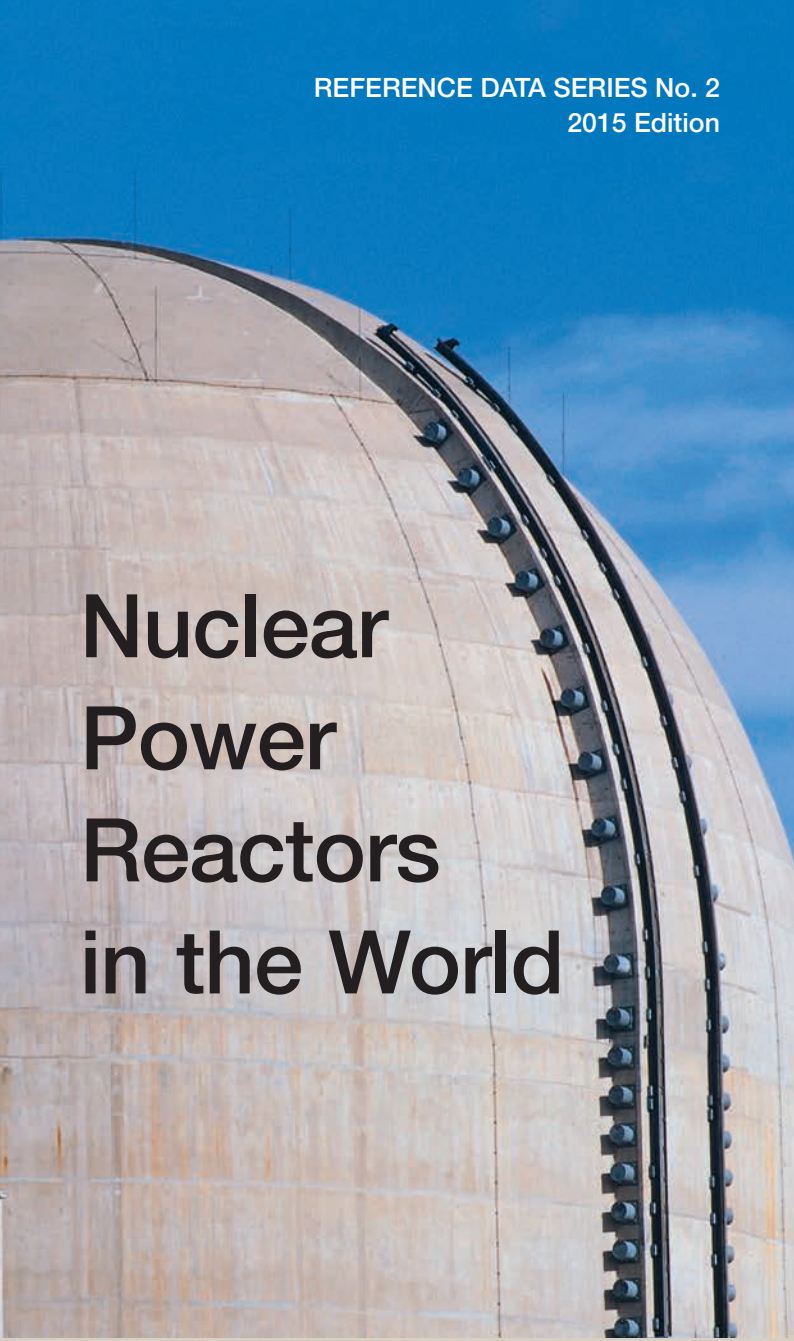
REFERENCE DATA SERIES No. 2
2015 Edition



# Nuclear Power Reactors in the World

IAEA
International Atomic Energy Agency

REFERENCE DATA SERIES No. 2

# NUCLEAR POWER REACTORS IN THE WORLD

2015 Edition

INTERNATIONAL ATOMIC ENERGY AGENCY
VIENNA, 2015

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# INTRODUCTION

*Nuclear Power Reactors in the World* is an annual publication that presents the most recent data pertaining to reactor units in IAEA Member States.

This thirty-fifth edition of Reference Data Series No. 2 provides a detailed comparison of various statistics up to and including 31 December 2014. The tables and figures contain the following information:

— General statistics on nuclear reactors in IAEA Member States;
— Technical data on specific reactors that are either planned, under construction or operational, or that have been shut down or decommissioned;
— Performance data on reactors operating in IAEA Member States, as reported to the IAEA.

The data compiled in this publication is a product of the IAEA's Power Reactor Information System (PRIS). The PRIS database is a comprehensive source of data on all nuclear power reactors in the world. It includes specification and performance history data on operational reactors as well as on reactors under construction or in the decommissioning process. Data is collected by the IAEA via designated national correspondents in Member States.

PRIS outputs are available in the IAEA's annual publications and on the PRIS web page (*http://www.iaea.org/pris*). Detailed outputs are accessible to registered users through on-line applications. Enquiries should be addressed to:

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# DEFINITIONS

**Performance factors**

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

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

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

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

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

$$\text{OF (\%)} = \frac{\text{On-line hours}}{\text{Total hours}} \times 100$$

where

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

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

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

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

LF is the load factor, expressed in per cent.

OF is the operating factor, expressed in per cent.

REG Reference energy generation: The net electrical energy (MW·h), supplied by a unit continuously operated at the reference unit power for the duration of the entire reference period.

PEL Planned energy loss: The energy (MW·h) that was not supplied during the period because of planned shutdowns or load reductions due to causes under plant management control. Energy losses are considered to be planned if they are scheduled at least four weeks in advance.

UEL Unplanned energy loss: The energy (MW·h) that was not supplied during the period because of unplanned shutdowns, outage extensions, or load reductions due to causes under plant management control. Energy losses are considered to be unplanned if they are not scheduled at least four weeks in advance.

XEL External energy loss: The energy (MW·h) that was not supplied owing to constraints beyond plant management control that reduced plant availability.

EG The net electrical energy supplied during the reference period as measured at the unit outlet terminals after deducting the electrical energy taken by unit auxiliaries and the losses in transformers that are considered to be integral parts of the unit.

**Planned reactors**
The IAEA considers a reactor as planned from the date when a construction licence application has been submitted to the relevant national regulatory authorities to the construction start date.

**Construction start**
The date when the first major placing of concrete, usually for the base mat of the reactor building, is carried out.

**First criticality**
The date when the reactor is made critical for the first time.

**Grid connection**
The date when the plant is first connected to the electrical grid for the supply of power. After this date, the plant is considered as operational.

**Commercial operation**
The date when the plant is handed over by the contractors to the owner and declared officially in commercial operation.

**Long term shutdown (suspended operation)**
A unit is considered to be in long term shutdown if it has been shut down for an extended period (usually several years) initially without any firm recovery schedule, but with the intention to restart the unit eventually. Suspended operation is a new term for this status.

**Permanent shutdown**
The date when the plant is officially declared to be shut down by the owner and taken out of operation permanently.

**NSSS supplier**
The supplier of a power reactor unit's nuclear steam supply system.

**Units and energy conversion**
1 terawatt-hour (TW·h) = $10^6$ megawatt-hours (MW·h)

For an average power plant,

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

## TABLE 1. OVERVIEW OF POWER REACTORS AND NUCLEAR SHARE, 31 DEC. 2014

| Country | Operational reactors | | Reactors in long term shutdown | | Reactors under construction | | Nuclear electricity supplied in 2014 | |
|---|---|---|---|---|---|---|---|---|
| | No. of units | Net capacity MW(e) | No. of units | Net capacity MW(e) | No. of units | Net capacity MW(e) | TW(e)·h | Share of total % |
| ARGENTINA | 3 | 1627 | | | 1 | 25 | 5.3 | 4.1 |
| ARMENIA | 1 | 375 | | | | | 2.3 | 30.7 |
| BELARUS | | | | | 2 | 2218 | NA | NA |
| BELGIUM | 7 | 5927 | | | | | 32.1 | 47.5 |
| BRAZIL | 2 | 1884 | | | 1 | 1245 | 14.5 | 2.9 |
| BULGARIA | 2 | 1926 | | | | | 15.0 | 31.8 |
| CANADA | 19 | 13500 | | | | | 98.6 | 16.8 |
| CHINA | 23 | 19007 | | | 26 | 25756 | 123.8 | 2.4 |
| CZECH REP. | 6 | 3904 | | | | | 28.6 | 35.8 |
| FINLAND | 4 | 2752 | | | 1 | 1600 | 22.6 | 34.7 |
| FRANCE | 58 | 63130 | | | 1 | 1630 | 418.0 | 76.9 |
| GERMANY | 9 | 12074 | | | | | 91.8 | 15.8 |
| HUNGARY | 4 | 1889 | | | | | 14.8 | 53.6 |
| INDIA | 21 | 5308 | | | 6 | 3907 | 33.2 | 3.5 |
| IRAN, ISL. REP. | 1 | 915 | | | | | 3.7 | 1.5 |
| JAPAN | 48 | 42388 | 1 | 246 | 2 | 2650 | 0.0 | 0.0 |
| KOREA, REP. OF | 23 | 20717 | | | 5 | 6370 | 149.2 | 30.4 |
| MEXICO | 2 | 1330 | | | | | 9.3 | 5.6 |
| NETHERLANDS | 1 | 482 | | | | | 3.9 | 4.0 |
| PAKISTAN | 3 | 690 | | | 2 | 630 | 4.6 | 4.3 |
| ROMANIA | 2 | 1300 | | | | | 10.8 | 18.5 |
| RUSSIA | 34 | 24654 | | | 9 | 7371 | 169.1 | 18.6 |
| SLOVAKIA | 4 | 1814 | | | 2 | 880 | 14.4 | 56.8 |
| SLOVENIA | 1 | 688 | | | | | 6.1 | 37.3 |
| SOUTH AFRICA | 2 | 1860 | | | | | 14.8 | 6.2 |
| SPAIN | 7 | 7121 | 1 | 446 | | | 54.9 | 20.4 |
| SWEDEN | 10 | 9470 | | | | | 62.3 | 41.5 |
| SWITZERLAND | 5 | 3333 | | | | | 26.5 | 37.9 |

## TABLE 1. OVERVIEW OF POWER REACTORS AND NUCLEAR SHARE, 31 DEC. 2014 — continued

| Country | Operational reactors | | Reactors in long term shutdown | | Reactors under construction | | Nuclear electricity supplied in 2014 | |
|---|---|---|---|---|---|---|---|---|
| | No. of units | Net capacity MW(e) | No. of units | Net capacity MW(e) | No. of units | Net capacity MW(e) | TW(e)·h | Share of total % |
| UAE | | | | | 3 | 4035 | NA | NA |
| UK | 16 | 9373 | | | | | 57.9 | 17.2 |
| UKRAINE | 15 | 13107 | | | 2 | 1900 | 83.1 | 49.4 |
| USA | 99 | 98639 | | | 5 | 5633 | 798.6 | 19.5 |
| TOTAL | 438 | 376216 | 2 | 692 | 70 | 68450 | 2410.4 | NA |

Note:

The total includes the following data from Taiwan, China:

— 6 units, 5032 MW in operation; 2 units, 2600 MW under construction;

— 40.8 TW(e)·h of nuclear electricity generation, representing 18.9% of the total electricity generated there;

## TABLE 2. TYPE AND NET ELECTRICAL POWER OF OPERATIONAL REACTORS, 31 DEC. 2014

| Country | PWR | | BWR | | GCR | | PHWR | | LWGR | | FBR | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | MW(e) | No. | MW(e) | No. | MW(e) | No. | MW(e) | No. | MW(e) | No. | MW(e) | No. | MW(e) |
| ARGENTINA | | | | | | | 3 | 1627 | | | | | 3 | 1627 |
| ARMENIA | 1 | 375 | | | | | | | | | | | 1 | 375 |
| BELGIUM | 7 | 5927 | | | | | | | | | | | 7 | 5927 |
| BRAZIL | 2 | 1884 | | | | | | | | | | | 2 | 1884 |
| BULGARIA | 2 | 1926 | | | | | | | | | | | 2 | 1926 |
| CANADA | | | | | | | 19 | 13500 | | | | | 19 | 13500 |
| CHINA | 20 | 17687 | | | | | 2 | 1300 | | | 1 | 20 | 23 | 19007 |
| CZECH REP. | 6 | 3904 | | | | | | | | | | | 6 | 3904 |
| FINLAND | 2 | 992 | 2 | 1760 | | | | | | | | | 4 | 2752 |
| FRANCE | 58 | 63130 | | | | | | | | | | | 58 | 63130 |
| GERMANY | 7 | 9502 | 2 | 2572 | | | | | | | | | 9 | 12074 |
| HUNGARY | 4 | 1889 | | | | | | | | | | | 4 | 1889 |
| INDIA | 1 | 917 | 2 | 300 | | | 18 | 4091 | | | | | 21 | 5308 |
| IRAN, ISL. REP. | 1 | 915 | | | | | | | | | | | 1 | 915 |
| JAPAN | 24 | 19284 | 24 | 23104 | | | | | | | | | 48 | 42388 |
| KOREA, REP. OF | 19 | 18076 | | | | | 4 | 2641 | | | | | 23 | 20717 |
| MEXICO | | | 2 | 1330 | | | | | | | | | 2 | 1330 |
| NETHERLANDS | 1 | 482 | | | | | | | | | | | 1 | 482 |
| PAKISTAN | 2 | 600 | | | | | 1 | 90 | | | | | 3 | 690 |
| ROMANIA | | | | | | | 2 | 1300 | | | | | 2 | 1300 |
| RUSSIA | 18 | 13875 | | | | | | | 15 | 10219 | 1 | 560 | 34 | 24654 |
| SLOVAKIA | 4 | 1814 | | | | | | | | | | | 4 | 1814 |
| SLOVENIA | 1 | 688 | | | | | | | | | | | 1 | 688 |
| SOUTH AFRICA | 2 | 1860 | | | | | | | | | | | 2 | 1860 |
| SPAIN | 6 | 6057 | 1 | 1064 | | | | | | | | | 7 | 7121 |
| SWEDEN | 3 | 2807 | 7 | 6663 | | | | | | | | | 10 | 9470 |
| SWITZERLAND | 3 | 1740 | 2 | 1593 | | | | | | | | | 5 | 3333 |
| UK | 1 | 1198 | | | 15 | 8175 | | | | | | | 16 | 9373 |
| UKRAINE | 15 | 13107 | | | | | | | | | | | 15 | 13107 |
| USA | 65 | 64741 | 34 | 33898 | | | | | | | | | 99 | 98639 |
| TOTAL | 277 | 257231 | 80 | 75462 | 15 | 8175 | 49 | 24549 | 15 | 10219 | 2 | 580 | 438 | 376216 |

Notes:

1. The totals include 6 units, 5032 MW in Taiwan, China.
2. During 2014, 5 reactors, 4721 MW were newly connected to the grid.

## TABLE 3. TYPE AND NET ELECTRICAL POWER OF REACTORS UNDER CONSTRUCTION, 31 DEC. 2014

| Country | PWR | | BWR | | PHWR | | LWGR | | FBR | | HTGR | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | MW(e) | No. | MW(e) | No. | MW(e) | No. | MW(e) | No. | MW(e) | No. | MW(e) | No. | MW(e) |
| ARGENTINA | 1 | 25 | | | | | | | | | | | 1 | 25 |
| BELARUS | 2 | 2218 | | | | | | | | | | | 2 | 2218 |
| BRAZIL | 1 | 1245 | | | | | | | | | | | 1 | 1245 |
| CHINA | 25 | 25556 | | | | | | | | | 1 | 200 | 26 | 25756 |
| FINLAND | 1 | 1600 | | | | | | | | | | | 1 | 1600 |
| FRANCE | 1 | 1630 | | | | | | | | | | | 1 | 1630 |
| INDIA | 1 | 917 | | | 4 | 2520 | | | 1 | 470 | | | 6 | 3907 |
| JAPAN | | | 2 | 2650 | | | | | | | | | 2 | 2650 |
| KOREA, REP. OF | 5 | 6370 | | | | | | | | | | | 5 | 6370 |
| PAKISTAN | 2 | 630 | | | | | | | | | | | 2 | 630 |
| RUSSIA | 8 | 6582 | | | | | | | 1 | 789 | | | 9 | 7371 |
| SLOVAKIA | 2 | 880 | | | | | | | | | | | 2 | 880 |
| UAE | 3 | 4035 | | | | | | | | | | | 3 | 4035 |
| UKRAINE | 2 | 1900 | | | | | | | | | | | 2 | 1900 |
| USA | 5 | 5633 | | | | | | | | | | | 5 | 5633 |
| TOTAL | 59 | 59221 | 4 | 5250 | 4 | 2520 | | | 2 | 1259 | 1 | 200 | 70 | 68450 |

Notes:

1. The totals include 2 units ( 2xBWR), 2600 MW in Taiwan, China.
2. During 2014, construction started on 3 reactors, 2479 MW.

## TABLE 4. REACTOR YEARS OF EXPERIENCE, UP TO 31 DEC. 2014

| Country | Operational reactors | | Reactors in long term shutdown | | Permanently shutdown reactors | | Total, operating and shutdown | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | No. | Net capacity MW(e) | No. | Net capacity MW(e) | No. | Net capacity MW(e) | No. | Net capacity MW(e) | Operating experience Years | Months |
| ARGENTINA | 3 | 1627 | | | | | 3 | 1627 | 73 | 2 |
| ARMENIA | 1 | 375 | | | 1 | 376 | 2 | 751 | 40 | 8 |
| BELGIUM | 7 | 5927 | | | 1 | 10 | 8 | 5937 | 268 | 7 |
| BRAZIL | 2 | 1884 | | | | | 2 | 1884 | 47 | 3 |
| BULGARIA | 2 | 1926 | | | 4 | 1632 | 6 | 3558 | 157 | 3 |
| CANADA | 19 | 13500 | | | 6 | 2143 | 25 | 15643 | 674 | 6 |
| CHINA | 23 | 19007 | | | | | 23 | 19007 | 181 | 7 |
| CZECH REP. | 6 | 3904 | | | | | 6 | 3904 | 140 | 10 |
| FINLAND | 4 | 2752 | | | | | 4 | 2752 | 143 | 4 |
| FRANCE | 58 | 63130 | | | 12 | 3789 | 70 | 66919 | 1990 | 4 |
| GERMANY | 9 | 12074 | | | 27 | 14301 | 36 | 26375 | 808 | 1 |
| HUNGARY | 4 | 1889 | | | | | 4 | 1889 | 118 | 2 |
| INDIA | 21 | 5308 | | | | | 21 | 5308 | 418 | 6 |
| IRAN, ISL. REP. | 1 | 915 | | | | | 1 | 915 | 3 | 4 |
| ITALY | | | | | 4 | 1423 | 4 | 1423 | 80 | 8 |
| JAPAN | 48 | 42388 | 1 | 246 | 11 | 6164 | 60 | 48798 | 1694 | 4 |
| KAZAKHSTAN | | | | | 1 | 52 | 1 | 52 | 25 | 10 |
| KOREA, REP. OF | 23 | 20717 | | | | | 23 | 20717 | 450 | 1 |
| LITHUANIA | | | | | 2 | 2370 | 2 | 2370 | 43 | 6 |
| MEXICO | 2 | 1330 | | | | | 2 | 1330 | 45 | 11 |
| NETHERLANDS | 1 | 482 | | | 1 | 55 | 2 | 537 | 70 | |
| PAKISTAN | 3 | 690 | | | | | 3 | 690 | 61 | 8 |
| ROMANIA | 2 | 1300 | | | | | 2 | 1300 | 25 | 11 |
| RUSSIA | 34 | 24654 | | | 5 | 786 | 39 | 25440 | 1157 | 3 |
| SLOVAKIA | 4 | 1814 | | | 3 | 909 | 7 | 2723 | 152 | 7 |
| SLOVENIA | 1 | 688 | | | | | 1 | 688 | 33 | 3 |
| SOUTH AFRICA | 2 | 1860 | | | | | 2 | 1860 | 60 | 3 |
| SPAIN | 7 | 7121 | 1 | 446 | 2 | 621 | 10 | 8188 | 308 | 1 |

## TABLE 4. REACTOR YEARS OF EXPERIENCE, UP TO 31 DEC. 2014 — continued

| Country | Operational reactors | | Reactors in long term shutdown | | Permanently shutdown reactors | | Total, operating and shutdown | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | No. | Net capacity MW(e) | No. | Net capacity MW(e) | No. | Net capacity MW(e) | No. | Net capacity MW(e) | Operating experience Years | Months |
| SWEDEN | 10 | 9470 | | | 3 | 1210 | 13 | 10680 | 422 | 6 |
| SWITZERLAND | 5 | 3333 | | | 1 | 6 | 6 | 3339 | 199 | 11 |
| UK | 16 | 9373 | | | 29 | 4225 | 45 | 13598 | 1543 | 7 |
| UKRAINE | 15 | 13107 | | | 4 | 3515 | 19 | 16622 | 443 | 6 |
| USA | 99 | 98639 | | | 33 | 13945 | 132 | 112584 | 4012 | 4 |
| TOTAL | 438 | 376216 | 2 | 692 | 150 | 57532 | 590 | 434440 | 16096 | 10 |

Notes:

1. The total includes the following data from Taiwan, China:

— reactors connected to the grid: 6 units, 5032 MW;

— operating experience: 200 years, 1 month.

2. Operating experience is counted from the grid connection excluding any long term shutdown period.

## TABLE 5. OPERATIONAL REACTORS AND NET ELECTRICAL POWER, FROM 1985 TO 2014

| Country | Number of units and net capacity as of 31 Dec. of given year | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1985 | | 1990 | | 1995 | | 2000 | | 2005 | | 2010 | | 2013 | | 2014 | |
| | No. | MW(e) | No. | MW(e) | No. | MW(e) | No. | MW(e) | No. | MW(e) | No. | MW(e) | No. | MW(e) | No. | MW(e) |
| ARGENTINA | 2 | 935 | 2 | 935 | 2 | 935 | 2 | 978 | 2 | 935 | 2 | 935 | 2 | 935 | 3 | 1627 |
| ARMENIA | 2 | 816 | | | 1 | 376 | 1 | 376 | 1 | 376 | 1 | 375 | 1 | 375 | 1 | 375 |
| BELGIUM | 8 | 5464 | 7 | 5501 | 7 | 5631 | 7 | 5712 | 7 | 5801 | 7 | 5926 | 7 | 5927 | 7 | 5927 |
| BRAZIL | 1 | 626 | 1 | 626 | 1 | 626 | 2 | 1976 | 2 | 1901 | 2 | 1884 | 2 | 1884 | 2 | 1884 |
| BULGARIA | 4 | 1632 | 5 | 2585 | 6 | 3538 | 6 | 3760 | 4 | 2722 | 2 | 1906 | 2 | 1906 | 2 | 1926 |
| CANADA | 16 | 9741 | 20 | 13993 | 21 | 14902 | 14 | 9998 | 18 | 12584 | 18 | 12604 | 19 | 13500 | 19 | 13500 |
| CHINA | | | | | 3 | 2188 | 3 | 2188 | 9 | 6587 | 13 | 10065 | 20 | 15980 | 23 | 19007 |
| CZECH REP. | 1 | 391 | 4 | 1632 | 4 | 1782 | 5 | 2611 | 6 | 3373 | 6 | 3675 | 6 | 3884 | 6 | 3904 |
| FINLAND | 4 | 2300 | 4 | 2310 | 4 | 2310 | 4 | 2656 | 4 | 2676 | 4 | 2716 | 4 | 2752 | 4 | 2752 |
| FRANCE | 43 | 37478 | 56 | 55808 | 56 | 58573 | 59 | 63080 | 59 | 63260 | 58 | 63130 | 58 | 63130 | 58 | 63130 |
| GERMANY | 24 | 18110 | 21 | 21250 | 19 | 20972 | 19 | 21283 | 17 | 20339 | 17 | 20490 | 9 | 12068 | 9 | 12074 |
| HUNGARY | 2 | 825 | 4 | 1710 | 4 | 1729 | 4 | 1729 | 4 | 1755 | 4 | 1889 | 4 | 1889 | 4 | 1889 |
| INDIA | 6 | 1143 | 7 | 1324 | 10 | 1746 | 14 | 2508 | 15 | 2993 | 19 | 4189 | 21 | 5308 | 21 | 5308 |
| IRAN, ISL. REP. | | | | | | | | | | | | | 1 | 915 | 1 | 915 |
| ITALY | 3 | 1273 | | | | | | | | | | | | | | |
| JAPAN | 33 | 23612 | 41 | 30867 | 50 | 39625 | 52 | 43245 | 55 | 47593 | 54 | 46821 | 48 | 42388 | 48 | 42388 |
| KAZAKHSTAN | 1 | 135 | 1 | 135 | 1 | 50 | | | | | | | | | | |
| KOREA, REP. OF | 5 | 3692 | 9 | 7220 | 11 | 9115 | 16 | 12990 | 20 | 16810 | 21 | 18698 | 23 | 20721 | 23 | 20717 |
| LITHUANIA | 1 | 1380 | 2 | 2760 | 2 | 2370 | 2 | 2370 | 1 | 1185 | | | | | | |
| MEXICO | | | 1 | 640 | 2 | 1256 | 2 | 1290 | 2 | 1360 | 2 | 1300 | 2 | 1330 | 2 | 1330 |
| NETHERLANDS | 2 | 508 | 2 | 539 | 2 | 510 | 1 | 449 | 1 | 450 | 1 | 482 | 1 | 482 | 1 | 482 |
| PAKISTAN | 1 | 137 | 1 | 125 | 1 | 125 | 2 | 425 | 2 | 425 | 2 | 425 | 3 | 690 | 3 | 690 |
| ROMANIA | | | | | | | 1 | 655 | 1 | 655 | 2 | 1300 | 2 | 1300 | 2 | 1300 |
| RUSSIA | 28 | 15841 | 29 | 18898 | 30 | 19848 | 30 | 19848 | 31 | 21743 | 32 | 22693 | 33 | 23643 | 34 | 24654 |
| SLOVAKIA | 4 | 1632 | 4 | 1632 | 4 | 1632 | 6 | 2440 | 6 | 2442 | 4 | 1816 | 4 | 1815 | 4 | 1814 |
| SLOVENIA | 1 | 632 | 1 | 620 | 1 | 620 | 1 | 676 | 1 | 656 | 1 | 666 | 1 | 688 | 1 | 688 |
| SOUTH AFRICA | 2 | 1840 | 2 | 1840 | 2 | 1840 | 2 | 1840 | 2 | 1800 | 2 | 1800 | 2 | 1860 | 2 | 1860 |
| SPAIN | 8 | 5608 | 9 | 7099 | 9 | 7097 | 9 | 7468 | 9 | 7591 | 8 | 7514 | 7 | 7121 | 7 | 7121 |
| SWEDEN | 12 | 9455 | 12 | 9826 | 12 | 10028 | 11 | 9397 | 10 | 8905 | 10 | 9303 | 10 | 9474 | 10 | 9470 |

## TABLE 5. OPERATIONAL REACTORS AND NET ELECTRICAL POWER, FROM 1985 TO 2014 — continued

| Country | Number of units and net capacity as of 31 Dec. of given year | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1985 | | 1990 | | 1995 | | 2000 | | 2005 | | 2010 | | 2013 | | 2014 | |
| | No. | MW(e) | No. | MW(e) | No. | MW(e) | No. | MW(e) | No. | MW(e) | No. | MW(e) | No. | MW(e) | No. | MW(e) |
| SWITZERLAND | 5 | 2881 | 5 | 2942 | 5 | 3056 | 5 | 3170 | 5 | 3220 | 5 | 3238 | 5 | 3308 | 5 | 3333 |
| UK | 38 | 10077 | 37 | 11360 | 35 | 12910 | 33 | 12490 | 23 | 11852 | 19 | 10137 | 16 | 9243 | 16 | 9373 |
| UKRAINE | 10 | 8324 | 15 | 13020 | 15 | 13045 | 13 | 11195 | 15 | 13107 | 15 | 13107 | 15 | 13107 | 15 | 13107 |
| USA | 90 | 74401 | 108 | 96228 | 108 | 98068 | 103 | 96297 | 103 | 98145 | 104 | 101211 | 100 | 99081 | 99 | 98639 |
| TOTAL | 363 | 245779 | 416 | 318253 | 434 | 341387 | 435 | 349984 | 441 | 368125 | 441 | 375277 | 434 | 371736 | 438 | 376216 |

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

- 1985: 6 units, 4890 MW; 1990: 6 units, 4828 MW; 1995: 6 units, 4884 MW; 2000: 6 units, 4884 MW; 2005: 6 units, 4884 MW; 2010: 6 units, 4982 MW; 2013: 6 units, 5032 MW; 2014: 6 units, 5032 MW.

