusby	845	PWR/CE	4/77
MASSACHUSETTS					
Boston Edison Co. Yankee Atomic Electric Co. [Consisting of: Northeast Utilities (Connecticut Light and Power Co. 15%, Hartford Electric Light Co. 9.5%, Western Massachusetts Electric Co. 7%), New England Power Co. 30%, Boston Edison Co. 9.5%, Central Maine Power Co. 9.5%, Public Service Co. of New Hampshire 7%, Montaup Electric Co. 4.5%, Central Vermont Public Service Corp. 3.5%, Commonwealth Electric Co. 2.5%, Cambridge Electric Light Co. 2%]	Pilgrim 1 Yankee	Plymouth Rowe	670 175	BWR/GE PWR/W	12/72 7/61
MICHIGAN					
Consumers Power Co.	Big Rock Point	Charlevoix	63	BWR/GE	3/63
Consumers Power Co.	Palisades	South Haven	757	PWR/CE	12/71
Consumers Power Co.	Midland 1 (C-85%)	Midland	425	PWR/B&W	•
Consumers Power Co.	Midland 2 (C-85%)	Midland	808	PWR/B&W	•
Detroit Edison Co. 83% (Wolverine Power Supply, Inc. 17%)	Fermi 2 (C-99%)	Lagoona Beach	1,100	BWR/GE	6/85
Indiana & Michigan Electric Co. Indiana & Michigan Electric Co.	Donald C. Cook 1 Donald C. Cook 2	Bridgman Bridgman	1,030 1,100	PWR/W PWR/W	8/75 7/78
MINNESOTA					
Northern States Power Co.	Monticello	Monticello	545	BWR/GE	6/71
Northern States Power Co.	Prairie Island 1	Red Wing	530	PWR/W	12/73
Northern States Power Co.	Prairie Island 2	Red Wing	530	PWR/W	12/74
MISSISSIPPI					
Mississippi Power & Light Co. Mississippi Power & Light Co.	Grand Gulf 1 Grand Gulf 2 (C-33%)	Port Gibson Port Gibson	1,250 1,250	BWR/GE BWR/GE	3/85 ^a 0/90
MISSOURI					
Union Electric Co.	Callaway 1	Callaway County	1,150	PWR/W	12/84 ^b
NEBRASKA					
Nebraska Public Power District Omaha Public Power District	Cooper Fort Calhoun 1	Brownville Fort Calhoun	778 486	BWR/GE PWR/CE	7/74 9/73

^aReceived full power operating license 8/31/84.

^bReceived full power operating license 10/18/84. Commercial operation date is tentative.