## TABLE 6. NUCLEAR ELECTRICITY PRODUCTION AND SHARE, FROM 1985 TO 2014

| Country | Nuclear electricity supplied (TW·h) and percentage of nuclear share in given year | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1985 | | 1990 | | 1995 | | 2000 | | 2005 | | 2010 | | 2013 | | 2014 | |
| | TW·h | % of total | TW·h | % of total | TW·h | % of total | TW·h | % of total | TW·h | % of total | TW·h | % of total | TW·h | % of total | TW·h | % of total |
| ARGENTINA | 5.25 | 11.7 | 6.72 | 19.8 | 6.57 | 11.8 | 5.74 | 7.3 | 6.37 | 6.9 | 6.69 | 5.9 | 5.74 | 4.4 | 5.26 | 4.1 |
| ARMENIA | | | | | | | 1.84 | 33.0 | 2.50 | 42.7 | 2.29 | 39.4 | 2.17 | 29.2 | 2.27 | 30.7 |
| BELGIUM | 29.25 | 59.8 | 40.59 | 60.1 | 39.30 | 55.5 | 45.81 | 56.8 | 45.34 | 55.6 | 45.73 | 50.0 | 40.63 | 52.1 | 32.09 | 47.5 |
| BRAZIL | 3.17 | 1.7 | 2.06 | 1.0 | 2.33 | 1.0 | 5.59 | 1.9 | 9.20 | 2.5 | 13.77 | 3.1 | 13.78 | 2.8 | 14.46 | 2.9 |
| BULGARIA | 12.17 | 31.6 | 13.51 | 35.7 | 16.22 | 46.4 | 16.79 | 45.0 | 17.38 | 44.1 | 14.24 | 33.1 | 13.32 | 30.7 | 15.01 | 31.8 |
| CANADA | 59.47 | 12.7 | 69.87 | 14.8 | 93.98 | 17.3 | 69.12 | 11.8 | 86.83 | 14.5 | 85.50 | 15.1 | 94.29 | 16.0 | 98.59 | 16.8 |
| CHINA | | | | | 12.13 | 1.2 | 16.02 | 1.2 | 50.33 | 2.0 | 70.96 | 1.8 | 104.84 | 2.1 | 123.81 | 2.4 |
| CZECH REP. | 1.99 | NA | 11.77 | NA | 12.23 | 20.0 | 12.71 | 18.7 | 23.25 | 30.5 | 26.44 | 33.3 | 29.01 | 35.9 | 28.64 | 35.8 |
| FINLAND | 17.98 | 38.2 | 18.13 | 35.1 | 18.13 | 29.9 | 21.58 | 32.2 | 22.36 | 32.9 | 21.89 | 28.4 | 22.67 | 33.3 | 22.65 | 34.7 |
| FRANCE | 213.28 | 64.8 | 297.61 | 74.5 | 358.71 | 76.1 | 395.39 | 76.4 | 431.18 | 78.5 | 410.09 | 74.1 | 405.90 | 73.3 | 418.00 | 76.9 |
| GERMANY | 119.59 | 31.2 | 139.37 | 33.1 | 146.13 | 29.6 | 160.66 | 30.6 | 154.61 | 26.6 | 133.01 | 22.6 | 92.14 | 15.5 | 91.78 | 15.9 |
| HUNGARY | 6.10 | 23.6 | 12.89 | 51.4 | 13.20 | 42.3 | 13.35 | 40.6 | 13.02 | 37.2 | 14.66 | 42.1 | 14.54 | 50.7 | 14.78 | 53.6 |
| INDIA | 3.87 | 2.2 | 5.29 | 2.2 | 6.99 | 1.9 | 14.23 | 3.1 | 15.73 | 2.8 | 20.48 | 2.9 | 30.01 | 3.5 | 33.23 | 3.5 |
| IRAN, ISL. REP. | | | | | | | | | | | | | 3.89 | 1.5 | 3.72 | 1.5 |
| ITALY | 6.46 | 3.8 | | | | | | | | | | | | | | |
| JAPAN | 145.37 | 22.7 | 187.19 | 27.1 | 275.51 | 33.4 | 306.24 | 33.8 | 280.50 | 29.3 | 280.25 | 29.2 | 13.95 | 1.7 | | |
| KAZAKHSTAN | | | | | 0.08 | 0.1 | | | | | | | | | | |
| KOREA, REP. OF | 12.36 | 23.2 | 50.26 | 49.1 | 60.21 | 36.1 | 103.54 | 40.7 | 137.59 | 44.7 | 141.89 | 32.2 | 132.47 | 27.6 | 149.20 | 30.4 |
| LITHUANIA | 8.75 | NA | 15.70 | NA | 10.64 | 86.1 | 7.42 | 73.9 | 9.54 | 70.3 | | | | | | |
| MEXICO | | | 2.78 | 2.6 | 7.53 | 6.0 | 7.92 | 3.9 | 10.32 | 5.0 | 5.59 | 3.6 | 11.38 | 4.6 | 9.31 | 5.6 |
| NETHERLANDS | 3.69 | 6.1 | 3.29 | 4.9 | 3.78 | 4.9 | 3.70 | 4.3 | 3.77 | 3.9 | 3.75 | 3.4 | 2.74 | 2.8 | 3.87 | 4.0 |
| PAKISTAN | 0.26 | 1.0 | 0.38 | 1.1 | 0.46 | 0.9 | 0.90 | 1.7 | 2.41 | 2.8 | 2.56 | 2.6 | 4.37 | 4.4 | 4.58 | 4.3 |
| ROMANIA | | | | | | | 5.05 | 10.9 | 5.11 | 8.6 | 10.70 | 19.5 | 10.70 | 19.8 | 10.75 | 18.5 |
| RUSSIA | 88.26 | NA | 109.62 | NA | 91.59 | 11.8 | 120.10 | 15.0 | 137.64 | 15.8 | 159.41 | 17.1 | 161.72 | 17.5 | 169.06 | 18.6 |
| SLOVAKIA | 8.70 | NA | 11.16 | NA | 11.35 | 44.1 | 15.17 | 53.4 | 16.34 | 56.1 | 13.54 | 51.8 | 14.62 | 51.7 | 14.42 | 56.8 |
| SLOVENIA | 3.85 | NA | 4.39 | NA | 4.57 | 39.5 | 4.55 | 37.4 | 5.61 | 42.4 | 5.38 | 37.3 | 5.04 | 33.6 | 6.06 | 37.3 |
| SOUTH AFRICA | 5.39 | 4.2 | 8.47 | 5.6 | 11.29 | 6.5 | 13.00 | 6.6 | 12.24 | 5.5 | 12.90 | 5.2 | 13.64 | 5.7 | 14.76 | 6.2 |
| SPAIN | 26.83 | 24.0 | 51.98 | 35.9 | 53.49 | 34.1 | 59.49 | 27.6 | 54.99 | 19.6 | 59.26 | 20.1 | 54.31 | 19.7 | 54.86 | 20.4 |
| SWEDEN | 55.89 | 42.3 | 65.27 | 45.9 | 67.17 | 46.6 | 54.40 | 39.0 | 69.58 | 44.9 | 55.73 | 38.1 | 63.72 | 42.7 | 62.27 | 41.5 |

## TABLE 6. NUCLEAR ELECTRICITY PRODUCTION AND SHARE, FROM 1985 TO 2014 — continued

| Country | Nuclear electricity supplied (TW·h) and percentage of nuclear share in given year | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1985 | | 1990 | | 1995 | | 2000 | | 2005 | | 2010 | | 2013 | | 2014 | |
| | TW·h | % of total | TW·h | % of total | TW·h | % of total | TW·h | % of total | TW·h | % of total | TW·h | % of total | TW·h | % of total | TW·h | % of total |
| SWITZERLAND | 21.28 | 39.8 | 22.40 | 42.6 | 23.58 | 39.9 | 25.05 | 38.2 | 22.11 | 38.0 | 25.34 | 38.0 | 24.99 | 36.4 | 26.47 | 37.9 |
| UK | 53.73 | 19.6 | 58.77 | 19.7 | 70.64 | 25.4 | 72.99 | 21.9 | 75.34 | 20.0 | 56.85 | 15.5 | 64.13 | 18.3 | 57.92 | 17.2 |
| UKRAINE | 35.81 | NA | 71.26 | NA | 65.78 | 37.8 | 72.56 | 47.3 | 83.40 | 48.5 | 83.95 | 48.1 | 78.17 | 43.6 | 83.12 | 49.4 |
| USA | 378.90 | 15.5 | 578.08 | 20.6 | 673.52 | 22.5 | 755.55 | 19.8 | 783.35 | 19.3 | 807.08 | 19.6 | 790.19 | 19.4 | 798.62 | 19.5 |
| TOTAL | 1327.63 | | 1890.35 | | 2190.94 | | 2443.44 | | 2626.34 | | 2629.82 | | 2358.86 | | 2410.37 | |

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

1985: 0 TW(e)·h of nuclear electricity generation, representing 52.41% of the total electricity generated there;

1990: 31.54 TW(e)·h of nuclear electricity generation, representing 38.32% of the total electricity generated there;

1995: 33.8 TW(e)·h of nuclear electricity generation, representing 28.79% of the total electricity generated there;

2000: 37 TW(e)·h of nuclear electricity generation, representing 21.19% of the total electricity generated there;

2005: 38.4 TW(e)·h of nuclear electricity generation, representing 17.93% of the total electricity generated there;

2010: 39.89 TW(e)·h of nuclear electricity generation, representing 19.3% of the total electricity generated there;

2013: 39.82 TW(e)·h of nuclear electricity generation, representing 19.1% of the total electricity generated there;

2014: 40.8 TW(e)·h of nuclear electricity generation, representing 18.93% of the total electricity generated there.

## TABLE 7. ANNUAL CONSTRUCTION STARTS AND CONNECTIONS TO THE GRID, 1954 TO 2014

| Year | Construction starts | | Connections to the grid | | Operational reactors | |
|---|---|---|---|---|---|---|
| | Number of units | Design capacity (MW(e)) | Number of units | Design capacity (MW(e)) | Number of units | Updated capacity (MW(e)) |
| 1954 | 1 | 60 | 1 | 5 | 1 | 5 |
| 1955 | 8 | 260 | | | 1 | 5 |
| 1956 | 5 | 577 | 1 | 35 | 2 | 65 |
| 1957 | 13 | 1836 | 3 | 119 | 5 | 209 |
| 1958 | 6 | 476 | 1 | 35 | 6 | 269 |
| 1959 | 7 | 976 | 5 | 176 | 11 | 548 |
| 1960 | 11 | 1010 | 4 | 438 | 15 | 1087 |
| 1961 | 7 | 1529 | 1 | 15 | 16 | 1104 |
| 1962 | 8 | 1379 | 9 | 955 | 25 | 2223 |
| 1963 | 5 | 1722 | 9 | 500 | 33 | 2677 |
| 1964 | 9 | 2932 | 8 | 1022 | 40 | 3686 |
| 1965 | 9 | 3291 | 8 | 1879 | 48 | 5910 |
| 1966 | 15 | 7052 | 8 | 1528 | 55 | 7539 |
| 1967 | 25 | 16287 | 11 | 2165 | 64 | 9595 |
| 1968 | 37 | 26859 | 7 | 1086 | 69 | 10648 |
| 1969 | 13 | 9277 | 10 | 3670 | 78 | 14121 |
| 1970 | 37 | 25453 | 6 | 3410 | 84 | 17656 |
| 1971 | 18 | 12623 | 16 | 7711 | 99 | 24320 |
| 1972 | 29 | 22328 | 16 | 8880 | 113 | 32797 |
| 1973 | 29 | 23492 | 20 | 12727 | 132 | 43761 |
| 1974 | 38 | 35222 | 26 | 17149 | 154 | 61021 |
| 1975 | 38 | 36437 | 15 | 10236 | 169 | 70414 |
| 1976 | 43 | 41762 | 19 | 14196 | 186 | 83992 |
| 1977 | 23 | 21893 | 18 | 13199 | 199 | 96202 |
| 1978 | 23 | 21735 | 20 | 15782 | 218 | 111740 |
| 1979 | 27 | 23007 | 8 | 6909 | 225 | 117814 |
| 1980 | 20 | 19084 | 21 | 15088 | 245 | 133037 |
| 1981 | 17 | 16029 | 23 | 20355 | 267 | 153832 |
| 1982 | 19 | 19765 | 19 | 15330 | 284 | 168317 |
| 1983 | 14 | 11286 | 23 | 19266 | 306 | 187756 |
| 1984 | 13 | 11332 | 33 | 30980 | 336 | 218452 |
| 1985 | 19 | 15336 | 33 | 31061 | 363 | 245779 |
| 1986 | 8 | 7201 | 27 | 27134 | 389 | 272074 |
| 1987 | 13 | 11117 | 22 | 22191 | 407 | 295812 |
| 1988 | 7 | 7722 | 14 | 13574 | 416 | 305212 |
| 1989 | 6 | 4018 | 12 | 10566 | 420 | 311942 |
| 1990 | 5 | 3267 | 10 | 10543 | 416 | 318253 |
| 1991 | 2 | 2246 | 4 | 3668 | 415 | 321924 |
| 1992 | 3 | 3094 | 6 | 4809 | 418 | 325261 |
| 1993 | 4 | 3515 | 9 | 9012 | 427 | 333914 |
| 1994 | 2 | 1334 | 5 | 4332 | 429 | 336904 |
| 1995 | | | 5 | 3536 | 434 | 341387 |
| 1996 | 1 | 610 | 6 | 7080 | 438 | 347281 |
| 1997 | 5 | 4410 | 3 | 3557 | 434 | 347880 |
| 1998 | 3 | 2150 | 4 | 2973 | 430 | 344900 |
| 1999 | 4 | 4540 | 4 | 2729 | 432 | 347353 |
| 2000 | 7 | 5356 | 6 | 3063 | 435 | 349984 |
| 2001 | 1 | 1304 | 3 | 2696 | 438 | 352715 |
| 2002 | 6 | 3440 | 6 | 5049 | 439 | 357481 |
| 2003 | 1 | 202 | 2 | 1627 | 437 | 359827 |
| 2004 | 2 | 1336 | 5 | 4785 | 438 | 364673 |
| 2005 | 3 | 2907 | 4 | 3823 | 441 | 368125 |
| 2006 | 4 | 3413 | 2 | 1492 | 435 | 369581 |
| 2007 | 8 | 6644 | 3 | 1842 | 439 | 371707 |
| 2008 | 10 | 10667 | | | 438 | 371557 |
| 2009 | 12 | 13125 | 2 | 1068 | 437 | 370702 |
| 2010 | 16 | 15842 | 5 | 3776 | 441 | 375277 |
| 2011 | 4 | 1890 | 7 | 4013 | 435 | 368921 |
| 2012 | 7 | 6984 | 3 | 2963 | 437 | 373263 |
| 2013 | 10 | 11252 | 4 | 4060 | 434 | 371736 |
| 2014 | 3 | 2479 | 5 | 4721 | 438 | 376216 |

## TABLE 8. NUMBER OF NEW REACTORS CONNECTED TO THE GRID AND MEDIAN CONSTRUCTION TIME IN MONTHS

| Country | 1981 - 1985 | | 1986 - 1990 | | 1991 - 1995 | | 1996 - 2000 | | 2001 - 2005 | | 2006 - 2010 | | 2011 - 2013 | | 2014 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | Months | No. | Months | No. | Months | No. | Months | No. | Months | No. | Months | No. | Months | No. | Months |
| ARGENTINA | 1 | 109 | | | | | | | | | | | | | 1 | 396 |
| BELGIUM | 4 | 80 | | | | | | | | | | | | | | |
| BRAZIL | 1 | 132 | | | | | 1 | 176 | | | | | | | | |
| BULGARIA | 1 | 104 | 1 | 89 | 1 | 113 | | | | | | | | | | |
| CANADA | 7 | 98 | 5 | 101 | 2 | 97 | | | | | | | | | | |
| CHINA | | | | | 3 | 73 | | | 6 | 59 | 4 | 68 | 7 | 61 | 3 | 70 |
| CZECH REP. | 1 | 74 | 3 | 93 | | | 1 | 167 | 1 | 191 | | | | | | |
| FRANCE | 24 | 68 | 15 | 86 | 3 | 93 | 4 | 124 | | | | | | | | |
| GERMANY | 7 | 100 | 6 | 103 | | | | | | | | | | | | |
| HUNGARY | 2 | 112 | 2 | 90 | | | | | | | | | | | | |
| INDIA | 2 | 154 | 1 | 152 | 3 | 120 | 4 | 122 | 1 | 64 | 4 | 81 | 2 | 123 | | |
| IRAN, ISL. REP. | | | | | | | | | | | | | 1 | 222 | | |
| JAPAN | 10 | 46 | 8 | 49 | 10 | 46 | 3 | 42 | 4 | 47 | 1 | 53 | | | | |
| KOREA, REP. OF | 4 | 65 | 4 | 62 | 2 | 61 | 5 | 59 | 4 | 54 | 1 | 51 | 2 | 54 | | |
| LITHUANIA | 1 | 80 | 1 | 116 | | | | | | | | | | | | |
| MEXICO | | | 1 | 151 | 1 | 210 | | | | | | | | | | |
| PAKISTAN | | | | | | | 1 | 83 | | | | | 1 | 64 | | |
| ROMANIA | | | | | | | 1 | 169 | | | 1 | 161 | | | | |
| RUSSIA | 9 | 73 | 4 | 72 | 1 | 109 | | | 2 | 233 | 1 | 323 | 1 | 108 | 1 | 64 |
| SLOVAKIA | 2 | 99 | | | | | 2 | 150 | | | | | | | | |
| SLOVENIA | 1 | 80 | | | | | | | | | | | | | | |
| SOUTH AFRICA | 2 | 102 | | | | | | | | | | | | | | |
| SPAIN | 5 | 112 | 2 | 96 | | | | | | | | | | | | |
| SWEDEN | 4 | 74 | | | | | | | | | | | | | | |
| SWITZERLAND | 1 | 125 | | | | | | | | | | | | | | |
| UK | 6 | 186 | 4 | 98 | 1 | 80 | | | | | | | | | | |
| UKRAINE | 7 | 57 | 6 | 58 | 1 | 113 | | | 2 | 227 | | | | | | |
| USA | 25 | 126 | 22 | 146 | 1 | 221 | 1 | 278 | | | | | | | | |
| TOTAL | 131 | 84 | 85 | 93 | 29 | 82 | 23 | 121 | 20 | 59 | 12 | 77 | 14 | 66 | 5 | 70 |

Notes:

1. Construction time is measured from the first pouring of concrete to the connection of the unit to the grid.
2. The totals include the following data from Taiwan, China: 1981 to 1985: 4 units, 72 months.

## TABLE 9. CONSTRUCTION STARTS DURING 2014

| Country | Reactor | | Type | Model | Capacity (MW) | | | Operator | NSSS supplier | Construction start | Grid connection | Commercial operation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | Thermal | Gross | Net | | | | | |
| ARGENTINA | AR -4 | CAREM25 | PWR | CAREM Prototyp | 100 | 29 | 25 | CNEA | CNEA | 2014-2 | — | — |
| BELARUS | BY -2 | BELARUSIAN-2 | PWR | VVER V-491 | 3200 | 1194 | 1109 | BelNPP | ASE | 2014-4 | — | — |
| UAE | AE -03 | BARAKAH-3 | PWR | APR-1400 | 3983 | 1400 | 1345 | ENEC | KEPCO | 2014-9 | 2018-11 | — |

Note: During 2014, construction started on 3 reactors (2479 MW).

## TABLE 10. CONNECTIONS TO THE GRID DURING 2014

| Country | Reactor | | Type | Model | Capacity (MW) | | | Operator | NSSS supplier | Construction start | First criticality | Grid connection |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | Thermal | Gross | Net | | | | | |
| ARGENTINA | AR -3 | ATUCHA-2 | PHWR | PHWR KWU | 2160 | 745 | 692 | NASA | SIEMENS | 1981-7 | 2014-6 | 2014-6 |
| CHINA | CN -24 | FANGJIASHAN-1 | PWR | CPR-1000 | 2905 | 1080 | 1000 | QNPC | NPIC | 2008-12 | 2014-10 | 2014-11 |
| | CN -20 | FUQING-1 | PWR | CPR-1000 | 2905 | 1080 | 1000 | FQNP | NPIC | 2008-11 | 2014-7 | 2014-8 |
| | CN -19 | NINGDE-2 | PWR | CPR-1000 | 2905 | 1080 | 1018 | NDNP | SHE | 2008-11 | 2013-12 | 2014-1 |
| RUSSIA | RU -63 | ROSTOV-3 | PWR | VVER V-320 | 3000 | 1100 | 1011 | REA | ROSATOM | 2009-9 | 2014-12 | 2014-12 |

Note: During 2014, 5 reactors (4721 MW) were newly connected to the grid.

## TABLE 11. SCHEDULED CONNECTIONS TO THE GRID DURING 2015

| Country | Reactor | | Type | Capacity (MW) | | | Operator | NSSS supplier | Construction start | First criticality | Grid date |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | Thermal | Gross | Net | | | | | |
| CHINA | CN -37 | CHANGJIANG-2 | PWR | 1930 | 650 | 610 | HNPC | DEC | 2010-11 | — | — |
| | CN -25 | FANGJIASHAN-2 | PWR | 2905 | 1080 | 1000 | QNPC | NPIC | 2009-7 | 2014-12 | 2015-1 |
| | CN -42 | FUQING-3 | PWR | 2905 | 1080 | 1000 | FQNP | NPIC | 2010-12 | — | — |
| | CN -26 | HONGYANHE-3 | PWR | 2905 | 1080 | 1000 | LHNPC | DEC | 2009-3 | 2014-10 | 2015-3 |
| | CN -34 | NINGDE-3 | PWR | 2905 | 1080 | 1018 | NDNP | CFHI | 2010-1 | 2015-3 | 2015-3 |
| | CN -23 | YANGJIANG-2 | PWR | 2905 | 1080 | 1000 | YJNPC | CFHI | 2009-6 | 2015-3 | 2015-3 |
| KOREA, REP. OF | KR -24 | SHIN-WOLSONG-2 | PWR | 2825 | 1000 | 950 | KHNP | DHICKOPC | 2008-9 | 2015-2 | 2015-2 |

Note: During 2015, 7 reactors (6578 MW) are expected to achieve connection to grid.

## TABLE 12. REACTORS PLANNED FOR CONSTRUCTION AS KNOWN ON 31 DEC. 2014

| Country | Reactor | | Type | Model | Capacity (MW) | | | Operator | NSSS supplier | Expected construction start |
|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | Thermal | Gross | Net | | | |
| CHINA | CN-72 | BAMAOSHAN | PWR | CPR-1000 | 2905 | 1080 | 900 | | | — |
| | CN-53 | CHANGJIANG-3 | PWR | | 1930 | 650 | 610 | | | — |
| | CN-54 | CHANGJIANG-4 | PWR | | 1930 | 650 | 610 | | | — |
| | CN-57 | FANGCHENGGANG-3 | PWR | | | | 1000 | | | — |
| | CN-58 | FANGCHENGGANG-4 | PWR | | | | 1000 | | | — |
| | CN-59 | FANGCHENGGANG-5 | PWR | | | | 1000 | | | — |
| | CN-60 | FANGCHENGGANG-6 | PWR | | | | 1000 | | | — |
| | CN-49 | FUQING-5 | PWR | Hualong One | 2905 | 1087 | 1000 | FQNP | NPIC | — |
| | CN-50 | FUQING-6 | PWR | Hualong One | 2905 | 1087 | 1000 | FQNP | NPIC | — |
| | CN-85 | GUOHE-1 | PWR | CAP-1400 | 4040 | 1534 | 1400 | SNPDP | | — |
| | CN-86 | GUOHE-2 | PWR | CAP-1400 | 4040 | 1534 | 1400 | SNPDP | | — |
| | CN-76 | HAIYANG-3 | PWR | AP-1000 | 3415 | 1253 | 1000 | SDNPC | WH | — |
| | CN-77 | HAIYANG-4 | PWR | AP-1000 | 3415 | 1253 | 1000 | SDNPC | WH | — |
| | CN-51 | HONGSHIDING-1 | PWR | | | | 0 | | | — |
| | CN-52 | HONGSHIDING-2 | PWR | | | | 0 | HONGYANH | DEC | — |
| | CN-80 | HONGYANHE-5 | PWR | ACPR-1000 | 2905 | 1080 | 1000 | LHNPC | DEC | 2015-3 |
| | CN-81 | HONGYANHE-6 | PWR | ACPR-1000 | 2905 | 1080 | 1000 | LHNPC | DEC | — |
| | CN-65 | JIYANG-1 | PWR | | | | 1000 | | | — |
| | CN-66 | JIYANG-2 | PWR | | | | 1000 | | | — |
| | CN-67 | JIYANG-3 | PWR | | | | 1000 | | | — |
| | CN-68 | JIYANG-4 | PWR | | | | 1000 | | | — |
| | CN-87 | LUFENG-1 | PWR | CPR-1000 | | | 1000 | LFNPC | | — |
| | CN-88 | LUFENG-2 | PWR | CPR-1000 | | | 1000 | LFNPC | | — |
| | CN-61 | PENGZE-1 | PWR | | | | 1250 | | | — |
| | CN-62 | PENGZE-2 | PWR | | | | 1250 | | | — |
| | CN-63 | PENGZE-3 | PWR | | | | 1250 | | | — |
| | CN-64 | PENGZE-4 | PWR | | | | 1250 | | | — |
| | CN-78 | SANMEN-3 | PWR | AP-1000 | 3400 | 1250 | 1000 | SMNPC | WH/MHI | — |
| | CN-79 | SANMEN-4 | PWR | AP-1000 | 3400 | 1250 | 1000 | SMNPC | WH/MHI | — |

## TABLE 12. REACTORS PLANNED FOR CONSTRUCTION AS KNOWN ON 31 DEC. 2014 — continued

| Country | Reactor | | Type | Model | Capacity (MW) | | | Operator | NSSS supplier | Expected construction start |
|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | Thermal | Gross | Net | | | |
| | CN -70 | SANMING-1 | FBR | BN-800 | 2100 | 860 | 800 | FSNPC | | — |
| | CN -71 | SANMING-2 | FBR | BN-800 | 2100 | 860 | 800 | FSNPC | | — |
| | CN -55 | TAOHUAJIANG-1 | PWR | | | | 0 | | | — |
| | CN -56 | TAOHUAJIANG-2 | PWR | | | | 0 | | | — |
| | CN -74 | TIANWAN-5 | PWR | CNP-1000 | 2905 | 1080 | 1000 | JNPC | DEC | — |
| | CN -75 | TIANWAN-6 | PWR | CNP-1000 | 2905 | 1080 | 1000 | JNPC | DEC | — |
| | CN -47 | XIANNING-1 | PWR | | | | 0 | | | — |
| | CN -48 | XIANNING-2 | PWR | | | | 0 | | | — |
| | CN -82 | XUDABU-1 | PWR | CPR-1000 | 2905 | 1080 | 1000 | LNPC | DEC | — |
| | CN -83 | XUDABU-2 | PWR | CPR-1000 | 2905 | 1080 | 1000 | LNPC | DEC | — |
| INDIA | IN -33 | GORAKHPUR-1 | PHWR | PHWR-700 | | 700 | 630 | NPCIL | | — |
| | IN -34 | GORAKHPUR-2 | PHWR | PHWR-700 | | 700 | 630 | NPCIL | | — |
| | IN -35 | KUDANKULAM-3 | PWR | VVER V-412 | 3000 | 1000 | 917 | NPCIL | | — |
| | IN -36 | KUDANKULAM-4 | PWR | VVER V-412 | 3000 | 1000 | 917 | NPCIL | | — |
| IRAN, ISL. REP. | IR -2 | BUSHEHR-2 | PWR | VVER V-446 | 3000 | 1000 | 915 | NPPDCO | TBD | — |
| | IR -5 | BUSHEHR-3 | PWR | - | 3000 | 1000 | 915 | NPPDCO | ASE | — |
| | IR -9 | DARKHOVAIN | PWR | IR-360 | 1113 | 360 | 330 | NPPDCO | | — |
| JAPAN | JP -76 | HAMAOKA-6 | BWR | ABWR | 3926 | 1400 | 1350 | CHUBU | | — |
| | JP -69 | HIGASHI DORI-1 (TEPCO) | BWR | ABWR | 3926 | 1385 | 1343 | TEPCO | H/G | — |
| | JP -74 | HIGASHI DORI-2 (TEPCO) | BWR | ABWR | 3926 | 1385 | 1343 | TEPCO | | — |
| | JP -72 | HIGASHI DORI-2 (TOHOKU) | BWR | ABWR | | | 1067 | TOHOKU | | — |
| | JP -62 | KAMINOSEKI-1 | BWR | ABWR | 3926 | 1373 | 1325 | CHUGOKU | | — |
| | JP -63 | KAMINOSEKI-2 | BWR | ABWR | 3926 | 1373 | 1325 | CHUGOKU | | — |
| | JP -75 | SENDAI-3 | PWR | APWR | 4466 | 1590 | 1590 | KYUSHU | | — |
| | JP -67 | TSURUGA-3 | PWR | APWR | 4466 | 1538 | 1538 | JAPCO | MHI | — |
| | JP -68 | TSURUGA-4 | PWR | APWR | 4466 | 1538 | 1538 | JAPCO | MHI | — |
| RUSSIA | RU -171 | BALTIC-2 | PWR | VVER V-491 | 3200 | 1194 | 1109 | REA | ROSATOM | — |

## TABLE 12. REACTORS PLANNED FOR CONSTRUCTION AS KNOWN ON 31 DEC. 2014 — continued

| Country | Reactor | | Type | Model | Capacity (MW) | | | Operator | NSSS supplier | Expected construction start |
|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | Thermal | Gross | Net | | | |
| | RU-202 | BASHKIR-1 | PWR | VVER V-510 | 3300 | 1255 | 1115 | REA | ROSATOM | — |
| | RU-203 | BASHKIR-2 | PWR | VVER V-510 | 3300 | 1255 | 1115 | REA | ROSATOM | — |
| | RU-207 | BELOYARSK-5 | FBR | BN-1200 | 3000 | 1220 | 0 | REA | ROSATOM | — |
| | RU-177 | CENTRAL-1 | PWR | VVER V-510 | 3300 | 1255 | 0 | REA | ROSATOM | — |
| | RU-178 | CENTRAL-2 | PWR | VVER V-510 | 3300 | 1255 | 0 | REA | ROSATOM | — |
| | RU-175 | KOLA 2-1 | PWR | - | 3200 | 1200 | 0 | REA | ROSATOM | — |
| | RU-176 | KOLA 2-2 | PWR | - | 3200 | 1200 | 1100 | REA | ROSATOM | — |
| | RU-166 | KURSK 2-1 | PWR | VVER V-510 | 3300 | 1255 | 0 | REA | ROSATOM | — |
| | RU-189 | KURSK 2-2 | PWR | VVER V-510 | 3300 | 1255 | 0 | REA | ROSATOM | — |
| | RU-190 | KURSK 2-3 | PWR | VVER V-510 | 3300 | 1255 | 0 | REA | ROSATOM | — |
| | RU-191 | KURSK 2-4 | PWR | VVER V-510 | 3300 | 1255 | 0 | REA | ROSATOM | — |
| | RU-165 | LENINGRAD 2-3 | PWR | VVER V-491 | 3200 | 1170 | 1085 | REA | ROSATOM | — |
| | RU-167 | LENINGRAD 2-4 | PWR | VVER V-491 | 3200 | 1170 | 1085 | REA | ROSATOM | — |
| | RU-181 | NIZHEGORODSK-1 | PWR | | 3300 | 1255 | 0 | REA | ROSATOM | — |
| | RU-182 | NIZHEGORODSK-2 | PWR | | 3300 | 1255 | 0 | REA | ROSATOM | — |
| | RU-187 | SEVERSK-1 | PWR | VVER V-510 | 3300 | 1255 | 0 | REA | ROSATOM | — |
| | RU-188 | SEVERSK-2 | PWR | VVER V-510 | 3300 | 1255 | 0 | REA | ROSATOM | — |
| | RU-198 | SMOLENSK 2-1 | PWR | VVER V-510 | 3300 | 1255 | 0 | REA | ROSATOM | — |
| | RU-199 | SMOLENSK 2-2 | PWR | VVER V-510 | 3200 | 1255 | 0 | REA | ROSATOM | — |
| | RU-204 | SOUTH URALS-1 | FBR | BN-1200 | 3000 | 1220 | 1115 | REA | ROSATOM | — |
| | RU-205 | SOUTH URALS-2 | FBR | BN-1200 | 3000 | 1220 | 0 | REA | ROSATOM | — |
| UAE | AE-04 | BARAKAH-4 | PWR | APR-1400 | 3983 | 1400 | 1345 | ENEC | KEPCO | 2015-6 |
| USA | US-5039 | BELL BEND | PWR | EPR | 4300 | 1720 | 1600 | | AREVA | — |
| | US-5016 | CALVERT CLIFFS-3 | PWR | US-EPR | 4300 | 1720 | 1600 | | | — |
| | US-5034 | COMANCHE PEAK-3 | PWR | US-APWR | | | 1700 | | | — |
| | US-5035 | COMANCHE PEAK-4 | PWR | US-APWR | | | 1700 | | | — |
| | US-5033 | FERMI-3 | BWR | ESBWR | 4500 | 1600 | 1520 | | | — |
| | US-5022 | HARRIS-2 | PWR | AP-1000 | 3750 | 1250 | 1117 | | | — |

## TABLE 12. REACTORS PLANNED FOR CONSTRUCTION AS KNOWN ON 31 DEC. 2014 — continued

| Country | Reactor | | Type | Model | Capacity (MW) | | | Operator | NSSS supplier | Expected construction start |
|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | Thermal | Gross | Net | | | |
| | US -5023 | HARRIS-3 | PWR | AP-1000 | 3750 | 1250 | 1117 | | | — |
| | US -5029 | LEVY COUNTY-1 | PWR | AP-1000 | 3750 | 1250 | 1117 | PROGRESS | WH | — |
| | US -5030 | LEVY COUNTY-2 | PWR | AP-1000 | 3750 | 1250 | 1117 | | WH | — |
| | US -5017 | NORTH ANNA-3 | PWR | US-APWR | | | 1500 | | | — |
| | US -5012 | SOUTH TEXAS-3 | BWR | ABWR | 3926 | 1400 | 1350 | | | — |
| | US -5013 | SOUTH TEXAS-4 | BWR | ABWR | 3926 | 1400 | 1350 | | | — |
| | US -5040 | TURKEY POINT-6 | PWR | AP-1000 | 3750 | 1250 | 1117 | | | — |
| | US -5041 | TURKEY POINT-7 | PWR | AP-1000 | 3750 | 1250 | 1117 | | | — |
| | US -5018 | WILLIAM STATES LEE III-1 | PWR | AP-1000 | 3750 | 1250 | 1117 | | | — |
| | US -5019 | WILLIAM STATES LEE III-2 | PWR | AP-1000 | 3750 | 1250 | 1117 | | | — |
| VIET NAM | VN -1 | PHUOC DINH 1 | PWR | | | | 1000 | EVN | ROSATOM | — |
| | VN -2 | PHUOC DINH 2 | PWR | | | | 1000 | EVN | ROSATOM | — |

Note: Status as of 31 December 2014, 96 reactors (83518 MW) were known as planned.

## TABLE 13. REACTORS UNDER CONSTRUCTION, 31 DEC. 2014

| Country | Reactor | | Type | Model | Capacity (MW) | | | Operator | NSSS supplier | Construction start | First criticality | Grid connection | Commercial operation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | Thermal | Gross | Net | | | | | | |
| ARGENTINA | AR -4 | CAREM25 | PWR | CAREM Prototyp | 100 | 29 | 25 | CNEA | CNEA | 2014-2 | — | — | — |
| BELARUS | BY -1 | BELARUSIAN-1 | PWR | VVER V-491 | 3200 | 1194 | 1109 | BelNPP | ASE | 2013-11 | — | — | — |
| | BY -2 | BELARUSIAN-2 | PWR | VVER V-491 | 3200 | 1194 | 1109 | BelNPP | ASE | 2014-4 | — | — | — |
| BRAZIL | BR -3 | ANGRA-3 | PWR | PRE KONVOI | 3765 | 1350 | 1245 | ELETRONU | KWU | 2010-6 | — | — | 2016-1 |
| CHINA | CN -36 | CHANGJIANG-1 | PWR | CNP-600 | 1930 | 650 | 610 | HNPC | DEC | 2010-4 | — | — | — |
| | CN -37 | CHANGJIANG-2 | PWR | CNP-600 | 1930 | 650 | 610 | HNPC | DEC | 2010-11 | — | — | 2015-12 |
| | CN -38 | FANGCHENGGANG-1 | PWR | CPR-1000 | 2905 | 1080 | 1000 | GFNPC | DEC | 2010-7 | — | — | — |
| | CN -39 | FANGCHENGGANG-2 | PWR | CPR-1000 | 2905 | 1080 | 1000 | GFNPC | DEC | 2010-12 | — | — | — |
| | CN -25 | FANGJIASHAN-2 | PWR | CPR-1000 | 2905 | 1080 | 1000 | QNPC | NPIC | 2009-7 | 2014-12 | 2015-1 | 2015-2 |
| | CN -21 | FUQING-2 | PWR | CPR-1000 | 2905 | 1080 | 1000 | FQNP | NPIC | 2009-6 | — | — | — |
| | CN -42 | FUQING-3 | PWR | CPR-1000 | 2905 | 1080 | 1000 | FQNP | NPIC | 2010-12 | — | — | 2015-7 |
| | CN -43 | FUQING-4 | PWR | CPR-1000 | 2905 | 1080 | 1000 | FQNP | NPIC | 2012-11 | — | — | — |
| | CN -30 | HAIYANG-1 | PWR | AP-1000 | 3451 | 1250 | 1000 | SDNPC | WH | 2009-9 | — | — | — |
| | CN -31 | HAIYANG-2 | PWR | AP-1000 | 3415 | 1250 | 1000 | SDNPC | WH | 2010-6 | — | — | — |
| | CN -26 | HONGYANHE-3 | PWR | CPR-1000 | 2905 | 1080 | 1000 | LHNPC | DEC | 2009-3 | 2014-10 | 2015-3 | — |
| | CN -27 | HONGYANHE-4 | PWR | CPR-1000 | 2905 | 1080 | 1000 | LHNPC | DEC | 2009-8 | — | — | — |
| | CN -34 | NINGDE-3 | PWR | CPR-1000 | 2905 | 1080 | 1018 | NDNP | CFHI | 2010-1 | 2015-3 | 2015-3 | — |
| | CN -35 | NINGDE-4 | PWR | CPR-1000 | 2905 | 1080 | 1018 | NDNP | CFHI | 2010-9 | — | — | — |
| | CN -28 | SANMEN-1 | PWR | AP-1000 | 3400 | 1250 | 1000 | SMNPC | WH/MHI | 2009-4 | — | — | — |
| | CN -29 | SANMEN-2 | PWR | AP-1000 | 3400 | 1250 | 1000 | SMNPC | WH/MHI | 2009-12 | — | — | — |
| | CN -44 | SHIDAO BAY-1 | HTGR | HTR-PM | 500 | 211 | 200 | HSNPC | Tsinghua | 2012-12 | — | — | — |
| | CN -32 | TAISHAN-1 | PWR | EPR-1750 | 4590 | 1750 | 1660 | TNPC | AREVA | 2009-11 | — | — | — |
| | CN -33 | TAISHAN-2 | PWR | EPR-1750 | 4590 | 1750 | 1660 | TNPC | AREVA | 2010-4 | — | — | — |
| | CN -45 | TIANWAN-3 | PWR | VVER V-428M | 3000 | 1060 | 990 | JNPC | IZ | 2012-12 | — | — | — |
| | CN -73 | TIANWAN-4 | PWR | VVER V-428M | 3000 | 1060 | 990 | JNPC | IZ | 2013-9 | — | — | — |
| | CN -23 | YANGJIANG-2 | PWR | CPR-1000 | 2905 | 1080 | 1000 | YJNPC | CFHI | 2009-6 | 2015-3 | 2015-3 | — |

## TABLE 13. REACTORS UNDER CONSTRUCTION, 31 DEC. 2014 — continued

| Country | Reactor | | Type | Model | Capacity (MW) | | | Operator | NSSS supplier | Construction start | First criticality | Grid connection | Commercial operation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | Thermal | Gross | Net | | | | | | |
| | CN -40 | YANGJIANG-3 | PWR | CPR-1000 | 2905 | 1080 | 1000 | YJNPC | CFHI | 2010-11 | — | — | — |
| | CN -41 | YANGJIANG-4 | PWR | CPR-1000 | 2905 | 1080 | 1000 | YJNPC | CFHI | 2012-11 | — | — | — |
| | CN -46 | YANGJIANG-5 | PWR | ACPR-1000 | 2905 | 1087 | 1000 | YJNPC | CFHI | 2013-9 | — | — | — |
| | CN -69 | YANGJIANG-6 | PWR | ACPR-1000 | 2905 | 1087 | 1000 | YJNPC | CFHI | 2013-12 | — | — | — |
| FINLAND | FI -5 | OLKILUOTO-3 | PWR | EPR | 4300 | 1720 | 1600 | TVO | AREVA | 2005-8 | — | — | 2018-7 |
| FRANCE | FR -74 | FLAMANVILLE-3 | PWR | EPR | 4300 | 1650 | 1630 | EDF | AREVA | 2007-12 | 2016-12 | 2016-12 | — |
| INDIA | IN -30 | KAKRAPAR-3 | PHWR | PHWR-700 | 2166 | 700 | 630 | NPCIL | NPCIL | 2010-11 | — | — | — |
| | IN -31 | KAKRAPAR-4 | PHWR | PHWR-700 | 2166 | 700 | 630 | NPCIL | NPCIL | 2010-11 | — | — | — |
| | IN -26 | KUDANKULAM-2 | PWR | VVER V-412 | 3000 | 1000 | 917 | NPCIL | MAEP | 2002-7 | — | — | — |
| | IN -29 | PFBR | FBR | Prototype | 1253 | 500 | 470 | BHAVINI | | 2004-10 | — | — | — |
| | IN -21 | RAJASTHAN-7 | PHWR | Horizontal Pre | 2177 | 700 | 630 | NPCIL | NPCIL | 2011-7 | — | — | — |
| | IN -22 | RAJASTHAN-8 | PHWR | Horizontal Pre | 2177 | 700 | 630 | NPCIL | NPCIL | 2011-9 | — | — | — |
| JAPAN | JP -66 | OHMA | BWR | ABWR | 3926 | 1383 | 1325 | EPDC | H/G | 2010-5 | — | — | — |
| | JP -65 | SHIMANE-3 | BWR | ABWR | 3926 | 1373 | 1325 | CHUGOKU | HITACHI | 2007-10 | — | — | — |
| KOREA, REP. OF | KR -27 | SHIN-HANUL-1 | PWR | APR-1400 | 3938 | 1400 | 1340 | KHNP | DHICKOPC | 2012-7 | — | — | 2016-6 |
| | KR -28 | SHIN-HANUL-2 | PWR | APR-1400 | 3983 | 1400 | 1340 | KHNP | DHICKOPC | 2013-6 | — | — | 2017-6 |
| | KR -25 | SHIN-KORI-3 | PWR | APR-1400 | 3983 | 1400 | 1400 | KHNP | DHICKOPC | 2008-10 | — | — | — |
| | KR -26 | SHIN-KORI-4 | PWR | APR-1400 | 3938 | 1400 | 1340 | KHNP | DHICKOPC | 2009-8 | — | — | — |
| | KR -24 | SHIN-WOLSONG-2 | PWR | OPR-1000 | 2825 | 1000 | 950 | KHNP | DHICKOPC | 2008-9 | 2015-2 | 2015-2 | — |
| PAKISTAN | PK -4 | CHASNUPP-3 | PWR | CNP-300 | 999 | 340 | 315 | PAEC | CNNC | 2011-5 | 2016-8 | 2016-9 | 2016-12 |
| | PK -5 | CHASNUPP-4 | PWR | CNP-300 | 999 | 340 | 315 | PAEC | CNNC | 2011-12 | 2017-6 | 2017-7 | 2017-10 |
| RUSSIA | RU -151 | AKADEMIK LOMONOSOV-1 | PWR | KLT-40S 'Float | 150 | 38 | 32 | REA | ROSATOM | 2007-4 | — | — | 2019-12 |
| | RU -152 | AKADEMIK LOMONOSOV-2 | PWR | KLT-40S 'Float | 150 | 38 | 32 | REA | ROSATOM | 2007-4 | — | — | 2019-12 |

## TABLE 13. REACTORS UNDER CONSTRUCTION, 31 DEC. 2014 — continued

| Country | Reactor | | Type | Model | Capacity (MW) | | | Operator | NSSS supplier | Construction start | First criticality | Grid connection | Commercial operation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | Thermal | Gross | Net | | | | | | |
| | RU -170 | BALTIC-1 | PWR | VVER V-491 | 3200 | 1194 | 1109 | REA | ROSATOM | 2012-2 | — | 2018-12 | 2019-12 |
| | RU -116 | BELOYARSK-4 | FBR | BN-800 | 2100 | 864 | 789 | REA | ROSATOM | 2006-7 | 2014-6 | — | 2016-1 |
| | RU -163 | LENINGRAD 2-1 | PWR | VVER V-491 | 3200 | 1170 | 1085 | REA | ROSATOM | 2008-10 | — | — | 2016-7 |
| | RU -164 | LENINGRAD 2-2 | PWR | VVER V-491 | 3200 | 1170 | 1085 | REA | ROSATOM | 2010-4 | — | — | 2018-3 |
| | RU -161 | NOVOVORONEZH 2-1 | PWR | VVER V-392M | 3200 | 1199 | 1114 | REA | ROSATOM | 2008-6 | — | — | 2016-6 |
| | RU -162 | NOVOVORONEZH 2-2 | PWR | VVER V-392M | 3200 | 1199 | 1114 | REA | ROSATOM | 2009-7 | — | — | 2017-3 |
| | RU -64 | ROSTOV-4 | PWR | VVER V-320 | 3000 | 1100 | 1011 | REA | ROSATOM | 2010-6 | — | — | 2017-7 |
| SLOVAKIA | SK -10 | MOCHOVCE-3 | PWR | VVER V-213 | 1375 | 471 | 440 | SE,plc | SKODA | 1987-1 | 2016-8 | 2016-9 | 2016-11 |
| | SK -11 | MOCHOVCE-4 | PWR | VVER V-213 | 1375 | 471 | 440 | SE,plc | SKODA | 1987-1 | 2017-8 | 2017-9 | 2017-11 |
| UAE | AE -01 | BARAKAH-1 | PWR | APR-1400 | 3983 | 1400 | 1345 | ENEC | KEPCO | 2012-7 | 2016-10 | 2016-11 | 2017-6 |
| | AE -02 | BARAKAH-2 | PWR | APR-1400 | 3983 | 1400 | 1345 | ENEC | KEPCO | 2013-5 | 2017-10 | 2017-11 | — |
| | AE -03 | BARAKAH-3 | PWR | APR-1400 | 3983 | 1400 | 1345 | ENEC | KEPCO | 2014-9 | 2018-10 | 2018-11 | — |
| UKRAINE | UA -51 | KHMELNITSKI-3 | PWR | VVER V-392B | 3200 | 1000 | 950 | NNEGC | ASE | 1986-3 | — | 2021-1 | — |
| | UA -52 | KHMELNITSKI-4 | PWR | VVER V-392B | 3200 | 1000 | 950 | NNEGC | ASE | 1987-2 | — | 2021-1 | — |
| USA | US -5027 | SUMMER-2 | PWR | AP-1000 | 3400 | 1250 | 1117 | SCE&G | WH | 2013-3 | — | — | — |
| | US -5028 | SUMMER-3 | PWR | AP-1000 | 3400 | 1250 | 1117 | SCE&G | WH | 2013-11 | — | — | — |
| | US -5025 | VOGTLE-3 | PWR | AP-1000 | 3400 | 1250 | 1117 | SOUTHERN | WH | 2013-3 | — | — | — |
| | US -5026 | VOGTLE-4 | PWR | AP-1000 | 3400 | 1250 | 1117 | SOUTHERN | WH | 2013-11 | — | — | — |
| | US -391 | WATTS BAR-2 | PWR | W (4-loop) (IC | 3425 | 1218 | 1165 | TVA | WH | 1972-12 | — | — | — |

Note: Status as of 31 December 2014, 70 reactors (68450 MW) were under construction, including 2 units (2600 MW) in Taiwan, China.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TAIWAN, CN | TW -7 | LUNGMEN 1 | BWR | ABWR | 3926 | 1350 | 1300 | TPC | GE | 1999-3 | — | — | — |
| TAIWAN, CN | TW -8 | LUNGMEN 2 | BWR | ABWR | 3926 | 1350 | 1300 | TPC | GE | 1999-8 | — | — | — |

## TABLE 14. OPERATIONAL REACTORS, 31 DEC. 2014

| Country | Reactor | | Type | Model | Capacity (MW) | | | Operator | NSSS supplier | Construction start | Grid connection | Commercial operation | EAF % 2010-2014 | UCF % 2010-2014 | Non-electrical applics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | Thermal | Gross | Net | | | | | | | | |
| ARGENTINA | AR -1 | ATUCHA-1 | PHWR | PHWR KWU | 1179 | 357 | 335 | NASA | SIEMENS | 1968-6 | 1974-3 | 1974-6 | 86.1 | 86.4 | - |
| | AR -3 | ATUCHA-2 | PHWR | PHWR KWU | 2160 | 745 | 692 | NASA | SIEMENS | 1981-7 | 2014-6 | — | | | - |
| | AR -2 | EMBALSE | PHWR | CANDU 6 | 2015 | 648 | 600 | NASA | AECL | 1974-4 | 1983-4 | 1984-1 | 75.3 | 75.4 | - |
| ARMENIA | AM -19 | ARMENIAN-2 | PWR | VVER V-270 | 1375 | 408 | 375 | ANPPCJSC | FAEA | 1975-7 | 1980-1 | 1980-5 | 68.3 | 70.5 | - |
| BELGIUM | BE -2 | DOEL-1 | PWR | W (2-loop) | 1311 | 454 | 433 | ELECTRAB | ACECOWEN | 1969-7 | 1974-8 | 1975-2 | 91.5 | 91.7 | - |
| | BE -4 | DOEL-2 | PWR | W (2-loop) | 1311 | 454 | 433 | ELECTRAB | ACECOWEN | 1971-9 | 1975-8 | 1975-12 | 90.9 | 91.4 | - |
| | BE -5 | DOEL-3 | PWR | W (3-loop) | 3054 | 1056 | 1006 | ELECTRAB | FRAMACEC | 1975-1 | 1982-6 | 1982-10 | 60.0 | 60.2 | - |
| | BE -7 | DOEL-4 | PWR | W (3-loop) | 2988 | 1090 | 1039 | ELECTRAB | ACECOWEN | 1978-12 | 1985-4 | 1985-7 | 80.8 | 80.9 | - |
| | BE -3 | TIHANGE-1 | PWR | Framatome 3 lo | 2873 | 1009 | 962 | ELECTRAB | ACLF | 1970-6 | 1975-3 | 1975-10 | 82.4 | 83.8 | - |
| | BE -6 | TIHANGE-2 | PWR | W (3-loop) | 3064 | 1055 | 1008 | ELECTRAB | FRAMACEC | 1976-4 | 1982-10 | 1983-6 | 64.5 | 64.7 | - |
| | BE -8 | TIHANGE-3 | PWR | W (3-loop) | 3000 | 1094 | 1046 | ELECTRAB | ACECOWEN | 1978-11 | 1985-6 | 1985-9 | 90.5 | 91.6 | - |
| BRAZIL | BR -1 | ANGRA-1 | PWR | 2-loop WE | 1882 | 640 | 609 | ELETRONU | WH | 1971-5 | 1982-4 | 1985-1 | 84.4 | 84.5 | - |
| | BR -2 | ANGRA-2 | PWR | PRE KONVOI | 3764 | 1350 | 1275 | ELETRONU | KWU | 1976-1 | 2000-7 | 2001-2 | 90.5 | 91.0 | - |
| BULGARIA | BG -5 | KOZLODUY-5 | PWR | VVER V-320 | 3000 | 1000 | 963 | KOZNPP | AEE | 1980-7 | 1987-11 | 1988-12 | 87.9 | 88.3 | DH |
| | BG -6 | KOZLODUY-6 | PWR | VVER V-320 | 3000 | 1000 | 963 | KOZNPP | AEE | 1982-4 | 1991-8 | 1993-12 | 87.4 | 88.1 | DH |
| CANADA | CA -8 | BRUCE-1 | PHWR | CANDU 791 | 2575 | 824 | 772 | BRUCEPOW | OH/AECL | 1971-6 | 1977-1 | 1977-9 | 80.9 | 81.0 | - |
| | CA -9 | BRUCE-2 | PHWR | CANDU 791 | 2456 | 786 | 734 | BRUCEPOW | OH/AECL | 1970-12 | 1976-9 | 1977-9 | 85.0 | 85.0 | - |
| | CA -10 | BRUCE-3 | PHWR | CANDU 750A | 2832 | 805 | 730 | BRUCEPOW | OH/AECL | 1972-7 | 1977-12 | 1978-2 | 71.6 | 71.9 | - |
| | CA -11 | BRUCE-4 | PHWR | CANDU 750A | 2832 | 805 | 730 | BRUCEPOW | OH/AECL | 1972-9 | 1978-12 | 1979-1 | 82.8 | 83.0 | - |
| | CA -18 | BRUCE-5 | PHWR | CANDU 750B | 2832 | 872 | 817 | BRUCEPOW | OH/AECL | 1978-6 | 1984-12 | 1985-3 | 91.1 | 91.3 | - |
| | CA -19 | BRUCE-6 | PHWR | CANDU 750B | 2690 | 891 | 817 | BRUCEPOW | OH/AECL | 1978-1 | 1984-6 | 1984-9 | 89.8 | 89.9 | - |
| | CA -20 | BRUCE-7 | PHWR | CANDU 750B | 2832 | 872 | 817 | BRUCEPOW | OH/AECL | 1979-5 | 1986-2 | 1986-4 | 90.8 | 90.9 | - |
| | CA -21 | BRUCE-8 | PHWR | CANDU 750B | 2690 | 872 | 817 | BRUCEPOW | OH/AECL | 1979-8 | 1987-3 | 1987-5 | 91.1 | 91.2 | - |
| | CA -22 | DARLINGTON-1 | PHWR | CANDU 850 | 2776 | 934 | 878 | OPG | OH/AECL | 1982-4 | 1990-12 | 1992-11 | 88.7 | 89.7 | - |

Note: The column "Non-electrical applications" indicates the use of the facility to provide: DH district heating,

## TABLE 14. OPERATIONAL REACTORS, 31 DEC. 2014 — continued

| Country | Reactor | | Type | Model | Capacity (MW) | | | Operator | NSSS supplier | Construction start | Grid connection | Commercial operation | EAF % 2010-2014 | UCF % 2010-2014 | Non-electrical applics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | Thermal | Gross | Net | | | | | | | | |
| | CA-23 | DARLINGTON-2 | PHWR | CANDU 850 | 2776 | 934 | 878 | OPG | OH/AECL | 1981-9 | 1990-1 | 1990-10 | 87.0 | 87.9 | - |
| | CA-24 | DARLINGTON-3 | PHWR | CANDU 850 | 2776 | 934 | 878 | OPG | OH/AECL | 1984-9 | 1992-12 | 1993-2 | 94.4 | 95.4 | - |
| | CA-25 | DARLINGTON-4 | PHWR | CANDU 850 | 2776 | 934 | 878 | OPG | OH/AECL | 1985-7 | 1993-4 | 1993-6 | 86.7 | 87.4 | - |
| | CA-4 | PICKERING-1 | PHWR | CANDU 500A | 1744 | 542 | 515 | OPG | OH/AECL | 1966-6 | 1971-4 | 1971-7 | 66.2 | 66.7 | - |
| | CA-7 | PICKERING-4 | PHWR | CANDU 500A | 1744 | 542 | 515 | OPG | OH/AECL | 1968-5 | 1973-5 | 1973-6 | 69.5 | 69.8 | - |
| | CA-13 | PICKERING-5 | PHWR | CANDU 500B | 1744 | 540 | 516 | OPG | OH/AECL | 1974-11 | 1982-12 | 1983-5 | 75.3 | 76.2 | - |
| | CA-14 | PICKERING-6 | PHWR | CANDU 500B | 1744 | 540 | 516 | OPG | OH/AECL | 1975-10 | 1983-11 | 1984-2 | 81.5 | 82.0 | - |
| | CA-15 | PICKERING-7 | PHWR | CANDU 500B | 1744 | 540 | 516 | OPG | OH/AECL | 1976-3 | 1984-11 | 1985-1 | 76.5 | 77.1 | - |
| | CA-16 | PICKERING-8 | PHWR | CANDU 500B | 1744 | 540 | 516 | OPG | OH/AECL | 1976-9 | 1986-1 | 1986-2 | 72.4 | 72.8 | - |
| | CA-17 | POINT LEPREAU | PHWR | CANDU 6 | 2180 | 705 | 660 | NBEPC | AECL | 1975-5 | 1982-9 | 1983-2 | 32.7 | 32.7 | - |
| CHINA | CN-84 | CEFR | FBR | BN-20 | 65 | 25 | 20 | CIAE | IZ | 2000-5 | 2011-7 | — | | | - |
| | CN-2 | DAYA BAY-1 | PWR | M310 | 2905 | 984 | 944 | DNMC | FRAM | 1987-8 | 1993-8 | 1994-2 | 91.6 | 91.8 | - |
| | CN-3 | DAYA BAY-2 | PWR | M310 | 2905 | 984 | 944 | DNMC | FRAM | 1988-4 | 1994-2 | 1994-5 | 87.8 | 88.0 | - |
| | CN-24 | FANGJIASHAN-1 | PWR | CPR-1000 | 2905 | 1080 | 1000 | QNPC | NPIC | 2008-12 | 2014-11 | 2014-12 | 100.0 | 100.0 | - |
| | CN-20 | FUQING-1 | PWR | CPR-1000 | 2905 | 1080 | 1000 | FQNP | NPIC | 2008-11 | 2014-8 | 2014-11 | 100.0 | 100.0 | - |
| | CN-16 | HONGYANHE-1 | PWR | CPR-1000 | 2905 | 1119 | 1061 | LHNPC | DEC | 2007-8 | 2013-2 | 2013-6 | 79.6 | 80.5 | - |
| | CN-17 | HONGYANHE-2 | PWR | CPR-1000 | 2905 | 1119 | 1061 | LHNPC | DEC | 2008-3 | 2013-11 | 2014-5 | 81.1 | 81.1 | - |
| | CN-6 | LING AO-1 | PWR | M310 | 2905 | 990 | 950 | DNMC | FRAM | 1997-5 | 2002-2 | 2002-5 | 90.0 | 90.3 | - |
| | CN-7 | LING AO-2 | PWR | M310 | 2905 | 990 | 950 | DNMC | FRAM | 1997-11 | 2002-9 | 2003-1 | 91.5 | 91.8 | - |
| | CN-12 | LING AO-3 | PWR | CPR-1000 | 2905 | 1080 | 1007 | DNMC | DEC | 2005-12 | 2010-7 | 2010-9 | 83.9 | 84.2 | - |
| | CN-13 | LING AO-4 | PWR | CPR-1000 | 2905 | 1080 | 1007 | DNMC | DEC | 2006-6 | 2011-5 | 2011-8 | 87.7 | 88.2 | - |
| | CN-18 | NINGDE-1 | PWR | CPR-1000 | 2905 | 1080 | 1018 | NDNP | DEC | 2008-2 | 2012-12 | 2013-4 | 75.3 | 75.3 | - |
| | CN-19 | NINGDE-2 | PWR | CPR-1000 | 2905 | 1080 | 1018 | NDNP | SHE | 2008-11 | 2014-1 | 2014-5 | 99.8 | 99.8 | - |
| | CN-4 | QINSHAN 2-1 | PWR | CNP-600 | 1930 | 650 | 610 | NPQJVC | CNNC | 1996-6 | 2002-2 | 2002-4 | 84.0 | 84.0 | - |
| | CN-5 | QINSHAN 2-2 | PWR | CNP-600 | 1930 | 650 | 610 | NPQJVC | CNNC | 1997-4 | 2004-3 | 2004-5 | 86.2 | 86.2 | - |
| | CN-14 | QINSHAN 2-3 | PWR | CNP-600 | 1930 | 660 | 619 | NPQJVC | CNNC | 2006-4 | 2010-8 | 2010-10 | 89.6 | 89.6 | - |
| | CN-15 | QINSHAN 2-4 | PWR | CNP-600 | 1930 | 660 | 610 | NPQJVC | CNNC | 2007-1 | 2011-11 | 2011-12 | 89.6 | 89.9 | - |
| | CN-8 | QINSHAN 3-1 | PHWR | CANDU 6 | 2064 | 728 | 650 | TQNPC | AECL | 1998-6 | 2002-11 | 2002-12 | 92.9 | 92.9 | - |
| | CN-9 | QINSHAN 3-2 | PHWR | CANDU 6 | 2064 | 728 | 650 | TQNPC | AECL | 1998-9 | 2003-6 | 2003-7 | 92.5 | 92.7 | - |

## TABLE 14. OPERATIONAL REACTORS, 31 DEC. 2014 — continued

| Country | Reactor | | Type | Model | Capacity (MW) | | | Operator | NSSS supplier | Construction start | Grid connection | Commercial operation | EAF % 2010-2014 | UCF % 2010-2014 | Non-electrical applics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | Thermal | Gross | Net | | | | | | | | |
| | CN -1 | QINSHAN-1 | PWR | CNP-300 | 966 | 310 | 298 | CNNO | CNNC | 1985-3 | 1991-12 | 1994-4 | 89.0 | 89.1 | - |
| | CN -10 | TIANWAN-1 | PWR | VVER V-428 | 3000 | 1060 | 990 | JNPC | IZ | 1999-10 | 2006-5 | 2007-5 | 88.2 | 88.2 | - |
| | CN -11 | TIANWAN-2 | PWR | VVER V-428 | 3000 | 1060 | 990 | JNPC | IZ | 2000-9 | 2007-5 | 2007-8 | 87.5 | 87.5 | - |
| | CN -22 | YANGJIANG-1 | PWR | CPR-1000 | 2905 | 1086 | 1000 | YJNPC | CFHI | 2008-12 | 2013-12 | 2014-3 | 99.9 | 99.9 | - |
| CZECH REP. | CZ -4 | DUKOVANY-1 | PWR | VVER V-213 | 1444 | 500 | 468 | CEZ | SKODA | 1979-1 | 1985-2 | 1985-5 | 89.0 | 89.6 | - |
| | CZ -5 | DUKOVANY-2 | PWR | VVER V-213 | 1444 | 500 | 471 | CEZ | SKODA | 1979-1 | 1986-1 | 1986-3 | 87.1 | 88.1 | - |
| | CZ -8 | DUKOVANY-3 | PWR | VVER V-213 | 1444 | 500 | 468 | CEZ | SKODA | 1979-3 | 1986-11 | 1986-12 | 86.1 | 87.2 | - |
| | CZ -9 | DUKOVANY-4 | PWR | VVER V-213 | 1444 | 500 | 471 | CEZ | SKODA | 1979-3 | 1987-6 | 1987-7 | 85.9 | 86.9 | - |
| | CZ -23 | TEMELIN-1 | PWR | VVER V-320 | 3120 | 1077 | 1023 | CEZ | SKODA | 1987-2 | 2000-12 | 2002-6 | 80.8 | 81.0 | DH |
| | CZ -24 | TEMELIN-2 | PWR | VVER V-320 | 3120 | 1056 | 1003 | CEZ | SKODA | 1987-2 | 2002-12 | 2003-4 | 81.3 | 81.4 | DH |
| FINLAND | FI -1 | LOVIISA-1 | PWR | VVER V-213 | 1500 | 520 | 496 | FORTUMPH | AEE | 1971-5 | 1977-2 | 1977-5 | 90.9 | 91.6 | - |
| | FI -2 | LOVIISA-2 | PWR | VVER V-213 | 1500 | 520 | 496 | FORTUMPH | AEE | 1972-8 | 1980-11 | 1981-1 | 90.8 | 91.7 | - |
| | FI -3 | OLKILUOTO-1 | BWR | ABB-III, BWR-2 | 2500 | 910 | 880 | TVO | ASEASTAL | 1974-2 | 1978-9 | 1979-10 | 93.3 | 94.1 | - |
| | FI -4 | OLKILUOTO-2 | BWR | ABB-III, BWR-2 | 2500 | 910 | 880 | TVO | ASEASTAL | 1975-11 | 1980-2 | 1982-7 | 93.8 | 94.8 | - |
| FRANCE | FR -54 | BELLEVILLE-1 | PWR | P4 REP 1300 | 3817 | 1363 | 1310 | EDF | FRAM | 1980-5 | 1987-10 | 1988-6 | 75.6 | 76.7 | - |
| | FR -55 | BELLEVILLE-2 | PWR | P4 REP 1300 | 3817 | 1363 | 1310 | EDF | FRAM | 1980-8 | 1988-7 | 1989-1 | 83.3 | 85.4 | - |
| | FR -32 | BLAYAIS-1 | PWR | CP1 | 2785 | 951 | 910 | EDF | FRAM | 1977-1 | 1981-6 | 1981-12 | 77.7 | 78.6 | - |
| | FR -33 | BLAYAIS-2 | PWR | CP1 | 2785 | 951 | 910 | EDF | FRAM | 1977-1 | 1982-7 | 1983-2 | 78.0 | 79.7 | - |
| | FR -34 | BLAYAIS-3 | PWR | CP1 | 2785 | 951 | 910 | EDF | FRAM | 1978-4 | 1983-8 | 1983-11 | 78.4 | 79.4 | - |
| | FR -35 | BLAYAIS-4 | PWR | CP1 | 2785 | 951 | 910 | EDF | FRAM | 1978-4 | 1983-5 | 1983-10 | 79.5 | 80.7 | - |
| | FR -13 | BUGEY-2 | PWR | CP0 | 2785 | 945 | 910 | EDF | FRAM | 1972-11 | 1978-5 | 1979-3 | 69.7 | 71.6 | - |
| | FR -14 | BUGEY-3 | PWR | CP0 | 2785 | 945 | 910 | EDF | FRAM | 1973-9 | 1978-9 | 1979-3 | 63.3 | 67.4 | - |
| | FR -15 | BUGEY-4 | PWR | CP0 | 2785 | 917 | 880 | EDF | FRAM | 1974-6 | 1979-3 | 1979-7 | 80.9 | 82.5 | - |
| | FR -16 | BUGEY-5 | PWR | CP0 | 2785 | 917 | 880 | EDF | FRAM | 1974-7 | 1979-7 | 1980-1 | 72.2 | 74.9 | - |
| | FR -50 | CATTENOM-1 | PWR | P4 REP 1300 | 3817 | 1362 | 1300 | EDF | FRAM | 1979-10 | 1986-11 | 1987-4 | 80.1 | 81.7 | - |
| | FR -53 | CATTENOM-2 | PWR | P4 REP 1300 | 3817 | 1362 | 1300 | EDF | FRAM | 1980-7 | 1987-9 | 1988-2 | 75.7 | 78.4 | - |
| | FR -60 | CATTENOM-3 | PWR | P4 REP 1300 | 3817 | 1362 | 1300 | EDF | FRAM | 1982-6 | 1990-7 | 1991-2 | 78.1 | 79.4 | - |