State, Utility and Ownership	Unit, Status and % Construction Completed	Location	Net MWe	Type/Mfr.	Commercial Operation
NEW HAMPSHIRE					
Public Service Co. of New Hampshire 35.6% (United Illuminating Co. 17.5%, Massachusetts Municipal Wholesale Electric Co. 11.6%, New England Power Co. 9.9%, Central Maine Power Co. 6%, Connecticut Light and Power Co. 4%, Canal Electric Co. 3.5%, Montaup Electric Co. 2.9%, Bangor Hydro-Electric Co. 2.2%, New Hampshire Electric Coop. 2.2%, Central Vermont Public Service Corp. 1.6%, Maine Public Service Co. 1.5%, Others 1.5%)	Seabrook 1 (C-83%)	Seabrook	1,150	PWR/W	8/86
Public Service Co. of New Hampshire 35.6% (United Illuminating Co. 17.5%, Massachusetts Municipal Wholesale Electric Co. 11.6%, New England Power Co. 9.9%, Central Maine Power Co. 6%, Connecticut Light and Power Co. 4%, Canal Electric Co. 3.5%, Montaup Electric Co. 2.9%, Bangor Hydro-Electric Co. 2.2%, New Hampshire Electric Coop. 2.2%, Central Vermont Public Service Corp. 1.6%, Maine Public Service Co. 1.5%, Others 1.5%)	Seabrook 2 (C-25%)	Seabrook	1,150	PWR/W	*
NEW JERSEY					
Jersey Central Power & Light Co. Public Service Electric and Gas Co. 42.6% (Philadelphia Electric Co. 42.6%, Atlantic City Electric Co. 7.4%, Delmarva Power & Light Co. 7.4%)	Oyster Creek Salem 1	Lacey Township Lower Alloways Township	650 1,090	BWR/GE PWR/W	12/69 6/77
Public Service Electric and Gas Co. 42.6% (Philadelphia Electric Co. 42.6%, Atlantic City Electric Co. 7.4%, Delmarva Power & Light Co. 7.4%)	Salem 2	Lower Alloways Township	1,115	PWR/W	10/81
Public Service Electric and Gas Co. 95% (Atlantic City Electric Co. 5%)	Hope Creek 1 (C-92%)	Lower Alloways Township	1,067	BWR/GE	12/86
NEW YORK					
Consolidated Edison Co. of New York, Inc. Power Authority of the State of New York Power Authority of the State of New York Long Island Lighting Co. Niagara Mohawk Power Corp. Niagara Mohawk Power Corp. 41% (Long Island Lighting Co. 18%, New York State Electric & Gas Corp. 18%, Rochester Gas and Electric Co. 14%, Central Hudson Gas & Electric Corp. 9%)	Indian Point 2 Indian Point 3 James A. FitzPatrick Shoreham Nine Mile Point 1 Nine Mile Point 2 (C-82%)	Buchanan Buchanan Scriba Brookhaven Oswego Oswego	873 965 821 809 620 1,080	PWR/W PWR/W BWR/GE BWR/GE BWR/GE BWR/GE	8/73 8/76 7/75 10/85 ^a 12/69 10/86
Rochester Gas and Electric Corp.	Robert E. Ginna	Rochester	470	PWR/W	7/70
NORTH CAROLINA					
Carolina Power & Light Co. 81.7% (North Carolina Eastern Municipal Power Agency 18.3%)	Brunswick 1	Southport	821	BWR/GE	3/77
Carolina Power & Light Co. 81.7% (North Carolina Eastern Municipal Power Agency 18.3%)	Brunswick 2	Southport	821	BWR/GE	11/75

^aReceived limited low power operating license 12/7/84.

State, Utility and Ownership	Unit, Status and % Construction Completed	Location	Net MWe	Type/Mfr.	Commercial Operation
North Carolina (continued)					
Carolina Power & Light Co. 83.8% (North Carolina Eastern Municipal Power Agency 16.2%)	Shearon Harris 1 (C-89%)	New Hill	900	PWR/W	9/86
Duke Power Co.	William McGuire 1	Cowans Ford Dam	1,180	PWR/W	12/81
Duke Power Co.	William McGuire 2	Cowans Ford Dam	1,180	PWR/W	3/84
OHIO					
Central Area Power Coordination Group (CAPCO) [Cleveland Electric Illuminating Co. 31.1% (operating utility), Ohio Edison Co. 30.0%, Toledo Edison Co. 19.9%, Duquesne Light Co. 13.8%, Pennsylvania Power Co. 5.2%]	Perry 1 (C-96%)	North Perry	1,205	BWR/GE	12/85
Central Area Power Coordination Group (CAPCO) [Cleveland Electric Illuminating Co. 31.1% (operating utility), Ohio Edison Co. 30.0%, Toledo Edison Co. 19.9%, Duquesne Light Co. 13.8%, Pennsylvania Power Co. 5.2%]	Perry 2 (C-44%)	North Perry	1,205	BWR/GE	0/00 ^a
Central Area Power Coordination Group (CAPCO) [Toledo Edison Co. 48.6% (operating utility), Cleveland Electric Illuminating Co. 51.4%]	Davis-Besse 1	Oak Harbor	890	PWR/B&W	11/77
OREGON					
Portland General Electric Co. 67.5% (Eugene Water & Electric Board 30%, Pacific Power & Light Co. 2.5%)	Trojan	Rainier	1,130	PWR/W	5/76
PENNSYLVANIA					
Central Area Power Coordination Group (CAPCO) [Duquesne Light Co. 47.5% (operating utility), Ohio Edison Co. 35%, Pennsylvania Power Co. 17.5%]	Beaver Valley 1	Shippingport	833	PWR/W	10/76
Central Area Power Coordination Group (CAPCO) [Duquesne Light Co. 13.7% (operating utility), Ohio Edison Co. 41.9%, Cleveland Electric Illuminating Co. 24.5%, Toledo Edison Co. 19.9%]	Beaver Valley 2 (C-81%)	Shippingport	836	PWR/W	12/86
GPU Nuclear Corp. (Metropolitan Edison Co. 50%, Jersey Central Power & Light Co. 25%, Pennsylvania Electric Co. 25%)	Three Mile Island 1	Londonderry Township	819	PWR/B&W	9/74 ^b
GPU Nuclear Corp. (Metropolitan Edison Co. 50% Jersey Central Power & Light Co. 25%, Pennsylvania Electric Co. 25%)	Three Mile Island 2	Londonderry Township	906	PWR/B&W	12/78 ^c
Pennsylvania Power & Light Co. 90% (Allegheny Electric Coop. 10%)	Susquehanna 1	Berwick	1,050	BWR/GE	6/83
Pennsylvania Power & Light Co. 90% (Allegheny Electric Coop. 10%)	Susquehanna 2	Berwick	1,050	BWR/GE	1/85 ^d
Philadelphia Electric Co. 42.5% (Public Service Electric and Gas Co. 42.5%, Atlantic City Electric Co. 7.5%, Delmarva Power & Light Co. 7.5%)	Peach Bottom 2	Peach Bottom Township	1,065	BWR/GE	7/74
Philadelphia Electric Co. 42.5% (Public Service Electric and Gas Co., 42.5%, Atlantic City Electric Co. 7.5%, Delmarva Power & Light Co. 7.5%)	Peach Bottom 3	Peach Bottom Township	1,065	BWR/GE	12/74
Philadelphia Electric Co.	Limerick 1	Limerick Township	1,055	BWR/GE	9/85 ^e
Philadelphia Electric Co.	Limerick 2 (C-30%)	Limerick Township	1,055	BWR/GE	0/90

^aConstruction reduced to minimum work level April 2, 1984. Operation date is uncertain.

^bShut down 3/28/79 by NRC order pending completion of re-start proceedings.

^cShut down since 3/28/79 accident.

^dReceived full power operating license 6/27/84.

^eReceived low power operating license 10/26/84.