Note: The column "Non-electrical applications" indicates the use of the facility to provide: DH district heating,

## TABLE 14. OPERATIONAL REACTORS, 31 DEC. 2014 — continued

| Country | Reactor | | Type | Model | Capacity (MW) | | | Operator | NSSS supplier | Construction start | Grid connection | Commercial operation | EAF % 2010-2014 | UCF % 2010-2014 | Non-electrical applics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | Thermal | Gross | Net | | | | | | | | |
| | FR -65 | CATTENOM-4 | PWR | P4 REP 1300 | 3817 | 1362 | 1300 | EDF | FRAM | 1983-9 | 1991-5 | 1992-1 | 73.2 | 74.7 | - |
| | FR -40 | CHINON B-1 | PWR | CP2 | 2785 | 954 | 905 | EDF | FRAM | 1977-3 | 1982-11 | 1984-2 | 69.7 | 70.1 | - |
| | FR -41 | CHINON B-2 | PWR | CP2 | 2785 | 954 | 905 | EDF | FRAM | 1977-3 | 1983-11 | 1984-8 | 76.9 | 78.2 | - |
| | FR -56 | CHINON B-3 | PWR | CP2 | 2785 | 954 | 905 | EDF | FRAM | 1980-10 | 1986-10 | 1987-3 | 81.6 | 82.4 | - |
| | FR -57 | CHINON B-4 | PWR | CP2 | 2785 | 954 | 905 | EDF | FRAM | 1981-2 | 1987-11 | 1988-4 | 76.4 | 77.1 | - |
| | FR -62 | CHOOZ B-1 | PWR | N4 REP 1450 | 4270 | 1560 | 1500 | EDF | FRAM | 1984-1 | 1996-8 | 2000-5 | 78.4 | 79.1 | - |
| | FR -70 | CHOOZ B-2 | PWR | N4 REP 1450 | 4270 | 1560 | 1500 | EDF | FRAM | 1985-12 | 1997-4 | 2000-9 | 79.8 | 87.8 | - |
| | FR -72 | CIVAUX-1 | PWR | N4 REP 1450 | 4270 | 1561 | 1495 | EDF | FRAM | 1988-10 | 1997-12 | 2002-1 | 74.1 | 76.7 | - |
| | FR -73 | CIVAUX-2 | PWR | N4 REP 1450 | 4270 | 1561 | 1495 | EDF | FRAM | 1991-4 | 1999-12 | 2002-4 | 77.2 | 85.8 | - |
| | FR -42 | CRUAS-1 | PWR | CP2 | 2785 | 956 | 915 | EDF | FRAM | 1978-8 | 1983-4 | 1984-4 | 78.9 | 81.4 | - |
| | FR -43 | CRUAS-2 | PWR | CP2 | 2785 | 956 | 915 | EDF | FRAM | 1978-11 | 1984-9 | 1985-4 | 76.7 | 80.1 | - |
| | FR -44 | CRUAS-3 | PWR | CP2 | 2785 | 956 | 915 | EDF | FRAM | 1979-4 | 1984-5 | 1984-9 | 74.6 | 79.3 | - |
| | FR -45 | CRUAS-4 | PWR | CP2 | 2785 | 956 | 915 | EDF | FRAM | 1979-10 | 1984-10 | 1985-2 | 70.1 | 73.2 | - |
| | FR -22 | DAMPIERRE-1 | PWR | CP1 | 2785 | 937 | 890 | EDF | FRAM | 1975-2 | 1980-3 | 1980-9 | 78.6 | 79.6 | - |
| | FR -29 | DAMPIERRE-2 | PWR | CP1 | 2785 | 937 | 890 | EDF | FRAM | 1975-4 | 1980-12 | 1981-2 | 78.5 | 79.5 | - |
| | FR -30 | DAMPIERRE-3 | PWR | CP1 | 2785 | 937 | 890 | EDF | FRAM | 1975-9 | 1981-1 | 1981-5 | 79.4 | 81.2 | - |
| | FR -31 | DAMPIERRE-4 | PWR | CP1 | 2785 | 937 | 890 | EDF | FRAM | 1975-12 | 1981-8 | 1981-11 | 73.9 | 78.0 | - |
| | FR -11 | FESSENHEIM-1 | PWR | CP0 | 2785 | 920 | 880 | EDF | FRAM | 1971-9 | 1977-4 | 1978-1 | 71.4 | 72.1 | - |
| | FR -12 | FESSENHEIM-2 | PWR | CP0 | 2785 | 920 | 880 | EDF | FRAM | 1972-2 | 1977-10 | 1978-4 | 68.2 | 71.2 | - |
| | FR -46 | FLAMANVILLE-1 | PWR | P4 REP 1300 | 3817 | 1382 | 1330 | EDF | FRAM | 1979-12 | 1985-12 | 1986-12 | 80.0 | 82.2 | - |
| | FR -47 | FLAMANVILLE-2 | PWR | P4 REP 1300 | 3817 | 1382 | 1330 | EDF | FRAM | 1980-5 | 1986-7 | 1987-3 | 80.6 | 82.9 | - |
| | FR -61 | GOLFECH-1 | PWR | P4 REP 1300 | 3817 | 1363 | 1310 | EDF | FRAM | 1982-11 | 1990-6 | 1991-2 | 81.6 | 82.9 | - |
| | FR -68 | GOLFECH-2 | PWR | P4 REP 1300 | 3817 | 1363 | 1310 | EDF | FRAM | 1984-10 | 1993-6 | 1994-3 | 81.2 | 82.3 | - |
| | FR -20 | GRAVELINES-1 | PWR | CP1 | 2785 | 951 | 910 | EDF | FRAM | 1975-2 | 1980-3 | 1980-11 | 69.8 | 71.6 | - |
| | FR -21 | GRAVELINES-2 | PWR | CP1 | 2785 | 951 | 910 | EDF | FRAM | 1975-3 | 1980-8 | 1980-12 | 71.9 | 73.1 | - |
| | FR -27 | GRAVELINES-3 | PWR | CP1 | 2785 | 951 | 910 | EDF | FRAM | 1975-12 | 1980-12 | 1981-6 | 69.8 | 71.2 | - |
| | FR -28 | GRAVELINES-4 | PWR | CP1 | 2785 | 951 | 910 | EDF | FRAM | 1976-4 | 1981-6 | 1981-10 | 78.3 | 79.8 | - |
| | FR -51 | GRAVELINES-5 | PWR | CP1 | 2785 | 951 | 910 | EDF | FRAM | 1979-10 | 1984-8 | 1985-1 | 78.3 | 79.3 | - |
| | FR -52 | GRAVELINES-6 | PWR | CP1 | 2785 | 951 | 910 | EDF | FRAM | 1979-10 | 1985-8 | 1985-10 | 81.0 | 81.4 | - |
| | FR -58 | NOGENT-1 | PWR | P4 REP 1300 | 3817 | 1363 | 1310 | EDF | FRAM | 1981-5 | 1987-10 | 1988-2 | 83.0 | 86.3 | - |

## TABLE 14. OPERATIONAL REACTORS, 31 DEC. 2014 — continued

| Country | Reactor | | Type | Model | Capacity (MW) | | | Operator | NSSS supplier | Construction start | Grid connection | Commercial operation | EAF % 2010-2014 | UCF % 2010-2014 | Non-electrical applics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | Thermal | Gross | Net | | | | | | | | |
| | FR -59 | NOGENT-2 | PWR | P4 REP 1300 | 3817 | 1363 | 1310 | EDF | FRAM | 1982-1 | 1988-12 | 1989-5 | 83.6 | 84.3 | - |
| | FR -36 | PALUEL-1 | PWR | P4 REP 1300 | 3817 | 1382 | 1330 | EDF | FRAM | 1977-8 | 1984-6 | 1985-12 | 80.6 | 82.1 | - |
| | FR -37 | PALUEL-2 | PWR | P4 REP 1300 | 3817 | 1382 | 1330 | EDF | FRAM | 1978-1 | 1984-9 | 1985-12 | 85.8 | 87.5 | - |
| | FR -38 | PALUEL-3 | PWR | P4 REP 1300 | 3817 | 1382 | 1330 | EDF | FRAM | 1979-2 | 1985-9 | 1986-2 | 76.6 | 78.1 | - |
| | FR -39 | PALUEL-4 | PWR | P4 REP 1300 | 3817 | 1382 | 1330 | EDF | FRAM | 1980-2 | 1986-4 | 1986-6 | 80.3 | 81.4 | - |
| | FR -63 | PENLY-1 | PWR | P4 REP 1300 | 3817 | 1382 | 1330 | EDF | FRAM | 1982-9 | 1990-5 | 1990-12 | 77.6 | 78.4 | - |
| | FR -64 | PENLY-2 | PWR | P4 REP 1300 | 3817 | 1382 | 1330 | EDF | FRAM | 1984-8 | 1992-2 | 1992-11 | 80.9 | 83.4 | - |
| | FR -48 | ST. ALBAN-1 | PWR | P4 REP 1300 | 3817 | 1381 | 1335 | EDF | FRAM | 1979-1 | 1985-8 | 1986-5 | 79.9 | 81.2 | - |
| | FR -49 | ST. ALBAN-2 | PWR | P4 REP 1300 | 3817 | 1381 | 1335 | EDF | FRAM | 1979-7 | 1986-7 | 1987-3 | 81.5 | 82.8 | - |
| | FR -17 | ST. LAURENT B-1 | PWR | CP2 | 2785 | 956 | 915 | EDF | FRAM | 1976-5 | 1981-1 | 1983-8 | 76.5 | 80.9 | - |
| | FR -23 | ST. LAURENT B-2 | PWR | CP2 | 2785 | 956 | 915 | EDF | FRAM | 1976-7 | 1981-6 | 1983-8 | 69.8 | 73.1 | - |
| | FR -18 | TRICASTIN-1 | PWR | CP1 | 2785 | 955 | 915 | EDF | FRAM | 1974-11 | 1980-5 | 1980-12 | 80.8 | 82.3 | - |
| | FR -19 | TRICASTIN-2 | PWR | CP1 | 2785 | 955 | 915 | EDF | FRAM | 1974-12 | 1980-8 | 1980-12 | 77.2 | 79.8 | - |
| | FR -25 | TRICASTIN-3 | PWR | CP1 | 2785 | 955 | 915 | EDF | FRAM | 1975-4 | 1981-2 | 1981-5 | 74.6 | 75.1 | - |
| | FR -26 | TRICASTIN-4 | PWR | CP1 | 2785 | 955 | 915 | EDF | FRAM | 1975-5 | 1981-6 | 1981-11 | 78.4 | 80.9 | - |
| GERMANY | DE -32 | BROKDORF | PWR | PWR | 3900 | 1480 | 1410 | E.ON | KWU | 1976-1 | 1986-10 | 1986-12 | 88.2 | 88.2 | - |
| | DE -33 | EMSLAND | PWR | Konvoi | 3850 | 1406 | 1335 | KLE | KWU | 1982-8 | 1988-4 | 1988-6 | 94.8 | 94.8 | - |
| | DE -23 | GRAFENRHEINFELD | PWR | PWR | 3765 | 1345 | 1275 | E.ON | KWU | 1975-1 | 1981-12 | 1982-6 | 83.3 | 83.3 | - |
| | DE -27 | GROHNDE | PWR | PWR | 3900 | 1430 | 1360 | KWG | KWU | 1976-6 | 1984-9 | 1985-2 | 88.2 | 89.1 | - |
| | DE -26 | GUNDREMMINGEN-B | BWR | BWR-72 | 3840 | 1344 | 1284 | KGG | KWU | 1976-7 | 1984-3 | 1984-7 | 86.4 | 86.4 | - |
| | DE -28 | GUNDREMMINGEN-C | BWR | BWR-72 | 3840 | 1344 | 1288 | KGG | KWU | 1976-7 | 1984-11 | 1985-1 | 89.1 | 89.2 | - |
| | DE -31 | ISAR-2 | PWR | Konvoi | 3950 | 1485 | 1410 | E.ON | KWU | 1982-9 | 1988-1 | 1988-4 | 93.5 | 93.5 | - |
| | DE -44 | NECKARWESTHEIM-2 | PWR | Konvoi | 3850 | 1400 | 1310 | EnKK | KWU | 1982-11 | 1989-1 | 1989-4 | 91.7 | 91.8 | - |
| | DE -24 | PHILIPPSBURG-2 | PWR | PWR | 3950 | 1468 | 1402 | EnKK | KWU | 1977-7 | 1984-12 | 1985-4 | 84.2 | 84.7 | - |
| HUNGARY | HU -1 | PAKS-1 | PWR | VVER V-213 | 1485 | 500 | 470 | PAKS Zrt | AEE | 1974-8 | 1982-12 | 1983-8 | 89.2 | 89.3 | - |
| | HU -2 | PAKS-2 | PWR | VVER V-213 | 1485 | 500 | 473 | PAKS Zrt | AEE | 1974-8 | 1984-9 | 1984-11 | 89.5 | 89.7 | DH |
| | HU -3 | PAKS-3 | PWR | VVER V-213 | 1485 | 500 | 473 | PAKS Zrt | AEE | 1979-10 | 1986-9 | 1986-12 | 86.5 | 86.7 | DH |
| | HU -4 | PAKS-4 | PWR | VVER V-213 | 1485 | 500 | 473 | PAKS Zrt | AEE | 1979-10 | 1987-8 | 1987-11 | 87.7 | 87.9 | DH |

Note: The column "Non-electrical applications" indicates the use of the facility to provide: DH district heating,

## TABLE 14. OPERATIONAL REACTORS, 31 DEC. 2014 — continued

| Country | Reactor | | Type | Model | Capacity (MW) | | | Operator | NSSS supplier | Construction start | Grid connection | Commercial operation | EAF % 2010-2014 | UCF % 2010-2014 | Non-electrical applics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | Thermal | Gross | Net | | | | | | | | |
| INDIA | IN -13 | KAIGA-1 | PHWR | Horizontal Pre | 801 | 220 | 202 | NPCIL | NPCIL | 1989-9 | 2000-10 | 2000-11 | 72.1 | 95.8 | - |
| | IN -14 | KAIGA-2 | PHWR | Horizontal Pre | 801 | 220 | 202 | NPCIL | NPCIL | 1989-12 | 1999-12 | 2000-3 | 68.9 | 91.9 | - |
| | IN -15 | KAIGA-3 | PHWR | Horizontal Pre | 800 | 220 | 202 | NPCIL | NPCIL | 2002-3 | 2007-4 | 2007-5 | 73.4 | 91.5 | - |
| | IN -16 | KAIGA-4 | PHWR | Horizontal Pre | 800 | 220 | 202 | NPCIL | NPCIL | 2002-5 | 2011-1 | 2011-1 | 72.5 | 88.1 | - |
| | IN -9 | KAKRAPAR-1 | PHWR | Horizontal Pre | 801 | 220 | 202 | NPCIL | NPCIL | 1984-12 | 1992-11 | 1993-5 | 76.7 | 76.7 | - |
| | IN -10 | KAKRAPAR-2 | PHWR | Horizontal Pre | 801 | 220 | 202 | NPCIL | NPCIL | 1985-4 | 1995-3 | 1995-9 | 82.1 | 90.6 | - |
| | IN -25 | KUDANKULAM-1 | PWR | VVER V-412 | 3000 | 1000 | 917 | NPCIL | MAEP | 2002-3 | 2013-10 | 2014-12 | | | - |
| | IN -5 | MADRAS-1 | PHWR | Horizontal Pre | 801 | 220 | 205 | NPCIL | NPCIL | 1971-1 | 1983-7 | 1984-1 | 65.2 | 92.6 | DS |
| | IN -6 | MADRAS-2 | PHWR | Horizontal Pre | 801 | 220 | 205 | NPCIL | NPCIL | 1972-10 | 1985-9 | 1986-3 | 54.4 | 82.2 | DS |
| | IN -7 | NARORA-1 | PHWR | Horizontal Pre | 801 | 220 | 202 | NPCIL | NPCIL | 1976-12 | 1989-7 | 1991-1 | 62.1 | 91.4 | - |
| | IN -8 | NARORA-2 | PHWR | Horizontal Pre | 801 | 220 | 202 | NPCIL | NPCIL | 1977-11 | 1992-1 | 1992-7 | 52.9 | 80.9 | - |
| | IN -3 | RAJASTHAN-1 | PHWR | Horizontal Pre | 346 | 100 | 90 | NPCIL | AECL | 1965-8 | 1972-11 | 1973-12 | 0.0 | 0.0 | PH |
| | IN -4 | RAJASTHAN-2 | PHWR | Horizontal Pre | 693 | 200 | 187 | NPCIL | AECL/DAE | 1968-4 | 1980-11 | 1981-4 | 87.1 | 88.7 | PH |
| | IN -11 | RAJASTHAN-3 | PHWR | Horizontal Pre | 801 | 220 | 202 | NPCIL | NPCIL | 1990-2 | 2000-3 | 2000-6 | 89.4 | 92.3 | PH |
| | IN -12 | RAJASTHAN-4 | PHWR | Horizontal Pre | 801 | 220 | 202 | NPCIL | NPCIL | 1990-10 | 2000-11 | 2000-12 | 91.0 | 93.6 | PH |
| | IN -19 | RAJASTHAN-5 | PHWR | Horizontal Pre | 801 | 220 | 202 | NPCIL | NPCIL | 2002-9 | 2009-12 | 2010-2 | 90.5 | 90.8 | - |
| | IN -20 | RAJASTHAN-6 | PHWR | Horizontal Pre | 801 | 220 | 202 | NPCIL | NPCIL | 2003-1 | 2010-3 | 2010-3 | 76.3 | 76.7 | - |
| | IN -1 | TARAPUR-1 | BWR | BWR-1 (Mark 2) | 530 | 160 | 150 | NPCIL | GE | 1964-10 | 1969-4 | 1969-10 | 75.9 | 76.2 | - |
| | IN -2 | TARAPUR-2 | BWR | BWR-1 (Mark 2) | 530 | 160 | 150 | NPCIL | GE | 1964-10 | 1969-5 | 1969-10 | 82.1 | 82.7 | - |
| | IN -23 | TARAPUR-3 | PHWR | Horizontal Pre | 1730 | 540 | 490 | NPCIL | NPCIL | 2000-5 | 2006-6 | 2006-8 | 84.9 | 92.0 | - |
| | IN -24 | TARAPUR-4 | PHWR | Horizontal Pre | 1730 | 540 | 490 | NPCIL | NPCIL | 2000-3 | 2005-6 | 2005-9 | 73.3 | 87.4 | - |
| IRAN, ISL. REP. | IR -1 | BUSHEHR-1 | PWR | VVER V-446 | 3000 | 1000 | 915 | NPPDCO | ASE | 1975-5 | 2011-9 | 2013-9 | 64.2 | 64.2 | - |
| JAPAN | JP -25 | FUKUSHIMA-DAINI-1 | BWR | BWR-5 | 3293 | 1100 | 1067 | TEPCO | TOSHIBA | 1976-3 | 1981-7 | 1982-4 | 18.1 | 19.2 | - |
| | JP -26 | FUKUSHIMA-DAINI-2 | BWR | BWR-5 | 3293 | 1100 | 1067 | TEPCO | HITACHI | 1979-5 | 1983-6 | 1984-2 | 18.9 | 20.0 | - |
| | JP -35 | FUKUSHIMA-DAINI-3 | BWR | BWR-5 | 3293 | 1100 | 1067 | TEPCO | TOSHIBA | 1981-3 | 1984-12 | 1985-6 | 20.1 | 21.2 | - |
| | JP -38 | FUKUSHIMA-DAINI-4 | BWR | BWR-5 | 3293 | 1100 | 1067 | TEPCO | HITACHI | 1981-5 | 1986-12 | 1987-8 | 19.4 | 20.5 | - |
| | JP -12 | GENKAI-1 | PWR | M (2-loop) | 1650 | 559 | 529 | KYUSHU | MHI | 1971-9 | 1975-2 | 1975-10 | 34.1 | 34.1 | - |
| | JP -27 | GENKAI-2 | PWR | M (2-loop) | 1650 | 559 | 529 | KYUSHU | MHI | 1977-2 | 1980-6 | 1981-3 | 21.6 | 21.6 | - |

Note: The column "Non-electrical applications" indicates the use of the facility to provide: DS desalination, PH process heating,

## TABLE 14. OPERATIONAL REACTORS, 31 DEC. 2014 — continued

| Country | Reactor | | Type | Model | Capacity (MW) | | | Operator | NSSS supplier | Construction start | Grid connection | Commercial operation | EAF % 2010-2014 | UCF % 2010-2014 | Non-electrical applics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | Thermal | Gross | Net | | | | | | | | |
| | JP -45 | GENKAI-3 | PWR | M (4-loop) | 3423 | 1180 | 1127 | KYUSHU | MHI | 1988-6 | 1993-6 | 1994-3 | 18.8 | 18.8 | DS |
| | JP -46 | GENKAI-4 | PWR | M (4-loop) | 3423 | 1180 | 1127 | KYUSHU | MHI | 1992-7 | 1996-11 | 1997-7 | 34.7 | 34.7 | DS |
| | JP -36 | HAMAOKA-3 | BWR | BWR-5 | 3293 | 1100 | 1056 | CHUBU | TOSHIBA | 1983-4 | 1987-1 | 1987-8 | 18.2 | 18.2 | - |
| | JP -49 | HAMAOKA-4 | BWR | BWR-5 | 3293 | 1137 | 1092 | CHUBU | TOSHIBA | 1989-10 | 1993-1 | 1993-9 | 20.9 | 20.9 | - |
| | JP -60 | HAMAOKA-5 | BWR | ABWR | 3926 | 1380 | 1325 | CHUBU | TOSHIBA | 2000-7 | 2004-4 | 2005-1 | 5.9 | 9.6 | - |
| | JP -58 | HIGASHI DORI-1 (TOHOKU) | BWR | BWR-5 | 3293 | 1100 | 1067 | TOHOKU | TOSHIBA | 2000-11 | 2005-3 | 2005-12 | 21.9 | 21.9 | - |
| | JP -23 | IKATA-1 | PWR | M (2-loop) | 1650 | 566 | 538 | SHIKOKU | MHI | 1973-9 | 1977-2 | 1977-9 | 30.1 | 30.1 | DS |
| | JP -32 | IKATA-2 | PWR | M (2-loop) | 1650 | 566 | 538 | SHIKOKU | MHI | 1978-8 | 1981-8 | 1982-3 | 36.3 | 36.3 | DS |
| | JP -47 | IKATA-3 | PWR | M (3-loop) | 2660 | 890 | 846 | SHIKOKU | MHI | 1990-10 | 1994-3 | 1994-12 | 23.4 | 23.4 | DS |
| | JP -33 | KASHIWAZAKI KARIWA-1 | BWR | BWR-5 | 3293 | 1100 | 1067 | TEPCO | TOSHIBA | 1980-6 | 1985-2 | 1985-9 | 23.1 | 23.1 | - |
| | JP -39 | KASHIWAZAKI KARIWA-2 | BWR | BWR-5 | 3293 | 1100 | 1067 | TEPCO | TOSHIBA | 1985-11 | 1990-2 | 1990-9 | 0.0 | 0.0 | - |
| | JP -52 | KASHIWAZAKI KARIWA-3 | BWR | BWR-5 | 3293 | 1100 | 1067 | TEPCO | TOSHIBA | 1989-3 | 1992-12 | 1993-8 | 0.0 | 0.0 | - |
| | JP -53 | KASHIWAZAKI KARIWA-4 | BWR | BWR-5 | 3293 | 1100 | 1067 | TEPCO | HITACHI | 1990-3 | 1993-12 | 1994-8 | 0.0 | 0.0 | - |
| | JP -40 | KASHIWAZAKI KARIWA-5 | BWR | BWR-5 | 3293 | 1100 | 1067 | TEPCO | HITACHI | 1985-6 | 1989-9 | 1990-4 | 23.0 | 23.0 | - |
| | JP -55 | KASHIWAZAKI KARIWA-6 | BWR | ABWR | 3926 | 1356 | 1315 | TEPCO | TOSHIBA | 1992-11 | 1996-1 | 1996-11 | 39.3 | 39.3 | - |
| | JP -56 | KASHIWAZAKI KARIWA-7 | BWR | ABWR | 3926 | 1356 | 1315 | TEPCO | HITACHI | 1993-7 | 1996-12 | 1997-7 | 28.0 | 28.0 | - |
| | JP -4 | MIHAMA-1 | PWR | W (2-loop) | 1031 | 340 | 320 | KEPCO | WH | 1967-2 | 1970-8 | 1970-11 | 17.6 | 17.9 | - |
| | JP -6 | MIHAMA-2 | PWR | M (2-loop) | 1456 | 500 | 470 | KEPCO | MHI | 1968-5 | 1972-4 | 1972-7 | 29.8 | 30.0 | - |
| | JP -14 | MIHAMA-3 | PWR | M (3-loop) | 2440 | 826 | 780 | KEPCO | MHI | 1972-8 | 1976-2 | 1976-12 | 22.8 | 22.8 | - |
| | JP -15 | OHI-1 | PWR | W (4-loop) | 3423 | 1175 | 1120 | KEPCO | WH | 1972-10 | 1977-12 | 1979-3 | 20.0 | 20.0 | DS |
| | JP -19 | OHI-2 | PWR | W (4-loop) | 3423 | 1175 | 1120 | KEPCO | WH | 1972-12 | 1978-10 | 1979-12 | 30.0 | 30.0 | DS |
| | JP -50 | OHI-3 | PWR | M (4-loop) | 3423 | 1180 | 1127 | KEPCO | MHI | 1987-10 | 1991-6 | 1991-12 | 43.8 | 43.9 | - |
| | JP -51 | OHI-4 | PWR | M (4-loop) | 3423 | 1180 | 1127 | KEPCO | MHI | 1988-6 | 1992-6 | 1993-2 | 48.0 | 48.0 | - |
| | JP -22 | ONAGAWA-1 | BWR | BWR-4 | 1593 | 524 | 498 | TOHOKU | TOSHIBA | 1980-7 | 1983-11 | 1984-6 | 15.8 | 25.8 | - |
| | JP -54 | ONAGAWA-2 | BWR | BWR-5 | 2436 | 825 | 796 | TOHOKU | TOSHIBA | 1991-4 | 1994-12 | 1995-7 | 16.9 | 26.3 | - |
| | JP -57 | ONAGAWA-3 | BWR | BWR-5 | 2436 | 825 | 796 | TOHOKU | TOSHIBA | 1998-1 | 2001-5 | 2002-1 | 18.5 | 28.5 | - |
| | JP -28 | SENDAI-1 | PWR | M (3-loop) | 2660 | 890 | 846 | KYUSHU | MHI | 1979-12 | 1983-9 | 1984-7 | 19.6 | 19.6 | - |
| | JP -37 | SENDAI-2 | PWR | M (3-loop) | 2660 | 890 | 846 | KYUSHU | MHI | 1981-10 | 1985-4 | 1985-11 | 28.2 | 28.2 | - |
| | JP -48 | SHIKA-1 | BWR | BWR-5 | 1593 | 540 | 505 | HOKURIKU | HITACHI | 1989-7 | 1993-1 | 1993-7 | 17.4 | 17.4 | - |
| | JP -59 | SHIKA-2 | BWR | ABWR | 3926 | 1206 | 1108 | HOKURIKU | HITACHI | 2001-8 | 2005-7 | 2006-3 | 21.1 | 21.1 | - |

Note: The column "Non-electrical applications" indicates the use of the facility to provide: DS desalination,

## TABLE 14. OPERATIONAL REACTORS, 31 DEC. 2014 — continued

| Country | Reactor | | Type | Model | Capacity (MW) | | | Operator | NSSS supplier | Construction start | Grid connection | Commercial operation | EAF % 2010-2014 | UCF % 2010-2014 | Non-electrical applics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | Thermal | Gross | Net | | | | | | | | |
| | JP -7 | SHIMANE-1 | BWR | BWR-3 | 1380 | 460 | 439 | CHUGOKU | HITACHI | 1970-7 | 1973-12 | 1974-3 | 4.9 | 4.9 | - |
| | JP -41 | SHIMANE-2 | BWR | BWR-5 | 2436 | 820 | 789 | CHUGOKU | HITACHI | 1985-2 | 1988-7 | 1989-2 | 26.9 | 26.9 | - |
| | JP -8 | TAKAHAMA-1 | PWR | M (3-loop) | 2440 | 826 | 780 | KEPCO | WH/MHI | 1970-4 | 1974-3 | 1974-11 | 20.5 | 20.5 | - |
| | JP -13 | TAKAHAMA-2 | PWR | M (3-loop) | 2440 | 826 | 780 | KEPCO | MHI | 1971-3 | 1975-1 | 1975-11 | 31.7 | 31.7 | - |
| | JP -29 | TAKAHAMA-3 | PWR | M (3-loop) | 2660 | 870 | 830 | KEPCO | MHI | 1980-12 | 1984-5 | 1985-1 | 38.7 | 38.7 | DS |
| | JP -30 | TAKAHAMA-4 | PWR | M (3-loop) | 2660 | 870 | 830 | KEPCO | MHI | 1981-3 | 1984-11 | 1985-6 | 24.9 | 24.9 | DS |
| | JP -21 | TOKAI-2 | BWR | BWR-5 | 3293 | 1100 | 1060 | JAPCO | GE | 1973-10 | 1978-3 | 1978-11 | 14.6 | 18.4 | - |
| | JP -43 | TOMARI-1 | PWR | M (2-loop) | 1650 | 579 | 550 | HEPCO | MHI | 1985-4 | 1988-12 | 1989-6 | 22.3 | 22.3 | - |
| | JP -44 | TOMARI-2 | PWR | M (2-loop) | 1650 | 579 | 550 | HEPCO | MHI | 1985-6 | 1990-8 | 1991-4 | 29.4 | 29.4 | - |
| | JP -64 | TOMARI-3 | PWR | M (3-loop) | 2660 | 912 | 866 | HEPCO | MHI | 2004-11 | 2009-3 | 2009-12 | 43.4 | 43.4 | - |
| | JP -3 | TSURUGA-1 | BWR | BWR-2 | 1070 | 357 | 340 | JAPCO | GE | 1966-11 | 1969-11 | 1970-3 | 18.6 | 18.6 | - |
| | JP -34 | TSURUGA-2 | PWR | M (4-loop) | 3411 | 1160 | 1108 | JAPCO | MHI | 1982-11 | 1986-6 | 1987-2 | 19.3 | 19.3 | - |
| KOREA, REP. OF | KR -7 | HANBIT-1 | PWR | WH F | 2787 | 1000 | 961 | KHNP | WH | 1981-6 | 1986-3 | 1986-8 | 92.9 | 93.2 | - |
| | KR -8 | HANBIT-2 | PWR | WH F | 2787 | 993 | 977 | KHNP | WH | 1981-12 | 1986-11 | 1987-6 | 85.7 | 85.9 | - |
| | KR -11 | HANBIT-3 | PWR | OPR-1000 | 2825 | 1050 | 1000 | KHNP | DHICKAEC | 1989-12 | 1994-10 | 1995-3 | 78.5 | 78.9 | - |
| | KR -12 | HANBIT-4 | PWR | OPR-1000 | 2825 | 1049 | 998 | KHNP | DHICKAEC | 1990-5 | 1995-7 | 1996-1 | 88.4 | 89.0 | - |
| | KR -17 | HANBIT-5 | PWR | OPR-1000 | 2825 | 1053 | 994 | KHNP | DHICKOPC | 1997-6 | 2001-12 | 2002-5 | 87.1 | 87.3 | - |
| | KR -18 | HANBIT-6 | PWR | OPR-1000 | 2825 | 1052 | 993 | KHNP | DHICKOPC | 1997-11 | 2002-9 | 2002-12 | 89.2 | 89.4 | - |
| | KR -9 | HANUL-1 | PWR | France CPI | 2785 | 1003 | 963 | KHNP | FRAM | 1983-1 | 1988-4 | 1988-9 | 88.9 | 89.1 | - |
| | KR -10 | HANUL-2 | PWR | France CPI | 2775 | 1008 | 965 | KHNP | FRAM | 1983-7 | 1989-4 | 1989-9 | 88.2 | 88.2 | - |
| | KR -13 | HANUL-3 | PWR | OPR-1000 | 2825 | 1050 | 997 | KHNP | DHICKOPC | 1993-7 | 1998-1 | 1998-8 | 80.0 | 80.2 | - |
| | KR -14 | HANUL-4 | PWR | OPR-1000 | 2825 | 1053 | 999 | KHNP | DHICKOPC | 1993-11 | 1998-12 | 1999-12 | 59.4 | 59.4 | - |
| | KR -19 | HANUL-5 | PWR | OPR-1000 | 2815 | 1051 | 998 | KHNP | DHICKOPC | 1999-10 | 2003-12 | 2004-7 | 90.9 | 91.1 | - |
| | KR -20 | HANUL-6 | PWR | OPR-1000 | 2825 | 1051 | 997 | KHNP | DHICKOPC | 2000-9 | 2005-1 | 2005-4 | 92.0 | 92.1 | - |
| | KR -1 | KORI-1 | PWR | W △60 | 1729 | 608 | 576 | KHNP | WH | 1972-4 | 1977-6 | 1978-4 | 74.0 | 74.2 | - |
| | KR -2 | KORI-2 | PWR | WH F | 1882 | 676 | 640 | KHNP | WH | 1977-12 | 1983-4 | 1983-7 | 88.7 | 90.4 | - |
| | KR -5 | KORI-3 | PWR | WH F | 2912 | 1042 | 1011 | KHNP | WH | 1979-10 | 1985-1 | 1985-9 | 90.2 | 90.3 | - |
| | KR -6 | KORI-4 | PWR | WH F | 2912 | 1041 | 1010 | KHNP | WH | 1980-4 | 1985-11 | 1986-4 | 89.5 | 89.6 | - |
| | KR -21 | SHIN-KORI-1 | PWR | OPR-1000 | 2825 | 1049 | 999 | KHNP | DHICKOPC | 2006-6 | 2010-8 | 2011-2 | 75.3 | 75.5 | - |

Note: The column "Non-electrical applications" indicates the use of the facility to provide: DS desalination,

## TABLE 14. OPERATIONAL REACTORS, 31 DEC. 2014 — continued

| Country | Reactor | | Type | Model | Capacity (MW) | | | Operator | NSSS supplier | Construction start | Grid connection | Commercial operation | EAF % 2010-2014 | UCF % 2010-2014 | Non-electrical applics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | Thermal | Gross | Net | | | | | | | | |
| | KR -22 | SHIN-KORI-2 | PWR | OPR-1000 | 2825 | 1046 | 998 | KHNP | DHICKOPC | 2007-6 | 2012-1 | 2012-7 | 73.7 | 73.8 | - |
| | KR -23 | SHIN-WOLSONG-1 | PWR | OPR-1000 | 2825 | 1045 | 1000 | KHNP | DHICKOPC | 2007-11 | 2012-1 | 2012-7 | 72.9 | 73.1 | - |
| | KR -3 | WOLSONG-1 | PHWR | CANDU 6 | 2061 | 685 | 657 | KHNP | AECL | 1977-10 | 1982-12 | 1983-4 | 67.4 | 67.4 | - |
| | KR -4 | WOLSONG-2 | PHWR | CANDU 6 | 2061 | 675 | 650 | KHNP | AECL/DHI | 1992-6 | 1997-4 | 1997-7 | 91.5 | 91.5 | - |
| | KR -15 | WOLSONG-3 | PHWR | CANDU 6 | 2061 | 688 | 665 | KHNP | AECL/DHI | 1994-3 | 1998-3 | 1998-7 | 91.3 | 91.3 | - |
| | KR -16 | WOLSONG-4 | PHWR | CANDU 6 | 2061 | 691 | 669 | KHNP | AECL/DHI | 1994-7 | 1999-5 | 1999-10 | 91.6 | 91.7 | - |
| MEXICO | MX -1 | LAGUNA VERDE-1 | BWR | BWR-5 | 2027 | 700 | 665 | CFE | GE | 1976-10 | 1989-4 | 1990-7 | 70.9 | 71.7 | - |
| | MX -2 | LAGUNA VERDE-2 | BWR | BWR-5 | 2027 | 700 | 665 | CFE | GE | 1977-6 | 1994-11 | 1995-4 | 77.4 | 78.0 | - |
| NETHERLANDS | NL -2 | BORSSELE | PWR | 2-loops KWU | 1366 | 515 | 482 | EPZ | S/KWU | 1969-7 | 1973-7 | 1973-10 | 84.5 | 85.2 | - |
| PAKISTAN | PK -2 | CHASNUPP-1 | PWR | CNP-300 | 999 | 325 | 300 | PAEC | CNNC | 1993-8 | 2000-6 | 2000-9 | 84.9 | 84.9 | - |
| | PK -3 | CHASNUPP-2 | PWR | CNP-300 | 999 | 325 | 300 | PAEC | CNNC | 2005-12 | 2011-3 | 2011-5 | 79.2 | 79.2 | - |
| | PK -1 | KANUPP | PHWR | CANDU-137 MW | 337 | 100 | 90 | PAEC | CGE | 1966-8 | 1971-10 | 1972-12 | 43.9 | 43.9 | DS |
| ROMANIA | RO -1 | CERNAVODA-1 | PHWR | CANDU 6 | 2180 | 706 | 650 | SNN | AECL | 1982-7 | 1996-7 | 1996-12 | 92.8 | 93.2 | DH |
| | RO -2 | CERNAVODA-2 | PHWR | CANDU 6 | 2180 | 705 | 650 | SNN | AECL | 1983-7 | 2007-8 | 2007-10 | 94.5 | 95.1 | DH |
| RUSSIA | RU -96 | BALAKOVO-1 | PWR | VVER V-320 | 3000 | 1000 | 950 | REA | ROSATOM | 1980-12 | 1985-12 | 1986-5 | 83.8 | 83.9 | DH, PH |
| | RU -97 | BALAKOVO-2 | PWR | VVER V-320 | 3000 | 1000 | 950 | REA | ROSATOM | 1981-8 | 1987-10 | 1988-1 | 89.0 | 89.4 | DH, PH |
| | RU -98 | BALAKOVO-3 | PWR | VVER V-320 | 3000 | 1000 | 950 | REA | ROSATOM | 1982-11 | 1988-12 | 1989-4 | 89.6 | 89.8 | DH, PH |
| | RU -99 | BALAKOVO-4 | PWR | VVER V-320 | 3200 | 1000 | 950 | REA | ROSATOM | 1984-4 | 1993-4 | 1993-12 | 87.2 | 87.2 | DH, PH |
| | RU -21 | BELOYARSK-3 | FBR | BN-600 | 1470 | 600 | 560 | REA | ROSATOM | 1969-1 | 1980-4 | 1981-11 | 78.6 | 78.6 | DH, PH |
| | RU -141 | BILIBINO-1 | LWGR | EGP-6 | 62 | 12 | 11 | REA | ROSATOM | 1970-1 | 1974-1 | 1974-4 | 71.2 | 71.2 | DH |
| | RU -142 | BILIBINO-2 | LWGR | EGP-6 | 62 | 12 | 11 | REA | ROSATOM | 1970-1 | 1974-12 | 1975-2 | 83.2 | 83.2 | DH |
| | RU -143 | BILIBINO-3 | LWGR | EGP-6 | 62 | 12 | 11 | REA | ROSATOM | 1970-1 | 1975-12 | 1976-2 | 82.9 | 82.9 | DH |
| | RU -144 | BILIBINO-4 | LWGR | EGP-6 | 62 | 12 | 11 | REA | ROSATOM | 1970-1 | 1976-12 | 1977-1 | 84.6 | 84.6 | DH |
| | RU -30 | KALININ-1 | PWR | VVER V-338 | 3000 | 1000 | 950 | REA | ROSATOM | 1977-2 | 1984-5 | 1985-6 | 78.8 | 78.9 | DH, PH |
| | RU -31 | KALININ-2 | PWR | VVER V-338 | 3000 | 1000 | 950 | REA | ROSATOM | 1982-2 | 1986-12 | 1987-3 | 87.3 | 87.3 | DH, PH |

Note: The column "Non-electrical applications" indicates the use of the facility to provide: DS desalination, DH district heating, PH process heating,

## TABLE 14. OPERATIONAL REACTORS, 31 DEC. 2014 — continued

| Country | Reactor | | Type | Model | Capacity (MW) | | | Operator | NSSS supplier | Construction start | Grid connection | Commercial operation | EAF % 2010-2014 | UCF % 2010-2014 | Non-electrical applics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | Thermal | Gross | Net | | | | | | | | |
| | RU -36 | KALININ-3 | PWR | VVER V-320 | 3200 | 1000 | 950 | REA | ROSATOM | 1985-10 | 2004-12 | 2005-11 | 82.6 | 82.7 | PH |
| | RU -37 | KALININ-4 | PWR | VVER V-320 | 3200 | 1000 | 950 | REA | ROSATOM | 1986-8 | 2011-11 | 2012-12 | 81.5 | 81.5 | - |
| | RU -12 | KOLA-1 | PWR | VVER V-230 | 1375 | 440 | 411 | REA | ROSATOM | 1970-5 | 1973-6 | 1973-12 | 84.1 | 84.4 | DH, PH |
| | RU -13 | KOLA-2 | PWR | VVER V-230 | 1375 | 440 | 411 | REA | ROSATOM | 1970-5 | 1974-12 | 1975-2 | 85.4 | 85.8 | DH, PH |
| | RU -32 | KOLA-3 | PWR | VVER V-213 | 1375 | 440 | 411 | REA | ROSATOM | 1977-4 | 1981-3 | 1982-12 | 76.5 | 76.5 | DH, PH |
| | RU -33 | KOLA-4 | PWR | VVER V-213 | 1375 | 440 | 411 | REA | ROSATOM | 1976-8 | 1984-10 | 1984-12 | 80.6 | 80.6 | DH, PH |
| | RU -17 | KURSK-1 | LWGR | RBMK-1000 | 3200 | 1000 | 925 | REA | ROSATOM | 1972-6 | 1976-12 | 1977-10 | 77.5 | 77.8 | DH, PH |
| | RU -22 | KURSK-2 | LWGR | RBMK-1000 | 3200 | 1000 | 925 | REA | ROSATOM | 1973-1 | 1979-1 | 1979-8 | 69.4 | 69.7 | DH, PH |
| | RU -38 | KURSK-3 | LWGR | RBMK-1000 | 3200 | 1000 | 925 | REA | ROSATOM | 1978-4 | 1983-10 | 1984-3 | 81.6 | 81.9 | DH, PH |
| | RU -39 | KURSK-4 | LWGR | RBMK-1000 | 3200 | 1000 | 925 | REA | ROSATOM | 1981-5 | 1985-12 | 1986-2 | 81.8 | 82.1 | DH, PH |
| | RU -15 | LENINGRAD-1 | LWGR | RBMK-1000 | 3200 | 1000 | 925 | REA | ROSATOM | 1970-3 | 1973-12 | 1974-11 | 49.0 | 49.8 | DH, PH |
| | RU -16 | LENINGRAD-2 | LWGR | RBMK-1000 | 3200 | 1000 | 925 | REA | ROSATOM | 1970-6 | 1975-7 | 1976-2 | 64.3 | 64.6 | DH, PH |
| | RU -34 | LENINGRAD-3 | LWGR | RBMK-1000 | 3200 | 1000 | 925 | REA | ROSATOM | 1973-12 | 1979-12 | 1980-6 | 88.2 | 88.5 | DH, PH |
| | RU -35 | LENINGRAD-4 | LWGR | RBMK-1000 | 3200 | 1000 | 925 | REA | ROSATOM | 1975-2 | 1981-2 | 1981-8 | 81.8 | 81.9 | DH, PH |
| | RU -9 | NOVOVORONEZH-3 | PWR | VVER V-179 | 1375 | 417 | 385 | REA | ROSATOM | 1967-7 | 1971-12 | 1972-6 | 81.6 | 82.4 | DH, PH |
| | RU -11 | NOVOVORONEZH-4 | PWR | VVER V-179 | 1375 | 417 | 385 | REA | ROSATOM | 1967-7 | 1972-12 | 1973-3 | 86.4 | 87.6 | DH, PH |
| | RU -20 | NOVOVORONEZH-5 | PWR | VVER V-187 | 3000 | 1000 | 950 | REA | ROSATOM | 1974-3 | 1980-5 | 1981-2 | 67.2 | 67.7 | DH, PH |
| | RU -59 | ROSTOV-1 | PWR | VVER V-320 | 3200 | 1000 | 950 | REA | ROSATOM | 1981-9 | 2001-3 | 2001-12 | 89.3 | 89.4 | - |
| | RU -62 | ROSTOV-2 | PWR | VVER V-320 | 3200 | 1000 | 950 | REA | ROSATOM | 1983-5 | 2010-3 | 2010-12 | 90.5 | 90.7 | - |
| | RU -63 | ROSTOV-3 | PWR | VVER V-320 | 3000 | 1100 | 1011 | REA | ROSATOM | 2009-9 | 2014-12 | 2015-12 | | | - |
| | RU -23 | SMOLENSK-1 | LWGR | RBMK-1000 | 3200 | 1000 | 925 | REA | ROSATOM | 1975-10 | 1982-12 | 1983-9 | 76.7 | 77.1 | DH, PH |
| | RU -24 | SMOLENSK-2 | LWGR | RBMK-1000 | 3200 | 1000 | 925 | REA | ROSATOM | 1976-6 | 1985-5 | 1985-7 | 76.9 | 77.2 | DH, PH |
| | RU -67 | SMOLENSK-3 | LWGR | RBMK-1000 | 3200 | 1000 | 925 | REA | ROSATOM | 1984-5 | 1990-1 | 1990-10 | 83.0 | 83.1 | DH, PH |
| SLOVAKIA | SK -13 | BOHUNICE-3 | PWR | VVER V-213 | 1471 | 505 | 471 | SE,plc | SKODA | 1976-12 | 1984-8 | 1985-2 | 89.0 | 92.0 | DH, PH |
| | SK -14 | BOHUNICE-4 | PWR | VVER V-213 | 1471 | 505 | 471 | SE,plc | SKODA | 1976-12 | 1985-8 | 1985-12 | 89.9 | 92.6 | DH, PH |
| | SK -6 | MOCHOVCE-1 | PWR | VVER V-213 | 1471 | 470 | 436 | SE,plc | SKODA | 1983-10 | 1998-7 | 1998-10 | 92.1 | 92.7 | - |
| | SK -7 | MOCHOVCE-2 | PWR | VVER V-213 | 1471 | 470 | 436 | SE,plc | SKODA | 1983-10 | 1999-12 | 2000-4 | 89.6 | 90.6 | - |
| SLOVENIA | SI -1 | KRSKO | PWR | WE 212 | 1994 | 727 | 688 | NEK | WH | 1975-3 | 1981-10 | 1983-1 | 91.5 | 91.8 | - |

Note: The column "Non-electrical applications" indicates the use of the facility to provide: DH district heating, PH process heating,

## TABLE 14. OPERATIONAL REACTORS, 31 DEC. 2014 — continued

| Country | Reactor | | Type | Model | Capacity (MW) | | | Operator | NSSS supplier | Construction start | Grid connection | Commercial operation | EAF % 2010-2014 | UCF % 2010-2014 | Non-electrical applics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | Thermal | Gross | Net | | | | | | | | |
| SOUTH AFRICA | ZA -1 | KOEBERG-1 | PWR | CP1 | 2775 | 970 | 930 | ESKOM | FRAM | 1976-7 | 1984-4 | 1984-7 | 81.7 | 81.9 | - |
| | ZA -2 | KOEBERG-2 | PWR | CP1 | 2775 | 970 | 930 | ESKOM | FRAM | 1976-7 | 1985-7 | 1985-11 | 84.9 | 85.9 | - |
| SPAIN | ES -6 | ALMARAZ-1 | PWR | W (3-loop) | 2947 | 1049 | 1011 | CNAT | WH | 1973-7 | 1981-5 | 1983-9 | 85.7 | 86.8 | - |
| | ES -7 | ALMARAZ-2 | PWR | W (3-loop) | 2947 | 1044 | 1006 | CNAT | WH | 1973-7 | 1983-10 | 1984-7 | 86.7 | 87.9 | - |
| | ES -8 | ASCO-1 | PWR | W (3-loop) | 2954 | 1033 | 995 | ANAV | WH | 1974-5 | 1983-8 | 1984-12 | 86.6 | 87.7 | - |
| | ES -9 | ASCO-2 | PWR | W (3-loop) | 2941 | 1035 | 997 | ANAV | WH | 1975-3 | 1985-10 | 1986-3 | 83.2 | 85.1 | - |
| | ES -10 | COFRENTES | BWR | BWR-6 | 3237 | 1102 | 1064 | ID | GE | 1975-9 | 1984-10 | 1985-3 | 92.3 | 93.3 | - |
| | ES -11 | TRILLO-1 | PWR | PWR 3 loops | 3010 | 1066 | 1003 | CNAT | KWU | 1979-8 | 1988-5 | 1988-8 | 88.3 | 89.4 | - |
| | ES -16 | VANDELLOS-2 | PWR | W (3-loop) | 2941 | 1087 | 1045 | ANAV | WH | 1980-12 | 1987-12 | 1988-3 | 87.1 | 88.4 | - |
| SWEDEN | SE -9 | FORSMARK-1 | BWR | ABB-III, BWR-2 | 2928 | 1022 | 984 | FKA | ABBATOM | 1973-6 | 1980-6 | 1980-12 | 87.9 | 88.6 | - |
| | SE -11 | FORSMARK-2 | BWR | ABB-III, BWR-2 | 3253 | 1158 | 1120 | FKA | ABBATOM | 1975-1 | 1981-1 | 1981-7 | 79.9 | 80.5 | - |
| | SE -14 | FORSMARK-3 | BWR | ABB-III, BWR-3 | 3300 | 1212 | 1170 | FKA | ABBATOM | 1979-1 | 1985-3 | 1985-8 | 85.4 | 86.3 | - |
| | SE -2 | OSKARSHAMN-1 | BWR | ABB-I | 1375 | 492 | 473 | OKG | ABBATOM | 1966-8 | 1971-8 | 1972-2 | 47.7 | 48.4 | - |
| | SE -3 | OSKARSHAMN-2 | BWR | ABB-II | 1800 | 661 | 638 | OKG | ABBATOM | 1969-9 | 1974-10 | 1975-1 | 54.2 | 54.9 | - |
| | SE -12 | OSKARSHAMN-3 | BWR | ABB-III, BWR-3 | 3900 | 1450 | 1400 | OKG | ABBATOM | 1980-5 | 1985-3 | 1985-8 | 64.5 | 65.7 | - |
| | SE -4 | RINGHALS-1 | BWR | ABB-I | 2540 | 910 | 878 | RAB | ABBATOM | 1969-2 | 1974-10 | 1976-1 | 69.9 | 71.2 | - |
| | SE -5 | RINGHALS-2 | PWR | W (3-loops) | 2500 | 847 | 807 | RAB | WH | 1970-10 | 1974-8 | 1975-5 | 59.4 | 60.8 | - |
| | SE -7 | RINGHALS-3 | PWR | W (3-loops) | 3135 | 1117 | 1062 | RAB | WH | 1972-9 | 1980-9 | 1981-9 | 81.7 | 84.1 | - |
| | SE -10 | RINGHALS-4 | PWR | W (3-loops) | 3000 | 1168 | 938 | RAB | WH | 1973-11 | 1982-6 | 1983-11 | 78.2 | 80.2 | - |
| SWITZERLAND | CH -1 | BEZNAU-1 | PWR | W (2-loop) | 1130 | 380 | 365 | Axpo AG | WH | 1965-9 | 1969-7 | 1969-9 | 90.7 | 90.7 | DH |
| | CH -3 | BEZNAU-2 | PWR | W (2-loop) | 1130 | 380 | 365 | Axpo AG | WH | 1968-1 | 1971-10 | 1971-12 | 90.0 | 90.0 | DH |
| | CH -4 | GOESGEN | PWR | PWR 3 Loop | 3002 | 1060 | 1010 | KKG | KWU | 1973-12 | 1979-2 | 1979-11 | 88.5 | 88.6 | PH |
| | CH -5 | LEIBSTADT | BWR | BWR-6 | 3600 | 1275 | 1220 | KKL | GETSCO | 1974-1 | 1984-5 | 1984-12 | 86.0 | 87.2 | - |
| | CH -2 | MUEHLEBERG | BWR | BWR-4 | 1097 | 390 | 373 | BKW | GETSCO | 1967-3 | 1971-7 | 1972-11 | 87.9 | 88.0 | - |
| UK | GB -18A | DUNGENESS B-1 | GCR | AGR | 1500 | 615 | 520 | EDF UK | APC | 1965-10 | 1983-4 | 1985-4 | 37.7 | 37.7 | - |
| | GB -18B | DUNGENESS B-2 | GCR | AGR | 1500 | 615 | 520 | EDF UK | APC | 1965-10 | 1985-12 | 1989-4 | 46.2 | 46.2 | - |

Note: The column "Non-electrical applications" indicates the use of the facility to provide: DH district heating, PH process heating,

## TABLE 14. OPERATIONAL REACTORS, 31 DEC. 2014 — continued

| Country | Reactor Code | Reactor Name | Type | Model | Capacity (MW) Thermal | Gross | Net | Operator | NSSS supplier | Construction start | Grid connection | Commercial operation | EAF % 2010-2014 | UCF % 2010-2014 | Non-electrical applics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | GB-19A | HARTLEPOOL A-1 | GCR | AGR | 1500 | 655 | 595 | EDF UK | NPC | 1968-10 | 1983-8 | 1989-4 | 72.9 | 72.9 | - |
| | GB-19B | HARTLEPOOL A-2 | GCR | AGR | 1500 | 655 | 585 | EDF UK | NPC | 1968-10 | 1984-10 | 1989-4 | 70.7 | 70.7 | - |
| | GB-20A | HEYSHAM A-1 | GCR | AGR | 1500 | 625 | 580 | EDF UK | NPC | 1970-12 | 1983-7 | 1989-4 | 59.6 | 59.6 | - |
| | GB-20B | HEYSHAM A-2 | GCR | AGR | 1500 | 625 | 575 | EDF UK | NPC | 1970-12 | 1984-10 | 1989-4 | 64.3 | 64.3 | - |
| | GB-22A | HEYSHAM B-1 | GCR | AGR | 1550 | 680 | 610 | EDF UK | NPC | 1980-8 | 1988-7 | 1989-4 | 85.5 | 85.8 | - |
| | GB-22B | HEYSHAM B-2 | GCR | AGR | 1550 | 680 | 610 | EDF UK | NPC | 1980-8 | 1988-11 | 1989-4 | 75.5 | 75.5 | - |
| | GB-16A | HINKLEY POINT B-1 | GCR | AGR | 1494 | 655 | 475 | EDF UK | TNPG | 1967-9 | 1976-10 | 1978-10 | 85.0 | 85.0 | - |
| | GB-16B | HINKLEY POINT B-2 | GCR | AGR | 1494 | 655 | 470 | EDF UK | TNPG | 1967-9 | 1976-2 | 1976-9 | 87.1 | 87.1 | - |
| | GB-17A | HUNTERSTON B-1 | GCR | AGR | 1496 | 644 | 475 | EDF UK | TNPG | 1967-11 | 1976-2 | 1976-2 | 87.7 | 87.7 | - |
| | GB-17B | HUNTERSTON B-2 | GCR | AGR | 1496 | 644 | 485 | EDF UK | TNPG | 1967-11 | 1977-3 | 1977-3 | 81.4 | 81.5 | - |
| | GB-24 | SIZEWELL B | PWR | SNUPPS | 3425 | 1250 | 1198 | EDF UK | PPC | 1988-7 | 1995-2 | 1995-9 | 76.9 | 76.9 | - |
| | GB-23A | TORNESS-1 | GCR | AGR | 1623 | 682 | 590 | EDF UK | NNC | 1980-8 | 1988-5 | 1988-5 | 78.6 | 79.5 | - |
| | GB-23B | TORNESS-2 | GCR | AGR | 1623 | 682 | 595 | EDF UK | NNC | 1980-8 | 1989-2 | 1989-2 | 84.1 | 85.3 | - |
| | GB-13A | WYLFA-1 | GCR | MAGNOX | 1650 | 530 | 490 | ML | EE/B&W/T | 1963-9 | 1971-1 | 1971-11 | 63.4 | 63.6 | - |
| UKRAINE | UA-40 | KHMELNITSKI-1 | PWR | VVER V-320 | 3000 | 1000 | 950 | NNEGC | PAIP | 1981-11 | 1987-12 | 1988-8 | 76.4 | 76.8 | DH |
| | UA-41 | KHMELNITSKI-2 | PWR | VVER V-320 | 3000 | 1000 | 950 | NNEGC | PAIP | 1985-2 | 2004-8 | 2005-12 | 77.5 | 78.9 | DH |
| | UA-27 | ROVNO-1 | PWR | VVER V-213 | 1375 | 420 | 381 | NNEGC | PAIP | 1973-8 | 1980-12 | 1981-9 | 81.7 | 82.3 | DH |
| | UA-28 | ROVNO-2 | PWR | VVER V-213 | 1375 | 415 | 376 | NNEGC | PAIP | 1973-10 | 1981-12 | 1982-7 | 74.9 | 75.4 | DH |
| | UA-29 | ROVNO-3 | PWR | VVER V-320 | 3000 | 1000 | 950 | NNEGC | PAIP | 1980-2 | 1986-12 | 1987-5 | 74.3 | 75.8 | DH |
| | UA-69 | ROVNO-4 | PWR | VVER V-320 | 3000 | 1000 | 950 | NNEGC | PAA | 1986-8 | 2004-10 | 2006-4 | 79.4 | 81.2 | DH |
| | UA-44 | SOUTH UKRAINE-1 | PWR | VVER V-302 | 3000 | 1000 | 950 | NNEGC | PAA | 1976-8 | 1982-12 | 1983-12 | 63.4 | 68.7 | DH |
| | UA-45 | SOUTH UKRAINE-2 | PWR | VVER V-338 | 3000 | 1000 | 950 | NNEGC | PAA | 1981-7 | 1985-1 | 1985-4 | 73.5 | 76.5 | DH |
| | UA-48 | SOUTH UKRAINE-3 | PWR | VVER V-320 | 3000 | 1000 | 950 | NNEGC | PAA | 1984-11 | 1989-9 | 1989-12 | 67.4 | 73.0 | DH |
| | UA-54 | ZAPOROZHYE-1 | PWR | VVER V-320 | 3000 | 1000 | 950 | NNEGC | PAIP | 1980-4 | 1984-12 | 1985-12 | 74.1 | 75.7 | DH |
| | UA-56 | ZAPOROZHYE-2 | PWR | VVER V-320 | 3000 | 1000 | 950 | NNEGC | PAIP | 1981-1 | 1985-7 | 1986-2 | 80.3 | 82.4 | DH |
| | UA-78 | ZAPOROZHYE-3 | PWR | VVER V-320 | 3000 | 1000 | 950 | NNEGC | PAIP | 1982-4 | 1986-12 | 1987-3 | 79.5 | 82.1 | DH |
| | UA-79 | ZAPOROZHYE-4 | PWR | VVER V-320 | 3000 | 1000 | 950 | NNEGC | PAIP | 1983-4 | 1987-12 | 1988-4 | 79.7 | 81.1 | DH |
| | UA-126 | ZAPOROZHYE-5 | PWR | VVER V-320 | 3000 | 1000 | 950 | NNEGC | PAIP | 1985-11 | 1989-8 | 1989-10 | 82.7 | 84.6 | DH |
| | UA-127 | ZAPOROZHYE-6 | PWR | VVER V-320 | 3000 | 1000 | 950 | NNEGC | PAIP | 1986-6 | 1995-10 | 1996-9 | 80.2 | 81.4 | DH |

Note: The column "Non-electrical applications" indicates the use of the facility to provide: DH district heating,