State, Utility and Ownership	Unit, Status and % Construction Completed	Location	Net MWe	Type/Mfr.	Commercial Operation
SOUTH CAROLINA					
Carolina Power & Light Co.	H.B. Robinson 2	Hartsville	665	PWR/W	3/71
Duke Power Co.	Oconee 1	Lake Keowee	860	PWR/B&W	7/73
Duke Power Co.	Oconee 2	Lake Keowee	860	PWR/B&W	9/74
Duke Power Co.	Oconee 3	Lake Keowee	860	PWR/B&W	12/74
Duke Power Co. 25% (North Carolina Electric Membership Corp. 56.2%, Saluda River Electric Coop. 18.8%)	Catawba 1	York County	1,145	PWR/W	6/85 ^a
North Carolina Municipal Power Agency No. 1 75% (Piedmont Municipal Power Agency 25%)	Catawba 2 (C-84%)	York County	1,145	PWR/W	6/87
South Carolina Electric & Gas Co. 67% (South Carolina Public Service Authority 33%)	Summer 1	Jenkinsville	900	PWR/W	1/84
TENNESSEE					
Tennessee Valley Authority	Sequoyah 1	Daisy	1,148	PWR/W	7/81
Tennessee Valley Authority	Sequoyah 2	Daisy	1,148	PWR/W	6/82
Tennessee Valley Authority	Watts Bar 1 (C-96%)	Spring City	1,177	PWR/W	10/85
Tennessee Valley Authority	Watts Bar 2 (C-61%)	Spring City	1,177	PWR/W	10/86
TEXAS					
South Texas Project (Houston Lighting & Power Co. 30.8% (project manager), City Public Service Board of San Antonio 28%, Central Power and Light Co. 25.2%, City of Austin 16%)	South Texas Project 1 (C-70%)	Matagorda County	1,250	PWR/W	6/87
South Texas Project (Houston Lighting & Power Co. 30.8% (project manager), City Public Service Board of San Antonio 28%, Central Power and Light Co. 25.2%, City of Austin 16%)	South Texas Project 2 (C-42%)	Matagorda County	1,250	PWR/W	6/89
Texas Utilities Electric Co. (Dallas Power & Light Co. 18.3%, Texas Electric Service Co. 35.8%, Texas Power & Light Co. 33.7%, Texas Municipal Power Agency 6.2%, Brazos Electric Power Coop. 3.8%, Tex-La Electric Coop. of Texas 2.2%)	Comanche Peak 1 (C-99%)	Somervell County	1,150	PWR/W	0/85
Texas Utilities Electric Co. (Dallas Power & Light Co. 18.3%, Texas Electric Service Co. 35.8%, Texas Power & Light Co. 33.7%, Texas Municipal Power Agency 6.2%, Brazos Electric Power Coop. 3.8%, Tex-La Electric Coop. of Texas 2.2%)	Comanche Peak 2 (C-65%)	Somervell County	1,150	PWR/W	0/86
VERMONT					
Vermont Yankee Nuclear Power Corp. (Consisting of: Central Vermont Public Service Corp. 31.3%, Green Mountain Power Corp. 17.9%, New England Power Co. 20%, Northeast Utilities (Connecticut Light and Power Co. 6%, Hartford Electric Light Co. 3.5%, Western Massachusetts Electric Co. 2.5%), Central Maine Power Co. 4%, Public Service Co. of New Hampshire 4%, Burlington Electric Light Co. 3.6%, Cambridge Electric Light Co. 2.5%, Montaup Electric Co. 2.5%, Others 2.2%)	Vermont Yankee	Vernon	514	BWR/GE	11/72

^aReceived low power operating license 12/6/84.

State, Utility and Ownership	Unit, Status and % Construction Completed	Location	Net MWe	Type/Mfr.	Commercial Operation
VIRGINIA					
Virginia Electric and Power Co.	Surry 1	Surry	775	PWR/W	12/72
Virginia Electric and Power Co.	Surry 2	Surry	775	PWR/W	5/73
Virginia Electric and Power Co. 88.4% (Old Dominion Electric Coop. 11.6%)	North Anna 1	Mineral	890	PWR/W	6/78
Virginia Electric and Power Co. 88.4% (Old Dominion Electric Coop. 11.6%)	North Anna 2	Mineral	890	PWR/W	12/80
WASHINGTON					
U.S. Department of Energy (Steam purchased by Washington Public Power Supply System)	Hanford — N	Richland	860	GR/GE	9/66
Washington Public Power Supply System	WPPSS 1 (C-63%)	Richland	1,250	PWR/B&W	*
Washington Public Power Supply System	WPPSS 2	Richland	1,100	BWR/GE	12/84
Washington Public Power Supply System 70%, (Pacific Power & Light Co. 10%, Portland General Electric Co. 10%, Puget Sound Power and Light Co. 5%, Washington Water Power Co. 5%)	WPPSS 3 (C-75%)	Satsop	1,240	PWR/CE	*
WISCONSIN					
Dairyland Power Coop.	LaCrosse	Genoa	50	BWR/AC	11/69
Wisconsin Electric Power Co.	Point Beach 1	Two Creeks	497	PWR/W	12/70
Wisconsin Electric Power Co.	Point Beach 2	Two Creeks	497	PWR/W	10/72
Wisconsin Public Service Corp. 41.2% (Wisconsin Power and Light Co. 41%, Madison Gas and Electric Co. 17.8%)	Kewaunee	Carlton Township	535	PWR/W	6/74

LOW POWER OPERATING LICENSES ISSUED IN 1984

Unit and Status	Location	Net MWe	Type/Mfr.	Utility	Projected Commercial Operation
Byron 1	Byron, IL	1,120	PWR/W	Commonwealth Edison	1/85
Callaway 1	Callaway County, MO	1,150	PWR/W	Union Electric	12/84
Catawba 1	York County, SC	1,145	PWR/W	Duke Power	6/85
Limerick 1	Limerick Township, PA	1,055	BWR/GE	Philadelphia Electric	9/85
Shoreham	Brookhaven, NY	809	BWR/GE	Long Island Lighting	10/85
Susquehanna 2	Berwick, PA	1,050	BWR/GE	Pennsylvania Power & Light	1/85
Waterford 3	Taft, LA	1,104	PWR/CE	Louisiana Power & Light	3/85
Palo Verde 1	Wintersburg, AZ	1,270	PWR/CE	Arizona Public Service	12/85

Total: 8 reactors = 8,740 MWe

COMMERCIAL OPERATION ACHIEVED IN 1984

Unit and Status	Location	Net MWe	Type/Mfr.	Utility	Commercial Operation
LaSalle 1	Seneca, IL	1,078	BWR/GE	Commonwealth Edison	1/84
LaSalle 2	Seneca, IL	1,078	BWR/GE	Commonwealth Edison	10/84
McGuire 2	Cowens Ford Dam, NC	1,180	PWR/W	Duke Power	3/84
San Onofre 3	San Clemente, CA	1,080	PWR/CE	Southern California Edison	4/84
Summer 1	Jenkinsville, SC	900	PWR/W	South Carolina Electric & Gas	1/84
WPPSS 2	Richland, WA	1,100	BWR/GE	Washington Public Power Supply System	12/84

Total: 6 reactors = 6,416 MWe

REACTOR RETIRED IN 1984

Unit	Location	Net MWe	Type/Mfr.	Utility	Retirement Date
Dresden 1	Morris, IL	207	BWR/GE	Commonwealth Edison	8/84