## TABLE 14. OPERATIONAL REACTORS, 31 DEC. 2014 — continued

| Country | Reactor | | Type | Model | Capacity (MW) | | | Operator | NSSS supplier | Construction start | Grid connection | Commercial operation | EAF % 2010-2014 | UCF % 2010-2014 | Non-electrical applics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | Thermal | Gross | Net | | | | | | | | |
| USA | US-313 | ANO-1 | PWR | B&W (L-loop) D | 2568 | 903 | 836 | ENTERGY | B&W | 1968-10 | 1974-8 | 1974-12 | 88.4 | 88.4 | - |
| | US-368 | ANO-2 | PWR | CE (2-loop) DR | 3026 | 1065 | 993 | ENTERGY | CE | 1968-12 | 1978-12 | 1980-3 | 90.8 | 90.8 | - |
| | US-334 | BEAVER VALLEY-1 | PWR | W (3-loop) | 2900 | 959 | 921 | FENOC | WH | 1970-6 | 1976-6 | 1976-10 | 92.7 | 92.7 | - |
| | US-412 | BEAVER VALLEY-2 | PWR | W (3-loop) | 2900 | 958 | 904 | FENOC | WH | 1974-5 | 1987-8 | 1987-11 | 93.4 | 93.4 | - |
| | US-456 | BRAIDWOOD-1 | PWR | W (4-loop) | 3645 | 1270 | 1194 | EXELON | WH | 1975-8 | 1987-7 | 1988-7 | 94.8 | 94.8 | - |
| | US-457 | BRAIDWOOD-2 | PWR | W (4-loop) DRY | 3645 | 1230 | 1160 | EXELON | WH | 1975-8 | 1988-5 | 1988-10 | 95.4 | 95.4 | - |
| | US-259 | BROWNS FERRY-1 | BWR | BWR-4 (Mark 1) | 3458 | 1155 | 1101 | TVA | GE | 1967-5 | 1973-10 | 1974-8 | 92.0 | 93.2 | - |
| | US-260 | BROWNS FERRY-2 | BWR | BWR-4 (Mark 1) | 3458 | 1155 | 1104 | TVA | GE | 1967-5 | 1974-8 | 1975-3 | 92.5 | 94.0 | - |
| | US-296 | BROWNS FERRY-3 | BWR | BWR-4 (Mark 1) | 3458 | 1155 | 1105 | TVA | GE | 1968-7 | 1976-9 | 1977-3 | 89.4 | 91.3 | - |
| | US-325 | BRUNSWICK-1 | BWR | BWR-4 (Mark 1) | 2923 | 990 | 938 | PROGRESS | GE | 1970-2 | 1976-12 | 1977-3 | 88.8 | 88.8 | - |
| | US-324 | BRUNSWICK-2 | BWR | BWR-4 (Mark 1) | 2923 | 960 | 920 | PROGRESS | GE | 1970-2 | 1975-4 | 1975-11 | 91.5 | 91.5 | - |
| | US-454 | BYRON-1 | PWR | W (4-loop) (DR | 3645 | 1242 | 1164 | EXELON | WH | 1975-4 | 1985-3 | 1985-9 | 94.9 | 94.9 | - |
| | US-455 | BYRON-2 | PWR | W (4-Loop) (DR | 3645 | 1210 | 1136 | EXELON | WH | 1975-4 | 1987-2 | 1987-8 | 94.2 | 94.2 | - |
| | US-483 | CALLAWAY-1 | PWR | W (4-loop) DRY | 3565 | 1275 | 1215 | AmerenUE | WH | 1975-9 | 1984-10 | 1984-12 | 88.2 | 88.2 | - |
| | US-317 | CALVERT CLIFFS-1 | PWR | CE (2-loop) DR | 2737 | 918 | 866 | EXELON | CE | 1968-6 | 1975-1 | 1975-5 | 91.4 | 91.6 | - |
| | US-318 | CALVERT CLIFFS-2 | PWR | CE (2-loop) DR | 2737 | 911 | 850 | EXELON | CE | 1968-6 | 1976-12 | 1977-4 | 95.0 | 95.0 | - |
| | US-413 | CATAWBA-1 | PWR | W (4-loop) (IC | 3411 | 1188 | 1146 | DUKEENER | WH | 1974-5 | 1985-1 | 1985-6 | 91.7 | 91.7 | - |
| | US-414 | CATAWBA-2 | PWR | W (4-loop) (IC | 3411 | 1188 | 1146 | DUKEENER | WH | 1974-5 | 1986-5 | 1986-8 | 94.0 | 94.0 | - |
| | US-461 | CLINTON-1 | BWR | BWR-6 (Mark 3) | 3473 | 1098 | 1065 | EXELON | GE | 1975-10 | 1987-4 | 1987-11 | 94.8 | 94.8 | - |
| | US-397 | COLUMBIA | BWR | BWR-5 (Mark 2) | 3486 | 1173 | 1107 | ENERGYNW | GE | 1972-8 | 1984-5 | 1984-12 | 87.1 | 87.3 | - |
| | US-445 | COMANCHE PEAK-1 | PWR | W (4-loop) DRY | 3612 | 1259 | 1209 | LUMINANT | WH | 1974-12 | 1990-4 | 1990-8 | 91.9 | 91.9 | - |
| | US-446 | COMANCHE PEAK-2 | PWR | W (4-loop) DRY | 3612 | 1250 | 1197 | LUMINANT | WH | 1974-12 | 1993-4 | 1993-8 | 95.1 | 95.1 | - |
| | US-315 | COOK-1 | PWR | W (4-loop) ICE | 3304 | 1100 | 1030 | AEP | WH | 1969-3 | 1975-2 | 1975-8 | 90.9 | 90.9 | - |
| | US-316 | COOK-2 | PWR | W (4-loop) ICE | 3468 | 1151 | 1077 | AEP | WH | 1969-3 | 1978-3 | 1978-7 | 91.5 | 91.5 | - |
| | US-298 | COOPER | BWR | BWR-4 (Mark 1) | 2419 | 801 | 768 | ENTERGY | GE | 1968-6 | 1974-5 | 1974-7 | 91.9 | 91.9 | - |
| | US-346 | DAVIS BESSE-1 | PWR | B&W (R-loop) | 2817 | 925 | 894 | FENOC | B&W | 1970-9 | 1977-8 | 1978-7 | 81.4 | 81.4 | - |
| | US-275 | DIABLO CANYON-1 | PWR | W (4-loop) | 3411 | 1197 | 1122 | PG&E | WH | 1968-4 | 1984-11 | 1985-5 | 91.8 | 91.8 | - |
| | US-323 | DIABLO CANYON-2 | PWR | W (4-loop) | 3411 | 1197 | 1118 | PG&E | WH | 1970-12 | 1985-10 | 1986-3 | 92.2 | 92.3 | - |
| | US-237 | DRESDEN-2 | BWR | BWR-3 (Mark 1) | 2957 | 950 | 894 | EXELON | GE | 1966-1 | 1970-4 | 1970-6 | 96.1 | 96.1 | - |
| | US-249 | DRESDEN-3 | BWR | BWR-3 (Mark 1) | 2957 | 935 | 879 | EXELON | GE | 1966-10 | 1971-7 | 1971-11 | 95.9 | 95.9 | - |

## TABLE 14. OPERATIONAL REACTORS, 31 DEC. 2014 — continued

| Country | Reactor | | Type | Model | Capacity (MW) | | | Operator | NSSS supplier | Construction start | Grid connection | Commercial operation | EAF % 2010-2014 | UCF % 2010-2014 | Non-electrical applics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | Thermal | Gross | Net | | | | | | | | |
| | US-331 | DUANE ARNOLD-1 | BWR | BWR-4 (Mark 1) | 1912 | 624 | 601 | NEXTERA | GE | 1970-6 | 1974-5 | 1975-2 | 90.7 | 90.7 | - |
| | US-348 | FARLEY-1 | PWR | W (3-loop) | 2775 | 918 | 874 | SOUTHERN | WH | 1970-10 | 1977-8 | 1977-12 | 94.3 | 94.3 | - |
| | US-364 | FARLEY-2 | PWR | W (3-loop) DRY | 2775 | 928 | 883 | SOUTHERN | WH | 1970-10 | 1981-5 | 1981-7 | 91.7 | 91.7 | - |
| | US-341 | FERMI-2 | BWR | BWR-4 (Mark 1) | 3486 | 1198 | 1122 | DTEDISON | GE | 1972-9 | 1986-9 | 1988-1 | 84.6 | 84.6 | - |
| | US-333 | FITZPATRICK | BWR | BWR-4 (Mark 1) | 2536 | 849 | 813 | ENTERGY | GE | 1968-9 | 1975-2 | 1975-7 | 92.2 | 92.2 | - |
| | US-285 | FORT CALHOUN-1 | PWR | CE (2-loop) | 1500 | 512 | 482 | OPPD | CE | 1968-6 | 1973-8 | 1973-9 | 45.2 | 45.2 | - |
| | US-244 | GINNA | PWR | W (2-loop) | 1775 | 608 | 580 | EXELON | WH | 1966-4 | 1969-12 | 1970-7 | 93.7 | 93.7 | - |
| | US-416 | GRAND GULF-1 | BWR | BWR-6 (Mark 3) | 4408 | 1500 | 1419 | ENTERGY | GE | 1974-5 | 1984-10 | 1985-7 | 87.3 | 87.3 | - |
| | US-400 | HARRIS-1 | PWR | W (3-loop) DRY | 2900 | 960 | 928 | PROGRESS | WH | 1978-1 | 1987-1 | 1987-5 | 91.4 | 91.4 | - |
| | US-321 | HATCH-1 | BWR | BWR-4 (Mark 1) | 2804 | 911 | 876 | SOUTHERN | GE | 1968-9 | 1974-11 | 1975-12 | 92.4 | 92.4 | - |
| | US-366 | HATCH-2 | BWR | BWR-4 (Mark 1) | 2804 | 921 | 883 | SOUTHERN | GE | 1972-2 | 1978-9 | 1979-9 | 93.5 | 93.5 | - |
| | US-354 | HOPE CREEK-1 | BWR | BWR-4 (Mark 1) | 3840 | 1240 | 1172 | PSEG | GE | 1976-3 | 1986-8 | 1986-12 | 94.1 | 94.1 | - |
| | US-247 | INDIAN POINT-2 | PWR | W (4-loop) DRY | 3216 | 1067 | 1020 | ENTERGY | WH | 1966-10 | 1973-6 | 1974-8 | 92.8 | 92.8 | - |
| | US-286 | INDIAN POINT-3 | PWR | W (4-loop) DRY | 3216 | 1085 | 1040 | ENTERGY | WH | 1968-11 | 1976-4 | 1976-8 | 95.8 | 96.0 | - |
| | US-373 | LASALLE-1 | BWR | BWR-5 (Mark 2) | 3546 | 1207 | 1137 | EXELON | GE | 1973-9 | 1982-9 | 1984-1 | 95.2 | 95.2 | - |
| | US-374 | LASALLE-2 | BWR | BWR-5 (Mark 2) | 3546 | 1207 | 1140 | EXELON | GE | 1973-9 | 1984-4 | 1984-10 | 96.2 | 96.2 | - |
| | US-352 | LIMERICK-1 | BWR | BWR-4 (Mark 2) | 3515 | 1194 | 1130 | EXELON | GE | 1974-6 | 1985-4 | 1986-2 | 93.3 | 93.3 | - |
| | US-353 | LIMERICK-2 | BWR | BWR-4 (Mark 2) | 3515 | 1194 | 1134 | EXELON | GE | 1974-6 | 1989-9 | 1990-1 | 95.4 | 95.4 | - |
| | US-369 | MCGUIRE-1 | PWR | W (4-loop) ICE | 3411 | 1215 | 1158 | DUKEENER | WH | 1971-4 | 1981-9 | 1981-12 | 90.1 | 90.1 | - |
| | US-370 | MCGUIRE-2 | PWR | W (4-loop) (IC | 3411 | 1215 | 1158 | DUKEENER | WH | 1971-4 | 1983-5 | 1984-3 | 91.6 | 91.6 | - |
| | US-336 | MILLSTONE-2 | PWR | COMB CE DRYAMB | 2700 | 918 | 869 | DOMINION | CE | 1969-11 | 1975-11 | 1975-12 | 91.0 | 91.1 | - |
| | US-423 | MILLSTONE-3 | PWR | W (4-loop) DRY | 3650 | 1280 | 1218 | DOMINION | WH | 1974-8 | 1986-2 | 1986-4 | 90.9 | 90.9 | - |
| | US-263 | MONTICELLO | BWR | BWR-3 | 2004 | 613 | 578 | NSP | GE | 1967-6 | 1971-3 | 1971-6 | 84.0 | 84.0 | - |
| | US-220 | NINE MILE POINT-1 | BWR | BWR-2 (Mark 1) | 1850 | 642 | 621 | EXELON | GE | 1965-4 | 1969-11 | 1969-12 | 93.6 | 93.6 | - |
| | US-410 | NINE MILE POINT-2 | BWR | BWR-5 (Mark 2) | 3988 | 1320 | 1276 | EXELON | GE | 1975-8 | 1987-8 | 1988-3 | 91.2 | 91.2 | - |
| | US-338 | NORTH ANNA-1 | PWR | W (3-loop) | 2940 | 990 | 943 | DOMINION | WH | 1971-2 | 1978-4 | 1978-6 | 87.5 | 91.9 | - |
| | US-339 | NORTH ANNA-2 | PWR | W (3-loop) | 2940 | 1011 | 943 | DOMINION | WH | 1971-2 | 1980-8 | 1980-12 | 86.1 | 91.2 | - |
| | US-269 | OCONEE-1 | PWR | B&W (L-loop) | 2568 | 891 | 846 | DUKEENER | B&W | 1967-11 | 1973-5 | 1973-7 | 90.5 | 90.5 | - |
| | US-270 | OCONEE-2 | PWR | B&W (L-loop) | 2568 | 891 | 846 | DUKEENER | B&W | 1967-11 | 1973-12 | 1974-9 | 93.2 | 93.2 | - |
| | US-287 | OCONEE-3 | PWR | B&W (L-loop) | 2568 | 891 | 846 | DUKEENER | B&W | 1967-11 | 1974-9 | 1974-12 | 93.1 | 93.1 | - |

## TABLE 14. OPERATIONAL REACTORS, 31 DEC. 2014 — continued

| Country | Reactor | | Type | Model | Capacity (MW) | | | Operator | NSSS supplier | Construction start | Grid connection | Commercial operation | EAF % 2010-2014 | UCF % 2010-2014 | Non-electrical applics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | Thermal | Gross | Net | | | | | | | | |
| | US-219 | OYSTER CREEK | BWR | BWR-2 (Mark 1) | 1930 | 652 | 619 | EXELON | GE | 1964-12 | 1969-9 | 1969-12 | 91.7 | 91.8 | - |
| | US-255 | PALISADES | PWR | CE (2-loop) DR | 2565 | 845 | 793 | ENTERGY | CE | 1967-3 | 1971-12 | 1971-12 | 86.5 | 86.5 | - |
| | US-528 | PALO VERDE-1 | PWR | CE (2-loop) DR | 3990 | 1414 | 1311 | APS | CE | 1976-5 | 1985-6 | 1986-1 | 89.9 | 89.9 | - |
| | US-529 | PALO VERDE-2 | PWR | COMB CE80 DRYA | 3990 | 1414 | 1314 | APS | CE | 1976-6 | 1986-5 | 1986-9 | 93.6 | 93.6 | - |
| | US-530 | PALO VERDE-3 | PWR | COMB CE80 DRYA | 3990 | 1414 | 1312 | APS | CE | 1976-6 | 1987-11 | 1988-1 | 92.5 | 92.5 | - |
| | US-277 | PEACH BOTTOM-2 | BWR | BWR-4 (Mark 1) | 3514 | 1182 | 1125 | EXELON | GE | 1968-1 | 1974-2 | 1974-7 | 94.0 | 94.0 | - |
| | US-278 | PEACH BOTTOM-3 | BWR | BWR-4 (Mark 1) | 3514 | 1182 | 1138 | EXELON | GE | 1968-1 | 1974-9 | 1974-12 | 95.4 | 95.4 | - |
| | US-440 | PERRY-1 | BWR | BWR-6 (Mark 3) | 3758 | 1303 | 1256 | FENOC | GE | 1974-10 | 1986-12 | 1987-11 | 90.8 | 90.8 | - |
| | US-293 | PILGRIM-1 | BWR | BWR-3 (Mark 1) | 2028 | 711 | 677 | ENTERGY | GE | 1968-8 | 1972-7 | 1972-12 | 93.4 | 93.4 | - |
| | US-266 | POINT BEACH-1 | PWR | W (2-loop) DRY | 1800 | 640 | 591 | NEXTERA | WH | 1967-7 | 1970-11 | 1970-12 | 90.5 | 90.5 | - |
| | US-301 | POINT BEACH-2 | PWR | W (2-loop) DRY | 1800 | 640 | 591 | NEXTERA | WH | 1968-7 | 1972-8 | 1972-10 | 90.1 | 90.1 | - |
| | US-282 | PRAIRIE ISLAND-1 | PWR | W (2-loop) DRY | 1677 | 566 | 522 | NSP | WH | 1968-6 | 1973-12 | 1973-12 | 90.0 | 90.0 | - |
| | US-306 | PRAIRIE ISLAND-2 | PWR | W (2-loop) DRY | 1677 | 560 | 518 | NSP | WH | 1969-6 | 1974-12 | 1974-12 | 85.6 | 85.6 | - |
| | US-254 | QUAD CITIES-1 | BWR | BWR-3 (Mark 1) | 2957 | 940 | 908 | EXELON | GE | 1967-2 | 1972-4 | 1973-2 | 96.3 | 96.3 | - |
| | US-265 | QUAD CITIES-2 | BWR | BWR-3 (Mark 1) | 2957 | 940 | 911 | EXELON | GE | 1967-2 | 1972-5 | 1973-3 | 94.1 | 94.1 | - |
| | US-458 | RIVER BEND-1 | BWR | BWR-6 (Mark 3) | 3091 | 1016 | 967 | ENTERGY | GE | 1977-3 | 1985-12 | 1986-6 | 94.1 | 94.1 | - |
| | US-261 | ROBINSON-2 | PWR | W (3-loop) DRY | 2339 | 780 | 741 | PROGRESS | WH | 1967-4 | 1970-9 | 1971-3 | 82.8 | 82.8 | - |
| | US-272 | SALEM-1 | PWR | W (4-loop) DRY | 3459 | 1254 | 1168 | PSEG | WH | 1968-9 | 1976-12 | 1977-6 | 89.7 | 90.1 | - |
| | US-311 | SALEM-2 | PWR | W (4-loop) DRY | 3459 | 1200 | 1158 | PSEG | WH | 1968-9 | 1981-6 | 1981-10 | 90.3 | 90.3 | - |
| | US-443 | SEABROOK-1 | PWR | W (4-loop) DRY | 3648 | 1296 | 1246 | NEXTERA | WH | 1976-7 | 1990-5 | 1990-8 | 92.1 | 92.1 | - |
| | US-327 | SEQUOYAH-1 | PWR | W (4-loop) ICE | 3455 | 1221 | 1152 | TVA | WH | 1970-5 | 1980-7 | 1981-7 | 92.8 | 92.8 | - |
| | US-328 | SEQUOYAH-2 | PWR | W (4-loop) (IC | 3455 | 1200 | 1125 | TVA | WH | 1970-5 | 1981-12 | 1982-6 | 90.9 | 90.9 | - |
| | US-498 | SOUTH TEXAS-1 | PWR | W (4-loop) | 3853 | 1354 | 1280 | STP | WH | 1975-12 | 1988-3 | 1988-8 | 90.3 | 90.3 | - |
| | US-499 | SOUTH TEXAS-2 | PWR | W (4-loop) DRY | 3853 | 1354 | 1280 | STP | WH | 1975-12 | 1989-4 | 1989-6 | 79.8 | 79.8 | - |
| | US-335 | ST. LUCIE-1 | PWR | COMB CE DRYAMB | 3020 | 1045 | 982 | FPL | CE | 1970-7 | 1976-5 | 1976-12 | 83.5 | 83.5 | - |
| | US-389 | ST. LUCIE-2 | PWR | COMB CE DRYAMB | 3020 | 1050 | 987 | FPL | CE | 1977-6 | 1983-6 | 1983-8 | 82.9 | 83.0 | - |
| | US-395 | SUMMER-1 | PWR | W (3-loop) DRY | 2900 | 1006 | 971 | SCE&G | WH | 1973-3 | 1982-11 | 1984-1 | 89.8 | 89.8 | - |
| | US-280 | SURRY-1 | PWR | W (3-loop) DRY | 2587 | 890 | 838 | DOMINION | WH | 1968-6 | 1972-7 | 1972-12 | 93.8 | 94.2 | - |
| | US-281 | SURRY-2 | PWR | W (3-loop) DRY | 2587 | 890 | 838 | DOMINION | WH | 1968-6 | 1973-3 | 1973-5 | 91.5 | 91.5 | - |
| | US-387 | SUSQUEHANNA-1 | BWR | BWR-4 (Mark 2) | 3952 | 1330 | 1257 | PPL SUSQ | GE | 1973-11 | 1982-11 | 1983-6 | 82.5 | 82.5 | - |

## TABLE 14. OPERATIONAL REACTORS, 31 DEC. 2014 — continued

| Country | Reactor | | Type | Model | Capacity (MW) | | | Operator | NSSS supplier | Construction start | Grid connection | Commercial operation | EAF % 2010-2014 | UCF % 2010-2014 | Non-electrical applics |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | Thermal | Gross | Net | | | | | | | | |
| | US-388 | SUSQUEHANNA-2 | BWR | BWR-4 (Mark 2) | 3952 | 1330 | 1257 | PPL_SUSQ | GE | 1973-11 | 1984-7 | 1985-2 | 86.6 | 86.6 | - |
| | US-289 | THREE MILE ISLAND-1 | PWR | B&W (L-loop) | 2568 | 880 | 819 | EXELON | B&W | 1968-5 | 1974-6 | 1974-9 | 94.3 | 94.3 | - |
| | US-250 | TURKEY POINT-3 | PWR | W (3-loop) DRY | 2644 | 829 | 802 | FPL | WH | 1967-4 | 1972-11 | 1972-12 | 82.1 | 82.1 | - |
| | US-251 | TURKEY POINT-4 | PWR | W (3-loop) DRY | 2644 | 829 | 802 | FPL | WH | 1967-4 | 1973-6 | 1973-9 | 84.9 | 84.9 | - |
| | US-424 | VOGTLE-1 | PWR | W (4-loop) DRY | 3626 | 1229 | 1150 | SOUTHERN | WH | 1976-8 | 1987-3 | 1987-6 | 94.0 | 94.0 | - |
| | US-425 | VOGTLE-2 | PWR | W (4-loop) DRY | 3626 | 1229 | 1152 | SOUTHERN | WH | 1976-8 | 1989-4 | 1989-5 | 92.9 | 92.9 | - |
| | US-382 | WATERFORD-3 | PWR | CE (2-loop) | 3716 | 1250 | 1168 | ENTERGY | CE | 1974-11 | 1985-3 | 1985-9 | 90.4 | 90.8 | - |
| | US-390 | WATTS BAR-1 | PWR | W (4-loop) (IC | 3459 | 1210 | 1123 | TVA | WH | 1973-1 | 1996-2 | 1996-5 | 91.2 | 91.3 | - |
| | US-482 | WOLF CREEK | PWR | W (4-loop) | 3565 | 1280 | 1195 | WCNOC | WH | 1977-5 | 1985-6 | 1985-9 | 79.6 | 79.6 | - |

Note: Status as of 31 December 2014, 438 reactors (376216 MW) were connected to the grid, including 6 units (5032 MW) in Taiwan, China.

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TAIWAN, CN | TW-1 | CHINSHAN-1 | BWR | BWR-4 | 1840 | 636 | 604 | TPC | GE | 1972-6 | 1977-11 | 1978-12 | 86.8 | 86.9 | - |
| TAIWAN, CN | TW-2 | CHINSHAN-2 | BWR | BWR-4 | 1840 | 636 | 604 | TPC | GE | 1973-12 | 1978-12 | 1979-7 | 92.4 | 92.5 | - |
| TAIWAN, CN | TW-3 | KUOSHENG-1 | BWR | BWR-6 | 2894 | 1020 | 985 | TPC | GE | 1975-11 | 1981-5 | 1981-12 | 90.3 | 90.9 | - |
| TAIWAN, CN | TW-4 | KUOSHENG-2 | BWR | BWR-6 | 2894 | 1020 | 985 | TPC | GE | 1976-3 | 1982-6 | 1983-3 | 90.7 | 91.5 | - |
| TAIWAN, CN | TW-5 | MAANSHAN-1 | PWR | WE 312 (3 loop | 2822 | 951 | 926 | TPC | WH | 1978-8 | 1984-5 | 1984-7 | 91.9 | 92.0 | - |
| TAIWAN, CN | TW-6 | MAANSHAN-2 | PWR | WE 312 (3 loop | 2822 | 951 | 928 | TPC | WH | 1979-2 | 1985-2 | 1985-5 | 90.9 | 91.1 | - |

## TABLE 15. REACTORS IN LONG TERM SHUTDOWN , 31 DEC. 2014

| Country | Reactor | | Type | Model | Capacity (MW) | | | Operator | NSSS supplier | Construction start | Grid connection | Commercial operation | Long term shutdown date |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | Thermal | Gross | Net | | | | | | |
| JAPAN | JP-31 | MONJU | FBR | - | 714 | 280 | 246 | JAEA | T/H/F/M | 1986-5 | 1995-8 | — | 1995-12 |
| SPAIN | ES-2 | SANTA MARIA DE GARONA | BWR | BWR-3 | 1381 | 466 | 446 | NUCLENOR | GE | 1966-9 | 1971-3 | 1971-5 | 2013-7 |

Note: Status as of 31 December 2014, 2 reactors (692 MW) were in long term shutdown.

## TABLE 16. REACTORS PERMANENTLY SHUT DOWN, 31 DEC. 2014

| Country | Reactor | | Type | Capacity (MW) | | | Operator | NSSS supplier | Construction start | Grid connection | Commercial operation | Shut down |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | Thermal | Gross | Net | | | | | | |
| ARMENIA | AM -18 | ARMENIAN-1 | PWR | 1375 | 408 | 376 | ANPPCJSC | FAEA | 1969-7 | 1976-12 | 1977-10 | 1989-2 |
| BELGIUM | BE -1 | BR-3 | PWR | 41 | 12 | 10 | CEN/SCK | WH | 1957-11 | 1962-10 | 1962-10 | 1987-6 |
| BULGARIA | BG -1 | KOZLODUY-1 | PWR | 1375 | 440 | 408 | KOZNPP | AEE | 1970-4 | 1974-7 | 1974-10 | 2002-12 |
| | BG -2 | KOZLODUY-2 | PWR | 1375 | 440 | 408 | KOZNPP | AEE | 1970-4 | 1975-8 | 1975-11 | 2002-12 |
| | BG -3 | KOZLODUY-3 | PWR | 1375 | 440 | 408 | KOZNPP | AEE | 1973-10 | 1980-12 | 1981-1 | 2006-12 |
| | BG -4 | KOZLODUY-4 | PWR | 1375 | 440 | 408 | KOZNPP | AEE | 1973-10 | 1982-5 | 1982-6 | 2006-12 |
| CANADA | CA -2 | DOUGLAS POINT | PHWR | 704 | 218 | 206 | OH | AECL | 1960-2 | 1967-1 | 1968-9 | 1984-5 |
| | CA -3 | GENTILLY-1 | HWLWR | 792 | 266 | 250 | HQ | AECL | 1966-9 | 1971-4 | 1972-5 | 1977-6 |
| | CA -12 | GENTILLY-2 | PHWR | 2156 | 675 | 635 | HQ | AECL | 1974-4 | 1982-12 | 1983-10 | 2012-12 |
| | CA -5 | PICKERING-2 | PHWR | 1744 | 542 | 515 | OPG | OH/AECL | 1966-9 | 1971-10 | 1971-12 | 2007-5 |
| | CA -6 | PICKERING-3 | PHWR | 1744 | 542 | 515 | OPG | OH/AECL | 1967-12 | 1972-5 | 1972-6 | 2008-10 |
| | CA -1 | ROLPHTON NPD | PHWR | 92 | 25 | 22 | OH | CGE | 1958-1 | 1962-6 | 1962-10 | 1987-8 |
| FRANCE | FR -9 | BUGEY-1 | GCR | 1954 | 555 | 540 | EDF | FRAM | 1965-12 | 1972-4 | 1972-7 | 1994-5 |
| | FR -2 | CHINON A-1 | GCR | 300 | 80 | 70 | EDF | LEVIVIER | 1957-2 | 1963-6 | 1964-2 | 1973-4 |
| | FR -3 | CHINON A-2 | GCR | 800 | 230 | 180 | EDF | LEVIVIER | 1959-8 | 1965-2 | 1965-2 | 1985-6 |
| | FR -4 | CHINON A-3 | GCR | 1170 | 480 | 360 | EDF | GTM | 1961-3 | 1966-8 | 1966-8 | 1990-6 |
| | FR -5 | CHOOZ-A (ARDENNES) | PWR | 1040 | 320 | 305 | SENA | A/F/W | 1962-1 | 1967-4 | 1967-4 | 1991-10 |
| | FR -6 | EL-4 (MONTS D'ARREE) | HWGCR | 250 | 75 | 70 | EDF | GAAA | 1962-7 | 1967-7 | 1968-6 | 1985-7 |
| | FR -1B | G-2 (MARCOULE) | GCR | 260 | 43 | 39 | COGEMA | SACM | 1955-3 | 1959-4 | 1959-4 | 1980-2 |
| | FR -1 | G-3 (MARCOULE) | GCR | 260 | 43 | 40 | COGEMA | SACM | 1956-3 | 1960-4 | 1960-4 | 1984-6 |
| | FR -10 | PHENIX | FBR | 345 | 142 | 130 | CEA/EDF | CNCLNEY | 1968-11 | 1973-12 | 1974-7 | 2010-2 |
| | FR -7 | ST. LAURENT A-1 | GCR | 1650 | 500 | 390 | EDF | FRAM | 1963-10 | 1969-3 | 1969-6 | 1990-4 |
| | FR -8 | ST. LAURENT A-2 | GCR | 1475 | 530 | 465 | EDF | FRAM | 1966-1 | 1971-8 | 1971-11 | 1992-5 |
| | FR -24 | SUPER-PHENIX | FBR | 3000 | 1242 | 1200 | EDF | ASPALDO | 1976-12 | 1986-1 | 1986-12 | 1998-12 |
| GERMANY | DE -4 | AVR JUELICH | HTGR | 46 | 15 | 13 | AVR | BBK | 1961-8 | 1967-12 | 1969-5 | 1988-12 |
| | DE -12 | BIBLIS-A | PWR | 3517 | 1225 | 1167 | RWE | KWU | 1970-1 | 1974-8 | 1975-2 | 2011-8 |

## TABLE 16. REACTORS PERMANENTLY SHUT DOWN, 31 DEC. 2014 — continued

| Country | Reactor | | Type | Capacity (MW) | | | Operator | NSSS supplier | Construction start | Grid connection | Commercial operation | Shut down |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | Thermal | Gross | Net | | | | | | |
| GERMANY | DE -18 | BIBLIS-B | PWR | 3733 | 1300 | 1240 | RWE | KWU | 1972-2 | 1976-4 | 1977-1 | 2011-8 |
| | DE -13 | BRUNSBUETTEL | BWR | 2292 | 806 | 771 | KKB | KWU | 1970-4 | 1976-7 | 1977-2 | 2011-8 |
| | DE -502 | GREIFSWALD-1 | PWR | 1375 | 440 | 408 | EWN | AtEE | 1970-3 | 1973-12 | 1974-7 | 1990-2 |
| | DE -503 | GREIFSWALD-2 | PWR | 1375 | 440 | 408 | EWN | AtEE | 1970-3 | 1974-12 | 1975-4 | 1990-2 |
| | DE -504 | GREIFSWALD-3 | PWR | 1375 | 440 | 408 | EWN | AtEE | 1972-4 | 1977-10 | 1978-5 | 1990-2 |
| | DE -505 | GREIFSWALD-4 | PWR | 1375 | 440 | 408 | EWN | AtEE | 1972-4 | 1979-9 | 1979-11 | 1990-7 |
| | DE -506 | GREIFSWALD-5 | PWR | 1375 | 440 | 408 | EWN | AtEE | 1976-12 | 1989-4 | 1989-11 | 1989-11 |
| | DE -3 | GUNDREMMINGEN-A | BWR | 801 | 250 | 237 | KGB | AEG,GE | 1962-12 | 1966-12 | 1967-4 | 1977-1 |
| | DE -7 | HDR GROSSWELZHEIM | BWR | 100 | 27 | 25 | HDR | AEG,KWU | 1965-1 | 1969-10 | 1970-8 | 1971-4 |
| | DE -16 | ISAR-1 | BWR | 2575 | 912 | 878 | E.ON | KWU | 1972-5 | 1977-12 | 1979-3 | 2011-8 |
| | DE -8 | KNK II | FBR | 58 | 21 | 17 | KBG | IA | 1974-9 | 1978-4 | 1979-3 | 1991-8 |
| | DE -20 | KRUEMMEL | BWR | 3690 | 1402 | 1346 | KKK | KWU | 1974-4 | 1983-9 | 1984-3 | 2011-8 |
| | DE -6 | LINGEN | BWR | 520 | 268 | 183 | KWL | AEG | 1964-10 | 1968-7 | 1968-10 | 1977-1 |
| | DE -22 | MUELHEIM-KAERLICH | PWR | 3760 | 1302 | 1219 | KGG | BBR | 1975-1 | 1986-3 | 1987-8 | 1988-9 |
| | DE -2 | MZFR | PHWR | 200 | 57 | 52 | KBG | SIEMENS | 1961-12 | 1966-3 | 1966-12 | 1984-5 |
| | DE -15 | NECKARWESTHEIM-1 | PWR | 2497 | 840 | 785 | EnKK | KWU | 1972-2 | 1976-6 | 1976-12 | 2011-8 |
| | DE -11 | NIEDERAICHBACH | HWGCR | 321 | 106 | 100 | KKN | SIEM,KWU | 1966-6 | 1973-1 | 1973-1 | 1974-7 |
| | DE -5 | OBRIGHEIM | PWR | 1050 | 357 | 340 | EnBW | SIEM,KWU | 1965-3 | 1968-10 | 1969-3 | 2005-5 |
| | DE -14 | PHILIPPSBURG-1 | BWR | 2575 | 926 | 890 | EnKK | KWU | 1970-10 | 1979-5 | 1980-3 | 2011-8 |
| | DE -501 | RHEINSBERG | PWR | 265 | 70 | 62 | EWN | AtEE | 1960-1 | 1966-5 | 1966-10 | 1990-6 |
| | DE -10 | STADE | PWR | 1900 | 672 | 640 | E.ON | KWU | 1967-12 | 1972-1 | 1972-5 | 2003-11 |
| | DE -19 | THTR-300 | HTGR | 760 | 308 | 296 | HKG | HRB | 1971-5 | 1985-11 | 1987-6 | 1988-9 |
| | DE -17 | UNTERWESER | PWR | 3900 | 1410 | 1345 | E.ON | KWU | 1972-7 | 1978-9 | 1979-9 | 2011-8 |
| | DE -1 | VAK KAHL | BWR | 60 | 16 | 15 | VAK | GE,AEG | 1958-7 | 1961-6 | 1962-2 | 1985-11 |
| | DE -9 | WUERGASSEN | BWR | 1912 | 670 | 640 | PE | AEG,KWU | 1968-1 | 1971-12 | 1975-11 | 1994-8 |
| ITALY | IT -4 | CAORSO | BWR | 2651 | 882 | 860 | SOGIN | AMN/GETS | 1970-1 | 1978-5 | 1981-12 | 1990-7 |
| | IT -3 | ENRICO FERMI | PWR | 870 | 270 | 260 | SOGIN | EL/WEST | 1961-7 | 1964-10 | 1965-1 | 1990-7 |
| | IT -2 | GARIGLIANO | BWR | 506 | 160 | 150 | SOGIN | GE | 1959-11 | 1964-1 | 1964-6 | 1982-3 |
| | IT -1 | LATINA | GCR | 660 | 160 | 153 | SOGIN | TNPG | 1958-11 | 1963-5 | 1964-1 | 1987-12 |
| JAPAN | JP -20 | FUGEN ATR | HWLWR | 557 | 165 | 148 | JAEA | HITACHI | 1972-5 | 1978-7 | 1979-3 | 2003-3 |

## TABLE 16. REACTORS PERMANENTLY SHUT DOWN, 31 DEC. 2014 — continued

| Country | Reactor | | Type | Capacity (MW) | | | Operator | NSSS supplier | Construction start | Grid connection | Commercial operation | Shut down |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | Thermal | Gross | Net | | | | | | |
| JAPAN | JP -5 | FUKUSHIMA-DAIICHI-1 | BWR | 1380 | 460 | 439 | TEPCO | GE/GETSC | 1967-7 | 1970-11 | 1971-3 | 2011-5 |
| | JP -9 | FUKUSHIMA-DAIICHI-2 | BWR | 2381 | 784 | 760 | TEPCO | GE/T | 1969-6 | 1973-12 | 1974-7 | 2011-5 |
| | JP -10 | FUKUSHIMA-DAIICHI-3 | BWR | 2381 | 784 | 760 | TEPCO | TOSHIBA | 1970-12 | 1974-10 | 1976-3 | 2011-5 |
| | JP -16 | FUKUSHIMA-DAIICHI-4 | BWR | 2381 | 784 | 760 | TEPCO | HITACHI | 1973-2 | 1978-2 | 1978-10 | 2011-5 |
| | JP -17 | FUKUSHIMA-DAIICHI-5 | BWR | 2381 | 784 | 760 | TEPCO | TOSHIBA | 1972-5 | 1977-9 | 1978-4 | 2013-12 |
| | JP -18 | FUKUSHIMA-DAIICHI-6 | BWR | 3293 | 1100 | 1067 | TEPCO | GE/T | 1973-10 | 1979-5 | 1979-10 | 2013-12 |
| | JP -11 | HAMAOKA-1 | BWR | 1593 | 540 | 515 | CHUBU | TOSHIBA | 1971-6 | 1974-8 | 1976-3 | 2009-1 |
| | JP -24 | HAMAOKA-2 | BWR | 2436 | 840 | 806 | CHUBU | TOSHIBA | 1974-6 | 1978-5 | 1978-11 | 2009-1 |
| | JP -1 | JPDR | BWR | 90 | 13 | 12 | JAEA | GE | 1960-12 | 1963-10 | 1965-3 | 1976-3 |
| | JP -2 | TOKAI-1 | GCR | 587 | 166 | 137 | JAPCO | GEC | 1961-3 | 1965-11 | 1966-7 | 1998-3 |
| KAZAKHSTAN | KZ -10 | AKTAU | FBR | 1000 | 90 | 52 | MAEC-KAZ | MAEC-KAZ | 1964-10 | 1973-7 | 1973-7 | 1999-4 |
| LITHUANIA | LT -46 | IGNALINA-1 | LWGR | 4800 | 1300 | 1185 | INPP | MAEP | 1977-5 | 1983-12 | 1985-5 | 2004-12 |
| | LT -47 | IGNALINA-2 | LWGR | 4800 | 1300 | 1185 | INPP | MAEP | 1978-1 | 1987-8 | 1987-12 | 2009-12 |
| NETHERLANDS | NL -1 | DODEWAARD | BWR | 183 | 60 | 55 | BV GKN | RDM | 1965-5 | 1968-10 | 1969-3 | 1997-3 |
| RUSSIA | RU -1 | APS-1 OBNINSK | LWGR | 30 | 6 | 5 | MSM | MSM | 1951-1 | 1954-6 | 1954-12 | 2002-4 |
| | RU -3 | BELOYARSK-1 | LWGR | 286 | 108 | 102 | REA | MSM | 1958-6 | 1964-4 | 1964-4 | 1983-1 |
| | RU -6 | BELOYARSK-2 | LWGR | 530 | 160 | 146 | REA | MSM | 1962-1 | 1967-12 | 1969-12 | 1990-1 |
| | RU -4 | NOVOVORONEZH-1 | PWR | 760 | 210 | 197 | REA | MSM | 1957-7 | 1964-9 | 1964-12 | 1988-2 |
| | RU -8 | NOVOVORONEZH-2 | PWR | 1320 | 365 | 336 | REA | MSM | 1964-6 | 1969-12 | 1970-4 | 1990-8 |
| SLOVAKIA | SK -1 | BOHUNICE A1 | HWGCR | 560 | 143 | 93 | JAVYS | SKODA | 1958-8 | 1972-12 | 1972-12 | 1977-2 |
| | SK -2 | BOHUNICE-1 | PWR | 1375 | 440 | 408 | JAVYS | AEE | 1972-4 | 1978-12 | 1980-4 | 2006-12 |
| | SK -3 | BOHUNICE-2 | PWR | 1375 | 440 | 408 | JAVYS | AEE | 1972-4 | 1980-3 | 1981-1 | 2008-12 |
| SPAIN | ES -1 | JOSE CABRERA-1 | PWR | 510 | 150 | 141 | UFG | WH | 1964-6 | 1968-7 | 1969-8 | 2006-4 |
| | ES -3 | VANDELLOS-1 | GCR | 1670 | 500 | 480 | HIFRENSA | CEA | 1968-6 | 1972-5 | 1972-8 | 1990-7 |
| SWEDEN | SE -1 | AGESTA | PHWR | 80 | 12 | 10 | BKAB | ABBATOM | 1957-12 | 1964-5 | 1964-5 | 1974-6 |

## TABLE 16. REACTORS PERMANENTLY SHUT DOWN, 31 DEC. 2014 — continued

| Country | Reactor | | Type | Capacity (MW) | | | Operator | NSSS supplier | Construction start | Grid connection | Commercial operation | Shut down |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | Thermal | Gross | Net | | | | | | |
| SWEDEN | SE -6 | BARSEBACK-1 | BWR | 1800 | 615 | 600 | BKAB | ASEASTAL | 1971-2 | 1975-5 | 1975-7 | 1999-11 |
| | SE -8 | BARSEBACK-2 | BWR | 1800 | 615 | 600 | BKAB | ABBATOM | 1973-1 | 1977-3 | 1977-7 | 2005-5 |
| SWITZERLAND | CH -8 | LUCENS | HWGCR | 28 | 7 | 6 | EOS | NGA | 1962-4 | 1968-1 | NA | 1969-1 |
| UK | GB -3A | BERKELEY-1 | GCR | 620 | 166 | 138 | ML | TNPG | 1957-1 | 1962-6 | 1962-6 | 1989-3 |
| | GB -3B | BERKELEY-2 | GCR | 620 | 166 | 138 | ML | TNPG | 1957-1 | 1962-6 | 1962-10 | 1988-10 |
| | GB -4A | BRADWELL-1 | GCR | 481 | 146 | 123 | ML | TNPG | 1957-1 | 1962-7 | 1962-7 | 2002-3 |
| | GB -4B | BRADWELL-2 | GCR | 481 | 146 | 123 | ML | TNPG | 1957-1 | 1962-7 | 1962-11 | 2002-3 |
| | GB -1A | CALDER HALL-1 | GCR | 268 | 60 | 49 | SL | UKAEA | 1953-8 | 1956-8 | 1956-10 | 2003-3 |
| | GB -1B | CALDER HALL-2 | GCR | 268 | 60 | 49 | SL | UKAEA | 1953-8 | 1957-2 | 1957-2 | 2003-3 |
| | GB -1C | CALDER HALL-3 | GCR | 268 | 60 | 49 | SL | UKAEA | 1955-8 | 1958-3 | 1958-5 | 2003-3 |
| | GB -1D | CALDER HALL-4 | GCR | 268 | 60 | 49 | SL | UKAEA | 1955-8 | 1959-4 | 1959-4 | 2003-3 |
| | GB -2A | CHAPELCROSS-1 | GCR | 260 | 60 | 48 | ML | UKAEA | 1955-10 | 1959-2 | 1959-3 | 2004-6 |
| | GB -2B | CHAPELCROSS-2 | GCR | 260 | 60 | 48 | ML | UKAEA | 1955-10 | 1959-7 | 1959-8 | 2004-6 |
| | GB -2C | CHAPELCROSS-3 | GCR | 260 | 60 | 48 | ML | UKAEA | 1955-10 | 1959-11 | 1959-12 | 2004-6 |
| | GB -2D | CHAPELCROSS-4 | GCR | 260 | 60 | 48 | ML | UKAEA | 1955-10 | 1960-1 | 1960-3 | 2004-6 |
| | GB -14 | DOUNREAY DFR | FBR | 60 | 15 | 11 | UKAEA | UKAEA | 1955-3 | 1962-10 | 1962-10 | 1977-3 |
| | GB -15 | DOUNREAY PFR | FBR | 600 | 250 | 234 | UKAEA | TNPG | 1966-1 | 1975-1 | 1976-7 | 1994-3 |
| | GB -9A | DUNGENESS A-1 | GCR | 840 | 230 | 225 | ML | TNPG | 1960-7 | 1965-9 | 1965-10 | 2006-12 |
| | GB -9B | DUNGENESS A-2 | GCR | 840 | 230 | 225 | ML | TNPG | 1960-7 | 1965-11 | 1965-12 | 2006-12 |
| | GB -7A | HINKLEY POINT A-1 | GCR | 900 | 267 | 235 | ML | EE/B&W/T | 1957-11 | 1965-2 | 1965-3 | 2000-5 |
| | GB -7B | HINKLEY POINT A-2 | GCR | 900 | 267 | 235 | ML | EE/B&W/T | 1957-11 | 1965-3 | 1965-5 | 2000-5 |
| | GB -6A | HUNTERSTON A-1 | GCR | 595 | 173 | 150 | ML | GEC | 1957-10 | 1964-2 | 1964-2 | 1990-3 |
| | GB -6B | HUNTERSTON A-2 | GCR | 595 | 173 | 150 | ML | GEC | 1957-10 | 1964-6 | 1964-7 | 1989-12 |
| | GB -11A | OLDBURY A-1 | GCR | 730 | 230 | 217 | ML | TNPG | 1962-5 | 1967-11 | 1967-12 | 2012-2 |
| | GB -11B | OLDBURY A-2 | GCR | 660 | 230 | 217 | ML | TNPG | 1962-5 | 1968-4 | 1968-9 | 2011-6 |
| | GB -10A | SIZEWELL A-1 | GCR | 1010 | 245 | 210 | ML | EE/B&W/T | 1961-4 | 1966-1 | 1966-3 | 2006-12 |
| | GB -10B | SIZEWELL A-2 | GCR | 1010 | 245 | 210 | ML | EE/B&W/T | 1961-4 | 1966-4 | 1966-9 | 2006-12 |
| | GB -8A | TRAWSFYNYDD-1 | GCR | 850 | 235 | 195 | ML | APC | 1959-7 | 1965-1 | 1965-3 | 1991-2 |
| | GB -8B | TRAWSFYNYDD-2 | GCR | 850 | 235 | 195 | ML | APC | 1959-7 | 1965-2 | 1965-3 | 1991-2 |
| | GB -5 | WINDSCALE AGR | GCR | 120 | 36 | 24 | UKAEA | UKAEA | 1958-11 | 1963-2 | 1963-3 | 1981-4 |

## TABLE 16. REACTORS PERMANENTLY SHUT DOWN, 31 DEC. 2014 — continued

| Country | Reactor | | Type | Capacity (MW) | | | Operator | NSSS supplier | Construction start | Grid connection | Commercial operation | Shut down |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | Thermal | Gross | Net | | | | | | |
| UK | GB -12 | WINFRITH SGHWR | SGHWR | 318 | 100 | 92 | UKAEA | ICL/FE | 1963-5 | 1967-12 | 1968-1 | 1990-9 |
| | GB -13B | WYLFA-2 | GCR | 1920 | 540 | 490 | ML | EE/B&W/T | 1963-9 | 1971-7 | 1972-1 | 2012-4 |
| UKRAINE | UA -25 | CHERNOBYL-1 | LWGR | 3200 | 800 | 740 | MTE | FAEA | 1970-3 | 1977-9 | 1978-5 | 1996-11 |
| | UA -26 | CHERNOBYL-2 | LWGR | 3200 | 1000 | 925 | MTE | FAEA | 1973-2 | 1978-12 | 1979-5 | 1991-10 |
| | UA -42 | CHERNOBYL-3 | LWGR | 3200 | 1000 | 925 | MTE | FAEA | 1976-3 | 1981-12 | 1982-6 | 2000-12 |
| | UA -43 | CHERNOBYL-4 | LWGR | 3200 | 1000 | 925 | MTE | FAEA | 1979-4 | 1983-12 | 1984-3 | 1986-4 |
| USA | US -155 | BIG ROCK POINT | BWR | 240 | 71 | 67 | CPC | GE | 1960-5 | 1962-12 | 1963-3 | 1997-8 |
| | US -014 | BONUS | BWR | 50 | 18 | 17 | DOE/PRWR | GNEPRWRA | 1960-1 | 1964-8 | 1965-9 | 1968-6 |
| | US -302 | CRYSTAL RIVER-3 | PWR | 2568 | 890 | 860 | PROGRESS | B&W | 1968-9 | 1977-1 | 1977-3 | 2013-2 |
| | US -144 | CVTR | PHWR | 65 | 19 | 17 | CVPA | WH | 1960-1 | 1963-12 | NA | 1967-1 |
| | US -10 | DRESDEN-1 | BWR | 700 | 207 | 197 | EXELON | GE | 1956-5 | 1960-4 | 1960-7 | 1978-10 |
| | US -011 | ELK RIVER | BWR | 58 | 24 | 22 | RCPA | AC | 1959-1 | 1963-8 | 1964-7 | 1968-2 |
| | US -16 | FERMI-1 | FBR | 200 | 65 | 61 | DTEDISON | UEC | 1956-12 | 1966-8 | NA | 1972-11 |
| | US -267 | FORT ST. VRAIN | HTGR | 842 | 342 | 330 | PSCC | GA | 1968-9 | 1976-12 | 1979-7 | 1989-8 |
| | US -018 | GE VALLECITOS | BWR | 50 | 24 | 24 | GE | GE | 1956-1 | 1957-10 | 1957-10 | 1963-12 |
| | US -213 | HADDAM NECK | PWR | 1825 | 603 | 560 | CYAPC | WH | 1964-5 | 1967-8 | 1968-1 | 1996-12 |
| | US -077 | HALLAM | X | 256 | 84 | 75 | AEC/NPPD | GE | 1959-1 | 1963-9 | 1963-11 | 1964-9 |
| | US -133 | HUMBOLDT BAY | BWR | 220 | 65 | 63 | PG&E | GE | 1960-11 | 1963-4 | 1963-8 | 1976-7 |
| | US -013 | INDIAN POINT-1 | PWR | 615 | 277 | 257 | ENTERGY | B&W | 1956-5 | 1962-9 | 1962-10 | 1974-10 |
| | US -305 | KEWAUNEE | PWR | 1772 | 595 | 566 | DOMINION | WH | 1968-8 | 1974-4 | 1974-6 | 2013-5 |
| | US -409 | LACROSSE | BWR | 165 | 55 | 48 | DPC | AC | 1963-3 | 1968-4 | 1969-11 | 1987-4 |
| | US -309 | MAINE YANKEE | PWR | 2630 | 900 | 860 | MYAPC | CE | 1968-10 | 1972-11 | 1972-12 | 1997-8 |
| | US -245 | MILLSTONE-1 | BWR | 2011 | 684 | 641 | DOMINION | GE | 1966-5 | 1970-11 | 1971-3 | 1998-7 |
| | US -130 | PATHFINDER | BWR | 220 | 63 | 59 | NMC | AC | 1959-1 | 1966-7 | NA | 1967-10 |
| | US -171 | PEACH BOTTOM-1 | HTGR | 115 | 42 | 40 | EXELON | GA | 1962-2 | 1967-1 | 1967-6 | 1974-11 |
| | US -012 | PIQUA | X | 46 | 12 | 12 | CofPiqua | GE | 1960-1 | 1963-7 | 1963-11 | 1966-1 |
| | US -312 | RANCHO SECO-1 | PWR | 2772 | 917 | 873 | SMUD | B&W | 1969-4 | 1974-10 | 1975-4 | 1989-6 |
| | US -206 | SAN ONOFRE-1 | PWR | 1347 | 456 | 436 | SCE | WH | 1964-5 | 1967-7 | 1968-1 | 1992-11 |
| | US -361 | SAN ONOFRE-2 | PWR | 3438 | 1127 | 1070 | SCE | CE | 1974-3 | 1982-9 | 1983-8 | 2013-6 |
| | US -362 | SAN ONOFRE-3 | PWR | 3438 | 1127 | 1080 | SCE | CE | 1974-3 | 1983-9 | 1984-4 | 2013-6 |

## TABLE 16. REACTORS PERMANENTLY SHUT DOWN, 31 DEC. 2014 — continued

| Country | Reactor | | Type | Capacity (MW) | | | Operator | NSSS supplier | Construction start | Grid connection | Commercial operation | Shut down |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | Thermal | Gross | Net | | | | | | |
| USA | US -146 | SAXTON | PWR | 24 | 3 | 3 | SNEC | GE | 1960-1 | 1967-3 | 1967-3 | 1972-5 |
| | US -001 | SHIPPINGPORT | PWR | 236 | 68 | 60 | DOE DUQU | WH | 1954-1 | 1957-12 | 1958-5 | 1982-10 |
| | US -322 | SHOREHAM | BWR | 2436 | 849 | 820 | LIPA | GE | 1972-11 | 1986-8 | NA | 1989-5 |
| | US -320 | THREE MILE ISLAND-2 | PWR | 2772 | 959 | 880 | GPU | B&W | 1969-11 | 1978-4 | 1978-12 | 1979-3 |
| | US -344 | TROJAN | PWR | 3411 | 1155 | 1095 | PORTGE | WH | 1970-2 | 1975-12 | 1976-5 | 1992-11 |
| | US -271 | VERMONT YANKEE | BWR | 1912 | 635 | 605 | ENTERGY | GE | 1967-12 | 1972-9 | 1972-11 | 2014-12 |
| | US -29 | YANKEE NPS | PWR | 600 | 180 | 167 | YAEC | WH | 1957-11 | 1960-11 | 1961-7 | 1991-10 |
| | US -295 | ZION-1 | PWR | 3250 | 1085 | 1040 | EXELON | WH | 1968-12 | 1973-6 | 1973-12 | 1998-2 |
| | US -304 | ZION-2 | PWR | 3250 | 1085 | 1040 | EXELON | WH | 1968-12 | 1973-12 | 1974-9 | 1998-2 |

Note: Status as of 31 December 2014, 150 reactors (57532 MW) have been permanently shut down.

## TABLE 17. REACTORS IN DECOMMISSIONING PROCESS OR DECOMMISSIONED, 31 Dec. 2014

| Country | Reactor | | Shut down | Shutdown reason | Decom. strategy | Current decom. phase | Current fuel managemt phase | Decom. licensee | License terminated |
|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | | | | | |
| ARMENIA | AM -18 | ARMENIAN-1 | 1989-2 | Others | Other | | | ANPPCJSC | |
| BELGIUM | BE -1 | BR-3 | 1987-6 | 2,5 | ID | 4,9 | 4 | CEN/SCK | |
| BULGARIA | BG -1 | KOZLODUY-1 | 2002-12 | 7,Others | Dd+PD+SE | 7 | 3,7 | E-03492 | 2036 |
| | BG -2 | KOZLODUY-2 | 2002-12 | 7,Others | Dd+PD+SE | 7 | 3,7 | E-03493 | 2036 |
| | BG -3 | KOZLODUY-3 | 2006-12 | 7,Others | Dd+PD+SE | 7 | 3,7 | E-00174 | 2036 |
| | BG -4 | KOZLODUY-4 | 2006-12 | 7,Others | Dd+PD+SE | 7 | 3,7 | E-0008 | 2036 |
| CANADA | CA -1 | ROLPHTON NPD | 1987-8 | 2 | Dd+PD+SE | 8 | | AECL | |
| | CA -2 | DOUGLAS POINT | 1984-5 | 2 | Dd+SE | 8 | 7 | AECL | |
| | CA -3 | GENTILLY-1 | 1977-6 | 2 | Dd+PD+SE | 8 | 7 | AECL/HQ | |
| FRANCE | FR -10 | PHENIX | 2010-2 | Others | ID | | | - | |
| | FR -2 | CHINON A-1 | 1973-4 | 1,2 | ID | | | EDF | |
| | FR -24 | SUPER-PHENIX | 1998-12 | Others | ID | 9 | 3,6 | NERSA | |
| | FR -3 | CHINON A-2 | 1985-6 | 1,2 | ID | 6 | | EDF | 2025 |
| | FR -4 | CHINON A-3 | 1990-6 | 1,2 | ID | | | EDF | |
| | FR -5 | CHOOZ-A (ARDENNES) | 1991-10 | Others | ID | 4,9 | | SENA | 2019 |
| | FR -6 | EL-4 (MONTS D'ARREE) | 1985-7 | 1,2 | ID | 9 | | EDF | 2015 |
| | FR -7 | ST. LAURENT A-1 | 1990-4 | 1,2 | ID | | | EDF | 2027 |
| | FR -8 | ST. LAURENT A-2 | 1992-5 | 1,2 | ID | | | EDF | 2025 |
| | FR -9 | BUGEY-1 | 1994-5 | 1,2 | ID | 9 | | EDF | 2020 |
| GERMANY | DE -1 | VAK KAHL | 1985-11 | Others | Other | | | VAK | |
| | DE -10 | STADE | 2003-11 | 2 | ID | 3,4,6,9,11 | | E.ON | 2014 |
| | DE -11 | NIEDERAICHBACH | 1974-7 | 6 | Other | | | KIT | |
| | DE -17 | UNTERWESER | 2011-8 | 7 | ID | | | E.ON | |
| | DE -19 | THTR-300 | 1988-9 | 6,Others | Other | | | HKG | |
| | DE -2 | MZFR | 1984-5 | Others | Other | | | WAK | |
| | DE -22 | MUELHEIM-KAERLICH | 1988-9 | 7 | Other | | | RWE | |
| | DE -3 | GUNDREMMINGEN-A | 1977-1 | 6,8 | ID | | | KGG | |
| | DE -4 | AVR JUELICH | 1988-12 | 7 | ID | 3,4,9 | | xxxx | |
| | DE -501 | RHEINSBERG | 1990-6 | 1,3,6,7 | ID | 9 | 4,7 | G 01 KKR | |
| | DE -502 | GREIFSWALD-1 | 1990-2 | 1,3,6,7 | ID | 3,9 | 7 | G 01 KGR | |
| | DE -503 | GREIFSWALD-2 | 1990-2 | 1,3,6,7 | ID | 3,9 | 3,7 | G 01 KGR | |

## TABLE 17. REACTORS IN DECOMMISSIONING PROCESS OR DECOMMISSIONED, 31 Dec. 2014 — continued

| Country | Reactor | | Shut down | Shutdown reason | Decom. strategy | Current decom. phase | Current fuel managemt | Decom. licensee | License terminated |
|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | | | | | |
| GERMANY | DE -504 | GREIFSWALD-3 | 1990-2 | 1,3,6,7 | ID | 3,9 | 7 | G 01 KGR | |
| | DE -505 | GREIFSWALD-4 | 1990-7 | 1,3,6,7 | ID | 3 | 3,7 | G 01 KGR | |
| | DE -506 | GREIFSWALD-5 | 1989-11 | 1,2,3,6,7 | ID | 1,3,9 | 3,7 | G 01 KGR | |
| | DE -6 | LINGEN | 1977-1 | 2,5,6 | Dd+PD+SE | 9 | | RWE AG | |
| | DE -7 | HDR GROSSWELZHEIM | 1971-4 | 5 | Other | | | KIT | |
| | DE -8 | KNK II | 1991-8 | 5 | Other | | | WAK | |
| | DE -9 | WUERGASSEN | 1994-8 | 2 | ID | 3,4,6,9,11 | | E.ON | 2014 |
| ITALY | IT -1 | LATINA | 1987-12 | 7,Others | ID | 3,9 | | SOGIN | 2040 |
| | IT -2 | GARIGLIANO | 1982-3 | 3,4,Others | ID | 3,4,9 | | SOGIN | 2021 |
| | IT -3 | ENRICO FERMI | 1990-7 | 7,Others | ID | 3,4,9,10 | 3,5,6 | SOGIN | 2024 |
| | IT -4 | CAORSO | 1990-7 | 7,Others | ID | 4,9 | | SOGIN | 2026 |
| JAPAN | JP -1 | JPDR | 1976-3 | Others | ID | 3 | | JAERI | 2002 |
| | JP -11 | HAMAOKA-1 | 2009-1 | 6 | Dd+SE | 1,6,7 | | CHUBU DL | 2037 |
| | JP -2 | TOKAI-1 | 1998-3 | 2 | Dd+PD+SE | 3,4,6,7,9 | | JAPCO | 2025 |
| | JP -20 | FUGEN ATR | 2003-3 | 2 | Dd+SE | 1,5 | 2,5 | JAEA | 2034 |
| | JP -24 | HAMAOKA-2 | 2009-1 | 6 | Dd+SE | 1,6,7 | 2 | CHUBU DL | 2037 |
| KAZAKHSTAN | KZ -10 | AKTAU | 1999-4 | 2,5 | Dd+PD+SE | 1,6 | 4,7 | MAEC-KAZ | |
| LITHUANIA | LT -46 | IGNALINA-1 | 2004-12 | 7,Others | ID | 1,3,10 | 3 | INPP | 2038 |
| | LT -47 | IGNALINA-2 | 2009-12 | 7,Others | ID | 1,2,3 | 1 | INPP | 2038 |
| NETHERLANDS | NL -1 | DODEWAARD | 1997-3 | 2,Others | Dd+SE | 7 | | BV GKN | 2055 |
| RUSSIA | RU -3 | BELOYARSK-1 | 1983-1 | Others | Other | | | EA | |
| | RU -4 | NOVOVORONEZH-1 | 1988-2 | Others | Other | | | EA | |
| | RU -6 | BELOYARSK-2 | 1990-1 | Others | Other | | | EA | |
| | RU -8 | NOVOVORONEZH-2 | 1990-8 | Others | Other | | | EA | |
| SLOVAKIA | SK -1 | BOHUNICE A1 | 1977-2 | 4 | Dd+PD+SE | 3,6 | | JAVYS | |
| | SK -2 | BOHUNICE-1 | 2006-12 | 7 | ID | 3,4,9 | | JAVYS | |
| | SK -3 | BOHUNICE-2 | 2008-12 | 7 | ID | 3,4,9 | | JAVYS | |
| SPAIN | ES -1 | JOSE CABRERA-1 | 2006-4 | Others | ID | 3,4,9 | 3,7 | UFG | 2015 |
| | ES -3 | VANDELLOS-1 | 1990-7 | 4 | Dd+PD+SE | 8 | | ENRESA | 2032 |
| SWEDEN | SE -1 | AGESTA | 1974-6 | 2,3 | Dd+SE | 7 | | BKAB | |
| | SE -6 | BARSEBACK-1 | 1999-11 | Others | Other | | 4 | BKAB | 2027 |
| | SE -8 | BARSEBACK-2 | 2005-5 | Others | Other | | 4 | BKAB | 2027 |