PROJECTS DELAYED IN 1984

Unit and % of Construction Completed	Location	Net MWe	Type/Mfr.	Utility	Delayed ^a		Months
					From	To	
Beaver Valley 2 (81%)	Shippingport, PA	836	PWR/W	Ohio Edison	5/86	12/86	7
Bellefonte 1 (79%)	Scottsboro, AL	1,213	PWR/B&W	Tennessee Valley Authority	4/88	4/89	12
Bellefonte 2 (57%)	Scottsboro, AL	1,213	PWR/B&W	Tennessee Valley Authority	4/90	4/91	1
Braidwood 1 (81%)	Braidwood, IL	1,120	PWR/W	Commonwealth Edison	10/85	4/86	6
Braidwood 2 (54%)	Braidwood, IL	1,120	PWR/W	Commonwealth Edison	10/86	4/87	6
Byron 1 (100%)	Byron, IL	1,120	PWR/W	Commonwealth Edison	9/84	1/85	4
Byron 2 (67%)	Byron, IL	1,120	PWR/W	Commonwealth Edison	11/85	4/86	5
Diablo Canyon 1 (100%)	Avila Beach, CA	1,084	PWR/W	Pacific Gas & Electric	3/84	2/85	11
Fermi 2 (99%)	Lagoona Beach, MI	1,100	BWR/GE	Detroit Edison	12/84	6/85	6
Grand Gulf 1 (100%)	Port Gibson, MS	1,250	BWR/GE	Mississippi Power & Light	7/84	3/85	8
LaSalle 2 (100%)	Seneca, IL	1,078	BWR/GE	Commonwealth Edison	4/84	10/84	6
Limerick 1 (100%)	Limerick Township, PA	1,055	BWR/GE	Philadelphia Electric	4/85	9/85	5
Midland 1 (85%)	Midland, MI	425	PWR/B&W	Consumers Power	8/85	*	—
Midland 2 (85%)	Midland, MI	808	PWR/B&W	Consumers Power	2/85	*	—
Palo Verde 1 (99%)	Wintersburg, AZ	1,270	PWR/CE	Arizona Public Service	12/84	12/85	12
Palo Verde 2 (99%)	Wintersburg, AZ	1,270	PWR/CE	Arizona Public Service	9/85	6/86	9
Palo Verde 3 (99%)	Wintersburg, AZ	1,270	PWR/CE	Arizona Public Service	12/86	6/87	6
Perry 1 (96%)	North Perry, OH	1,205	BWR/GE	Cleveland Electric Illuminating	5/85	0/00	—
San Onofre 2 (100%)	San Clemente, CA	1,080	PWR/CE	Southern California Edison	1/84	4/84	3
Seabrook 1 (83%)	Seabrook, NH	1,150	PWR/W	Public Service of New Hampshire	12/84	8/86	20
Seabrook 2 (25%)	Seabrook, NH	1,150	PWR/W	Public Service of New Hampshire	7/87	*	—
Shearon Harris 1 (89%)	New Hill, NC	900	PWR/W	Carolina Power & Light	3/86	9/86	6
Shoreham (100%)	Brookhaven, NY	809	BWR/GE	Long Island Lighting	1/85	10/85	9
Susquehanna 2 (100%)	Berwick, PA	1,050	BWR/GE	Pennsylvania Power & Light	11/84	1/85	2
Waterford 3 (100%)	Taft, LA	1,104	PWR/CE	Louisiana Power & Light	12/84	3/85	3
Watts Bar 1 (96%)	Spring City, TN	1,177	PWR/W	Tennessee Valley Authority	11/84	10/85	11
Watts Bar 2 (61%)	Spring City, TN	1,177	PWR/W	Tennessee Valley Authority	4/86	10/86	6
WPPSS 2 (100%)	Richland, WA	1,100	BWR/GE	Washington Public Power Supply System	7/84	12/84	5
Wolf Creek (99%)	Burlington, KS	1,150	PWR/W	Kansas Gas & Electric	3/85	6/85	3

Total: 29 reactors = 31,404 MWe

*Indefinitely deferred.

^aProjected date of commercial operation.

REACTORS INDEFINITELY DELAYED AS OF DECEMBER 31, 1984

Unit and % of Construction Completed	Location	Net MWe	Type/Mfr.	Utility	Year Indefinitely Delayed
Midland 1 (85%)	Midland, MI	425	PWR/B&W	Consumers Power	1984
Midland 2 (85%)	Midland, MI	808	PWR/B&W	Consumers Power	1984
Seabrook 2 (25%)	Seabrook, NH	1,150	PWR/W	Public Service of New Hampshire	1984
WPPSS 1 (63%)	Richland, WA	1,250	PWR/B&W	Washington Public Power Supply System	1982
WPPSS 3 (75%)	Richland, WA	1,240	PWR/CE	Washington Public Power Supply System	1983

Total: 9 reactors = 4,873 MWe

REACTORS CANCELLED IN 1984

Unit and % Construction Completed	Location	Net MWe	Type/Mfr.	Utility
River Bend 2 (0%)	St. Francisville, LA	934	BWR/GE	Gulf States Utilities
Zimmer 1 (97%)	Moscow, OH	810	BWR/GE	Cincinnati Gas & Electric
Yellow Creek 1 (35%)	Iuka, MS	1,285	PWR/CE	Tennessee Valley Authority
Yellow Creek 2 (3%)	Iuka, MS	1,285	PWR/CE	Tennessee Valley Authority
Hartsville A-1 (44%)	Hartsville, TN	1,233	BWR/GE	Tennessee Valley Authority
Hartsville A-2 (34%)	Hartsville, TN	1,233	BWR/GE	Tennessee Valley Authority
Marble Hill 1 (60%)	Madison, IN	1,130	PWR/W	Public Service Indiana
Marble Hill 2 (37%)	Madison, IN	1,130	PWR/W	Public Service Indiana

Total: 8 reactors = 9,040 MWe

PROFILE OF U.S. REACTORS GOING INTO COMMERCIAL OPERATION

End of Year	Additions per year ^a		Cumulative ^b	
	No. of Units	Net MWe	No. of Units	Net MWe
1984	6	6,416	81	65,642
1985	17	18,865	98	84,507
1986	12	12,970	110	97,477
1987	5	5,885	115	103,362
1988	1	1,100	116	104,462
1989	2	2,463	118	106,925
1990	2	2,305	120	109,230
1991	1	1,213	121	110,443
... and beyond ^c	8	8,318	129	118,761

^aBased on projected commercial operation dates as shown in AIF's 1985 status report of U.S. reactors.

^bExcludes 2 reactors (1,725 MWe) that had been in commercial operation but are now shut down indefinitely.

^cAccounts for 5 reactors (4,873 MWe) with construction permits, the operating dates of which have been indefinitely deferred; two reactors (2,240 MWe) on order with operating dates beyond 1991 and one reactor (1,205 MWe) with construction reduced to minimum work level and operation date uncertain.

U.S. COMMERCIAL NUCLEAR REACTORS JANUARY 1, 1985

91 Reactors Operable ¹	76,679 MWe ²
36 Reactors With Construction Permits ³	39,842 MWe
<u>2 Reactors On Order</u>	<u>2,240 MWe</u>
129 TOTAL	118,761 MWe

¹Includes 81 reactors (65,642 MWe) in commercial operation; plus 4 reactors with full power operating licenses, not yet commercial (Susquehanna 2 — 1,050 MWe, Grand Gulf 1 — 1,250 MWe, Callaway 1 — 1,150 MWe, Diablo Canyon 1 — 1,084 MWe); 5 reactors with low power operating licenses (Limerick 1 — 1,055 MWe, Byron 1 — 1,120 MWe, Catawba 1 — 1,145 MWe, Waterford 3 — 1,104 MWe, Palo Verde 1 — 1,270 MWe); and 1 reactor licensed to load fuel and conduct cold criticality testing (Shoreham — 809 MWe). In addition, 2 reactors with operating licenses have been shut down indefinitely: TMI 1 — 819 MWe, TMI 2 — 906 MWe.

²Represents installed capacity of all operable nuclear power reactors and accounts for nearly 12% of total U.S. installed electric generating capacity (664,666 MWe) as of November 1984. Through the first eleven months of 1984, the 294 billion kilowatt-hours produced by nuclear reactors represented over 13% of all U.S. electrical output.

³Stages of reactor construction completed: 0 units = 1-24%, 5 units = 25-49%, 9 units = 50-74%, 22 units = 75-99%. Includes 5 reactors (4,873 MWe) with indefinite operating dates (WPPSS 1 & 3 — 2,490 MWe — 63% and 75%; Seabrook 2 — 1,150 MWe — 25%; Midland 1 & 2 — 1,233 MWe — 85%).

Note: U.S. commercial nuclear power plants have achieved approximately 850 cumulative reactor-years of operating experience. About 3,470 reactor-years have accumulated worldwide.

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