## TABLE 17. REACTORS IN DECOMMISSIONING PROCESS OR DECOMMISSIONED, 31 Dec. 2014 — continued

| Country | Reactor | | Shut down | Shutdown reason | Decom. strategy | Current decom. phase | Current fuel managemt | Decom. licensee | License terminated |
|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | | | | | |
| SWITZERLAND | CH -8 | LUCENS | 1969-1 | 4 | Dd+SE | 1 | | EOS | 2004 |
| UK | GB -10A | SIZEWELL A-1 | 2006-12 | 2,8 | Dd+SE | 3,5,6 | | Magnox S | 2110 |
| | GB -10B | SIZEWELL A-2 | 2006-12 | 2,8 | Dd+SE | 3,5,6 | | Magnox S | 2110 |
| | GB -12 | WINFRITH SGHWR | 1990-9 | Others | ID | 3,4,9,10 | | UKAEA | 2019 |
| | GB -14 | DOUNREAY DFR | 1977-3 | Others | Dd+PD+SE | 5 | | DSR | 2333 |
| | GB -15 | DOUNREAY PFR | 1994-3 | Others | Dd+PD+SE | 5 | | Magnox N | 2333 |
| | GB -1A | CALDER HALL-1 | 2003-3 | 2,8 | Dd+PD+SE | 8 | | SL | 2117 |
| | GB -1B | CALDER HALL-2 | 2003-3 | 2,8 | Dd+PD+SE | 8 | | SL | 2117 |
| | GB -1C | CALDER HALL-3 | 2003-3 | 2,8 | Dd+PD+SE | 8 | | SL | 2117 |
| | GB -1D | CALDER HALL-4 | 2003-3 | 2,8 | Dd+PD+SE | 8 | | SL | 2117 |
| | GB -2A | CHAPELCROSS-1 | 2004-6 | 2,8 | Dd+PD+SE | 3,5,6 | | Magnox N | 2128 |
| | GB -2B | CHAPELCROSS-2 | 2004-6 | 2,8 | Dd+PD+SE | 3,5,6 | | Magnox N | 2128 |
| | GB -2C | CHAPELCROSS-3 | 2004-6 | 2,8 | Dd+PD+SE | 3,5,6 | | Magnox N | 2128 |
| | GB -2D | CHAPELCROSS-4 | 2004-6 | 2,8 | Dd+PD+SE | 3,5,6 | | Magnox N | 2128 |
| | GB -3A | BERKELEY-1 | 1989-3 | 2,8 | Dd+SE | 8 | | Magnox S | 2083 |
| | GB -3B | BERKELEY-2 | 1988-10 | 2,8 | Dd+SE | 8 | | Magnox S | 2083 |
| | GB -4A | BRADWELL-1 | 2002-3 | 2,8 | Dd+SE | 3,5,6 | | Magnox S | 2104 |
| | GB -4B | BRADWELL-2 | 2002-3 | 2,8 | Dd+SE | 3,5,6 | | Magnox S | 2104 |
| | GB -5 | WINDSCALE AGR | 1981-4 | Others | Dd+PD+SE | 2,3,5,6 | | SL | 2065 |
| | GB -6A | HUNTERSTON A-1 | 1990-3 | 2,8 | Dd+PD+SE | 3,5,6 | | Magnox N | 2090 |
| | GB -6B | HUNTERSTON A-2 | 1989-12 | 2,8 | Dd+PD+SE | 3,5,6 | | Magnox N | 2090 |
| | GB -7A | HINKLEY POINT A-1 | 2000-5 | 2,8 | Dd+PD+SE | 3,5,6,8 | | Magnox S | 2104 |
| | GB -7B | HINKLEY POINT A-2 | 2000-5 | 2,8 | Dd+PD+SE | 3,5,6,8 | | Magnox S | 2104 |
| | GB -8A | TRAWSFYNYDD-1 | 1991-2 | 2,8 | Dd+PD+SE | 8 | | Magnox N | 2098 |
| | GB -8B | TRAWSFYNYDD-2 | 1991-2 | 2,8 | Dd+PD+SE | 8 | | Magnox N | 2098 |
| | GB -9A | DUNGENESS A-1 | 2006-12 | 2,8 | Dd+PD+SE | 3,5,6 | | Magnox S | 2111 |
| | GB -9B | DUNGENESS A-2 | 2006-12 | 2,8 | Dd+PD+SE | 3,5,6 | | Magnox S | 2111 |
| USA | US -001 | SHIPPINGPORT | 1982-10 | 3 | ID | | | DOE DUQU | 1989 |
| | US -011 | ELK RIVER | 1968-2 | 1,Others | ID | | | RCPA | 1974 |
| | US -012 | PIQUA | 1966-1 | 4,5 | ISD | 11 | | CofPiqua | |
| | US -013 | INDIAN POINT-1 | 1974-10 | 5 | Dd+PD+SE | | | ENTERGY | |
| | US -014 | BONUS | 1968-6 | 5,6 | ISD | | | DOE/PRWR | 1970 |

## TABLE 17. REACTORS IN DECOMMISSIONING PROCESS OR DECOMMISSIONED, 31 Dec. 2014 — continued

| Country | Reactor | | Shut down | Shutdown reason | Decom. strategy | Current decom. phase | Current fuel managemt | Decom. licensee | License terminated |
|---|---|---|---|---|---|---|---|---|---|
| | Code | Name | | | | | | | |
| USA | US -018 | GE VALLECITOS | 1963-12 | 1 | Dd+SE | | | GE&PGEC | |
| | US -077 | HALLAM | 1964-9 | 5 | Dd+SE | | | AEC&NPPD | 1971 |
| | US -10 | DRESDEN-1 | 1978-10 | 6 | Dd+SE | 11 | 7 | EXELON | |
| | US -130 | PATHFINDER | 1967-10 | 5 | Dd+SE | 11 | | NMC | |
| | US -133 | HUMBOLDT BAY | 1976-7 | 5 | Dd+PD+SE | 3,4,6 | | PG&E | 2013 |
| | US -144 | CVTR | 1967-1 | 7,Others | Dd+SE | | | CVPA | 2009 |
| | US -146 | SAXTON | 1972-5 | Others | ID | | | GPUNC | 2005 |
| | US -155 | BIG ROCK POINT | 1997-8 | 2,Others | ID | | 7 | CPC | 2007 |
| | US -16 | FERMI-1 | 1972-11 | 4,5 | Dd+SE | 9,11 | | DTEDISON | 2025 |
| | US -171 | PEACH BOTTOM-1 | 1974-11 | 1 | Dd+SE | 1 | | EXELON | |
| | US -206 | SAN ONOFRE-1 | 1992-11 | Others | Dd+PD+SE | 4 | | SCE | 2008 |
| | US -213 | HADDAM NECK | 1996-12 | 6 | ID | 4,6 | | CYAPC | 2007 |
| | US -245 | MILLSTONE-1 | 1998-7 | 6 | Dd+PD+SE | | | DOMINRES | |
| | US -267 | FORT ST. VRAIN | 1989-8 | 1,Others | ID | | | PSCC | 1996 |
| | US -29 | YANKEE NPS | 1991-10 | 5,7 | ID | 4,6 | | YAEC | 2005 |
| | US -295 | ZION-1 | 1998-2 | 5,6 | Dd+PD+SE | 1,9 | | CommonEd | |
| | US -304 | ZION-2 | 1998-2 | 5,6 | Dd+PD+SE | 1,9 | | COMMED | |
| | US -305 | KEWAUNEE | 2013-5 | 2,6 | Dd+SE | | | DOMINRES | |
| | US -309 | MAINE YANKEE | 1997-8 | 6 | ID | 4 | 7 | MYAPC | 2005 |
| | US -312 | RANCHO SECO-1 | 1989-6 | 5,6 | Dd+PD+SE | | | SMUD | 2009 |
| | US -320 | THREE MILE ISLAND-2 | 1979-3 | 4,5 | Other | 9,11 | 4 | GPU | |
| | US -322 | SHOREHAM | 1989-5 | 7,Others | ID | | | LIPA | 1995 |
| | US -344 | TROJAN | 1992-11 | 6 | Dd+PD+SE | | | PORTGE | 2005 |
| | US -409 | LACROSSE | 1987-4 | 2 | Dd+PD+SE | | 7 | DPC | |

## TABLE 17. DEFINITIONS FOR REACTORS IN DECOMMISSIONING PROCESS OR DECOMMISSIONED

| Shutdown reason | Description |
|---|---|
| 1 | The technology or process became obsolete |
| 2 | The process was no longer profitable |
| 3 | Changes in licensing requirements |
| 4 | After an operating incident |
| 5 | Other technological reasons |
| 6 | Other economical reasons |
| 7 | Public acceptance or political reasons |
| 8 | After major component failure or deterioration |
| Other | None of the above |

| Decommissioning strategy | Description |
|---|---|
| ID | Immediate dismantling and removal of all radioactive materials |
| Dd+SE | Deferred dismantling, placing all radiological areas into safe enclosure |
| Dd+PD+SE | Deferred dismantling, including partial dismantling and placing remaining radiological areas into safe enclosure |
| ISD | In situ disposal, involving encapsulation of radioactive materials and subsequent restriction of access |
| Other | None of the above |

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

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

## TABLE 18. PERFORMANCE FACTORS BY REACTOR CATEGORY, 2012 to 2014

| Reactor category | Reactors reporting to IAEA PRIS (see note) | | | | | | |
|---|---|---|---|---|---|---|---|
| | Number of units | Availability factor (%) | Planned cap. loss factor (%) | Capability factor (%) | Forced loss rate (%) | Operating factor (%) | Load factor (%) |
| PWR | 279 | 77.0 | 18.2 | 77.8 | 2.6 | 77.0 | 75.9 |
| PWR < 600 MWe | 47 | 69.1 | 27.6 | 69.6 | 1.5 | 71.1 | 67.4 |
| PWR ≥ 600 MWe | 232 | 77.7 | 17.3 | 78.6 | 2.6 | 78.2 | 76.7 |
| BWR | 83 | 60.9 | 36.9 | 61.1 | 2.5 | 61.3 | 60.6 |
| BWR < 600 MWe | 9 | 33.8 | 58.0 | 33.9 | 14.3 | 39.9 | 33.0 |
| BWR ≥ 600 MWe | 74 | 62.2 | 35.9 | 62.4 | 2.2 | 64.0 | 61.9 |
| PHWR | 49 | 83.4 | 9.7 | 85.3 | 4.3 | 83.3 | 80.2 |
| PHWR < 600 MWe | 26 | 77.2 | 9.9 | 82.5 | 6.8 | 83.1 | 76.9 |
| PHWR ≥ 600 MWe | 23 | 86.3 | 9.6 | 86.7 | 3.1 | 83.5 | 81.7 |
| LWGR | 15 | 73.1 | 24.3 | 73.4 | 2.6 | 76.4 | 74.2 |
| LWGR < 600 MWe | 4 | 83.2 | 16.5 | 83.2 | 0.3 | 76.6 | 41.0 |
| LWGR ≥ 600 MWe | 11 | 73.1 | 24.3 | 73.4 | 2.6 | 76.3 | 74.3 |
| GCR | 17 | 73.9 | 11.9 | 74.1 | 10.5 | 79.8 | 74.2 |
| FBR | 1 | 80.1 | 16.8 | 80.1 | 3.2 | 84.0 | 81.7 |
| TOTAL | 444 | 73.9 | 21.6 | 74.6 | 2.9 | 74.8 | 72.9 |

Note: Reactors permanently shut down during 2012 to 2014 (22 units) are considered.

## TABLE 19. FULL OUTAGE STATISTICS DURING 2014

| Reactor type | Number of operating reactors | Full outage hours per operating reactor | Planned outages (%) | Unplanned outages (%) | External outages (%) |
|---|---|---|---|---|---|
| PWR | 275 | 1905 | 86.1 | 11.3 | 2.6 |
| PWR < 600 MWe | 46 | 2259 | 94.6 | 4.0 | 1.4 |
| PWR ≥ 600 MWe | 229 | 1833 | 84.0 | 13.1 | 2.9 |
| BWR | 81 | 3208 | 97.1 | 2.9 | 0.0 |
| BWR < 600 MWe | 9 | 4456 | 95.7 | 4.3 | 0.0 |
| BWR ≥ 600 MWe | 72 | 3052 | 97.3 | 2.7 | 0.0 |
| PHWR | 48 | 1532 | 56.3 | 22.9 | 20.8 |
| PHWR < 600 MWe | 26 | 1555 | 68.3 | 30.3 | 1.4 |
| PHWR ≥ 600 MWe | 22 | 1505 | 41.7 | 14.0 | 44.3 |
| LWGR | 15 | 1581 | 90.3 | 5.3 | 4.4 |
| LWGR < 600 MWe | 4 | 1941 | 82.4 | 4.1 | 13.5 |
| LWGR ≥ 600 MWe | 11 | 1449 | 94.2 | 5.8 | 0.0 |
| GCR | 15 | 2245 | 47.7 | 51.7 | 0.6 |
| FBR | 1 | 1321 | 100.0 | 0.0 | 0.0 |
| TOTAL | 435 | 2105 | 85.6 | 11.2 | 3.2 |

Notes:

1. Only reactors in commercial operation are considered.
2. Reactors shut down during 2014 (1 unit) are considered.

## TABLE 20. DIRECT CAUSES OF FULL OUTAGES DURING 2014

| Direct cause | Planned full outages | | | | Unplanned full outages | | | |
|---|---|---|---|---|---|---|---|---|
| | Energy lost | | Time lost | | Energy lost | | Time lost | |
| | GW·h | % | Hours | % | GW·h | % | Hours | % |
| Plant equipment problem/failure | | | | | 53913 | 97.47 | 68612 | 97.69 |
| Refuellling without a maintenance | 29663 | 4.20 | 28517 | 3.49 | | | | |
| Inspection, maintenance or repair combined with refuelling | 271677 | 38.48 | 308397 | 37.76 | | | | |
| Inspection, maintenance or repair without refuelling | 24097 | 3.41 | 37592 | 4.60 | | | | |
| Testing of plant systems or components | 681 | 0.10 | 750 | 0.09 | 14 | 0.03 | 81 | 0.12 |
| Major back-fitting, refurbishment or upgrading activities with refuelling | 36363 | 5.15 | 43800 | 5.36 | | | | |
| Major back-fitting, refurbishment or upgrading activities without refuelling | 342662 | 48.53 | 388340 | 47.54 | | | | |
| Nuclear regulatory requirements | 135 | 0.02 | 673 | 0.08 | | | | |
| Human factor related | | | | | 937 | 1.69 | 997 | 1.42 |
| Fire | | | | | 449 | 0.81 | 545 | 0.78 |
| Other | 788 | 0.11 | 8760 | 1.07 | | | | |
| TOTAL | 706066 | 100.00 | 816829 | 100.00 | 55313 | 100.00 | 70235 | 100.00 |

Note: Only reactors which have achieved full commercial operation in or before 2014 are counted.

## TABLE 21. DIRECT CAUSES OF FULL OUTAGES, 2010 TO 2014

| Direct outage cause | Planned full outages | | | | Unplanned full outages | | | |
|---|---|---|---|---|---|---|---|---|
| | Energy lost | | Time lost | | Energy lost | | Time lost | |
| | GW(e).h | % | Hours | % | GW(e).h | % | Hours | % |
| Plant equipment problem/failure | | | | | 303616 | 89.99 | 371770 | 89.10 |
| Refuellling without a maintenance | 146513 | 4.50 | 151878 | 3.98 | | | | |
| Inspection, maintenance or repair combined with refuelling | 1528605 | 46.96 | 1726819 | 45.25 | | | | |
| Inspection, maintenance or repair without refuelling | 157309 | 4.83 | 248705 | 6.52 | | | | |
| Testing of plant systems or components | 9204 | 0.28 | 18925 | 0.50 | 797 | 0.24 | 1431 | 0.34 |
| Major back-fitting, refurbishment or upgrading activities with refuelling | 185029 | 5.68 | 251314 | 6.58 | | | | |
| Major back-fitting, refurbishment or upgrading activities without refuelling | 1221662 | 37.53 | 1368658 | 35.86 | | | | |
| Nuclear regulatory requirements | 317 | 0.01 | 1593 | 0.04 | 21847 | 6.47 | 27941 | 6.70 |
| Human factor related | | | | | 4886 | 1.45 | 7251 | 1.74 |
| Fire | | | | | 3029 | 0.90 | 4426 | 1.06 |
| Fuel management limitation (including high flux tilt, stretch out or coast-down operation) | 2264 | 0.07 | 4749 | 0.12 | 1911 | 0.57 | 1677 | 0.40 |
| Other | 3946 | 0.12 | 43826 | 1.15 | 1315 | 0.39 | 2772 | 0.66 |
| TOTAL | 3254849 | 100.00 | 3816467 | 100.00 | 337401 | 100.00 | 417268 | 100.00 |

Note: Only reactors which have achieved full commercial operation in or before 2014 are counted.

## TABLE 22. COUNTRIES: ABBREVIATIONS AND SUMMARY

| Country code | Full name | Number of reactors, as of 31 Dec. 2014 | | | | |
|---|---|---|---|---|---|---|
| | | Operational | Construction | LT shut down | Shut down | Planned |
| AR | ARGENTINA | 3 | 1 | | | |
| AM | ARMENIA | 1 | | | 1 | |
| BY | BELARUS | | 2 | | | |
| BE | BELGIUM | 7 | | | 1 | |
| BR | BRAZIL | 2 | 1 | | | |
| BG | BULGARIA | 2 | | | 4 | |
| CA | CANADA | 19 | | | 6 | |
| CN | CHINA | 23 | 26 | | | 39 |
| CZ | CZECH REPUBLIC | 6 | | | | |
| FI | FINLAND | 4 | 1 | | | |
| FR | FRANCE | 58 | 1 | | 12 | |
| DE | GERMANY | 9 | | | 27 | |
| HU | HUNGARY | 4 | | | | |
| IN | INDIA | 21 | 6 | | | 4 |
| IR | IRAN, ISLAMIC REPUBLIC OF | 1 | | | | 3 |
| IT | ITALY | | | | 4 | |
| JP | JAPAN | 48 | 2 | 1 | 11 | 9 |
| KZ | KAZAKHSTAN | | | | 1 | |
| KR | KOREA, REPUBLIC OF | 23 | 5 | | | |
| LT | LITHUANIA | | | | 2 | |
| MX | MEXICO | 2 | | | | |
| NL | NETHERLANDS | 1 | | | 1 | |
| PK | PAKISTAN | 3 | 2 | | | |
| RO | ROMANIA | 2 | | | | |
| RU | RUSSIA | 34 | 9 | | 5 | 22 |
| SK | SLOVAKIA | 4 | 2 | | 3 | |
| SI | SLOVENIA | 1 | | | | |
| ZA | SOUTH AFRICA | 2 | | | | |
| ES | SPAIN | 7 | | 1 | 2 | |
| SE | SWEDEN | 10 | | | 3 | |

## TABLE 22. COUNTRIES: ABBREVIATIONS AND SUMMARY — continued

| Country code | Full name | Number of reactors, as of 31 Dec. 2014 | | | | |
|---|---|---|---|---|---|---|
| | | Operational | Construction | LT shut down | Shut down | Planned |
| CH | SWITZERLAND | 5 | | | 1 | |
| UA | UKRAINE | 15 | 2 | | 4 | |
| AE | UNITED ARAB EMIRATES | | 3 | | | 1 |
| GB | UNITED KINGDOM | 16 | | | 29 | |
| US | UNITED STATES OF AMERICA | 99 | 5 | | 33 | 16 |
| VN | VIET NAM | | | | | 2 |
| TOTAL | | 438 | 70 | 2 | 150 | 96 |

Note: The total includes the following data from Taiwan, China:
— 6 units in operation; 2 units under construction.

## TABLE 23. REACTOR TYPES: ABBREVIATIONS AND SUMMARY

| Type code | Full name | Number of reactors, as of 31 Dec. 2014 | | | | |
|---|---|---|---|---|---|---|
| | | Operational | Construction | LT shut down | Shut down | Planned |
| BWR | Boiling Light-Water-Cooled and Moderated Reactor | 80 | 4 | 1 | 34 | 9 |
| FBR | Fast Breeder Reactor | 2 | 2 | 1 | 7 | 5 |
| GCR | Gas-Cooled, Graphite-Moderated Reactor | 15 | | | 37 | |
| HTGR | High-Temperature Gas-Cooled Reactor | | 1 | | 4 | |
| HWGCR | Heavy-Water-Moderated, Gas-Cooled Reactor | | | | 4 | |
| HWLWR | Heavy-Water-Moderated, Boiling Light-Water-Cooled Reactor | | | | 2 | |
| LWGR | Light-Water-Cooled, Graphite-Moderated Reactor | 15 | | | 9 | |
| PHWR | Pressurized Heavy-Water-Moderated and Cooled Reactor | 49 | 4 | | 8 | 2 |
| PWR | Pressurized Light-Water-Moderated and Cooled Reactor | 277 | 59 | | 42 | 80 |
| SGHWR | Steam-Generating Heavy-Water Reactor | | | | 1 | |
| X | Other | | | | 2 | |
| TOTAL | | 438 | 70 | 2 | 150 | 96 |

## TABLE 24. OPERATORS: ABBREVIATIONS AND SUMMARY

| Operator code | Full name | Number of reactors, as of 31 Dec. 2014 | | | | |
|---|---|---|---|---|---|---|
| | | Operational | Construction | LT shut down | Shut down | Planned |
| AEC/NPPD | ATOMIC ENERGY COMMISSION AND NEBRASKA PUBLIC POWER DISTRICT | | | | 1 | |
| AEP | AMERICAN ELECTRIC POWER COMPANY, INC. | 2 | | | | |
| AmerenUE | AMEREN UE, UNION ELECTRIC COMPANY | 1 | | | | |
| ANAV | ASOCIACION NUCLEAR ASCO-VANDELLOS A.I.E. (ENDESA/ID) | 3 | | | | |
| ANPPCJSC | CLOSED JOINT STOCK COMPANY ARMENIAN NPP | 1 | | | 1 | |
| APS | ARIZONA PUBLIC SERVICE CO. | 3 | | | | |
| AVR | ARBEITSGEMEINSCHAFT VERSUCHSREAKTOR GMBH | | | | 1 | |
| Axpo AG | KERNKRAFTWERK BEZNAUCH-5312 DÖTTINGEN | 2 | | | | |
| BelNPP | REPUBLICAN UNITARY ENTERPRISE BELARUSIAN NUCLEAR POWER PLANT | | 2 | | | |
| BHAVINI | BHARATIYA NABHIKIYA VIDYUT NIGAM LIMITED | | 1 | | | |
| BKAB | BARSEBÄCK KRAFT AB | | | | 3 | |
| BKW | BKW ENERGIE AG | 1 | | | | |
| BRUCEPOW | BRUCE POWER | 8 | | | | |
| BV GKN | BV GEMEENSCHAPPELIJKE KERNENERGIECENTRALE NEDERLAND (BV GKN) | | | | 1 | |
| CEA/EDF | COMMISSARIAT À L'ENERGIE ATOMIQUE (80%)ELECTRICITÉ DE FRANCE (20%) | | | | 1 | |
| CEN/SCK | CENTRE D'ETUDE DE L'ENERGIE NUCLEAIRE / STUDIECENTRUM VOOR KERNENERGIE | | | | 1 | |
| CEZ | CZECH POWER CO., CEZ A.S. | 6 | | | | |
| CFE | COMISION FEDERAL DE ELECTRICIDAD | 2 | | | | |
| CHUBU | CHUBU ELECTRIC POWER CO.,INC | 3 | | | 2 | 1 |
| CHUGOKU | THE CHUGOKU ELECTRIC POWER CO.,INC. | 2 | 1 | | | 2 |
| CIAE | CHINA INSTITUTE OF ATOMIC ENERGY | 1 | | | | |
| CNAT | CENTRALES NUCLEARES ALMARAZ-TRILLO(ID/UFG/ENDESA/HC/NUCLENOR ) | 3 | | | | |
| CNEA | COMISION NACIONAL DE ENERGIA ATOMICA | | 1 | | | |
| CNNO | CNNC NUCLEAR OPERARION MANAGEMENT COMPANY LIMITED. | 1 | | | | |
| CofPiqua | CITY OF PIQUA GOVERNMENT | | | | 1 | |
| COGEMA | COMPAGNIE GENERALE DES MATIERES NUCLEAIRES | | | | 2 | |
| CPC | CONSUMERS POWER CO. | | | | 1 | |
| CVPA | CAROLINAS-VIRGINIA NUCLEAR POWER ASSOC. | | | | 1 | |
| CYAPC | CONNECTICUT YANKEE ATOMIC POWER CO. | | | | 1 | |

## TABLE 24. OPERATORS: ABBREVIATIONS AND SUMMARY — continued

| Operator code | Full name | Number of reactors, as of 31 Dec. 2014 | | | | |
|---|---|---|---|---|---|---|
| | | Operational | Construction | LT shut down | Shut down | Planned |
| DNMC | DAYA BAY NUCLEAR POWER OPERATIONS AND MANAGEMENT CO,LTD. | 6 | | | | |
| DOE DUQU | DEPARTMENT OF ENERGY AND DUQUESNE LIGHT CO. | | | | 1 | |
| DOE/PRWR | DOE & PUERTO RICO WATER RESOURCES | | | | 1 | |
| DOMINION | DOMINION GENERATION | 6 | | | 2 | |
| DPC | DAIRYLAND POWER COOPERATIVE | | | | 1 | |
| DTEDISON | DETROIT EDISON CO. | 1 | | | 1 | |
| DUKEENER | DUKE ENERGY CORP. | 7 | | | | |
| E.ON | E.ON KERNKRAFT GMBH | 3 | | | 3 | |
| EDF | ELECTRICITE DE FRANCE | 58 | 1 | | 8 | |
| EDF UK | EDF ENERGY | 15 | | | | |
| ELECTRAB | ELECTRABEL | 7 | | | | |
| ELETRONU | ELETROBRAS ELETRONUCLEAR S.A. | 2 | 1 | | | |
| EnBW | ENBW KRAFTWERKE AG | | | | 1 | |
| ENEC | EMIRATES NUCLEAR ENERGY CORPORATION | | 3 | | | 1 |
| ENERGYNW | ENERGY NORTHWEST | 1 | | | | |
| EnKK | ENBW KERNKRAFT GMBH(SITZ IN OBRIGHEIM) | 2 | | | 2 | |
| ENTERGY | ENTERGY NUCLEAR OPERATIONS, INC. | 11 | | | 2 | |
| EOS | ENERGIE DE L'OUEST SUISSE | | | | 1 | |
| EPDC | ELECTRIC POWER DEVELOPMENT CO.,LTD. | | 1 | | | |
| EPZ | N.V. ELEKTRICITEITS-PRODUKTIEMAATSCHAPPIJ ZUID-NEDERLAND | 1 | | | | |
| ESKOM | ESKOM | 2 | | | | |
| EVN | VIETNAM ELECTRICITY | | | | | 2 |
| EWN | ENERGIEWERKE NORD GMBH | | | | 6 | |
| EXELON | EXELON GENERATION CO., LLC | 22 | | | 4 | |
| FENOC | FIRST ENERGY NUCLEAR OPERATING CO. | 4 | | | | |
| FKA | FORSMARK KRAFTGRUPP AB | 3 | | | | |
| FORTUMPH | FORTUM POWER AND HEAT OY (FORMER IVO) | 2 | | | | |
| FPL | FLORIDA POWER & LIGHT CO. | 4 | | | | |
| FQNP | CNNC FUJIAN FUQING NUCLEAR POWER CO.,LTD | 1 | 3 | | | 2 |
| FSNPC | FUJIAN SANMING NUCLEAR POWER CO.,LTD. | | | | | 2 |
| GE | GENERAL ELECTRIC | | | | 1 | |

## TABLE 24. OPERATORS: ABBREVIATIONS AND SUMMARY — continued

| Operator code | Full name | Number of reactors, as of 31 Dec. 2014 | | | | |
|---|---|---|---|---|---|---|
| | | Operational | Construction | LT shut down | Shut down | Planned |
| GFNPC | GUANGXI FANGCHENGGANG NUCLEAR POWER COMPANY LTD | | 2 | | | |
| GPU | GENERAL PUBLIC UTILITIES(OWNED BY FIRSTENERGY CORP.) | | | | 1 | |
| HDR | HEISSDAMPFREAKTOR-BETRIEBSGESELLSCHAFT MBH. | | | | 1 | |
| HEPCO | HOKKAIDO ELECTRIC POWER CO.,INC. | 3 | | | | |
| HIFRENSA | HISPANO-FRANCESA DE ENERGIA NUCLEAR, S.A. | | | | 1 | |
| HKG | HOCHTEMPERATUR-KERNKRAFTWERK GMBH | | | | 1 | |
| HNPC | HAINAN NUCLEAR POWER COMPANY | | 2 | | | |
| HOKURIKU | HOKURIKU ELECTRIC POWER CO. | 2 | | | | |
| HONGYANH | HONGYANHE NUCLEAR POWER COMPANY | | | | | 1 |
| HQ | HYDRO QUEBEC | | | | 2 | |
| HSNPC | HUANENG SHANDONG SHIDAO BAY NUCLEAR POWER COMPANY,LTD. | | 1 | | | |
| ID | IBERDROLA, S.A. | 1 | | | | |
| INPP | IGNALINA NUCLEAR POWER PLANT | | | | 2 | |
| JAEA | JAPAN ATOMIC ENERGY AGENCY | | | 1 | 2 | |
| JAPCO | JAPAN ATOMIC POWER CO. | 3 | | | 1 | 2 |
| JAVYS | JADROVA A VYRADOVACIA SPOLOCNOST/NUCLEAR AND DECOMMISSIONING COMPANY, PLC./ | | | | 3 | |
| JNPC | JIANGSU NUCLEAR POWER CORPORATION | 2 | 2 | | | 2 |
| KBG | KERNKRAFTWERK-BETRIEBSGESELLSCHAFT MBH | | | | 2 | |
| KEPCO | KANSAI ELECTRIC POWER CO. | 11 | | | | |
| KGB | KERNKRAFTWERKE GUNDREMMINGEN BETRIEBSGESELLSCHAFT MBH | | | | 1 | |
| KGG | KERNKRAFTWERK GUNDREMMINGEN GMBH | 2 | | | 1 | |
| KHNP | KOREA HYDRO AND NUCLEAR POWER CO. | 23 | 5 | | | |
| KKB | KERNKRAFTWERK BRUNSBÜTTEL GMBH | | | | 1 | |
| KKG | KERNKRAFTWERK GOESGEN-DAENIKEN AG | 1 | | | | |
| KKK | KERNKRAFTWERK KRÜMMEL GMBH & CO. OHG | | | | 1 | |
| KKL | KERNKRAFTWERK LEIBSTADT | 1 | | | | |
| KKN | KERNKRAFTWERK NIEDERAICHBACH GMBH | | | | 1 | |
| KLE | KERNKRAFTWERKE LIPPE-EMS GMBH | 1 | | | | |
| KOZNPP | KOZLODUY NPP PLC | 2 | | | 4 | |
| KWG | GEMEINSCHAFTSKERNKRAFTWERK GROHNDE GMBH & CO. OHG | 1 | | | | |
| KWL | KERNKRAFTWERK LINGEN GMBH | | | | 1 | |

## TABLE 24. OPERATORS: ABBREVIATIONS AND SUMMARY — continued

| Operator code | Full name | Number of reactors, as of 31 Dec. 2014 | | | | |
|---|---|---|---|---|---|---|
| | | Operational | Construction | LT shut down | Shut down | Planned |
| KYUSHU | KYUSHU ELECTRIC POWER CO.,INC. | 6 | | | | 1 |
| LFNPC | CGN LUFENG NUCLEAR POWER CO.LTD | | | | | 2 |
| LHNPC | LIAONING HONGYANHE NUCLEAR POWER CO. LTD. (LHNPC) | 2 | 2 | | | 2 |
| LIPA | LONG ISLAND POWER AUTHORITY | | | | 1 | |
| LNPC | LIAONIN NUCLEAR POWER COMPANY,LMT. | | | | | 2 |
| LUMINANT | LUMINANT GENERATION COMPANY LLC | 2 | | | | |
| MAEC-KAZ | MANGISHLAK ATOMIC ENERGY COMPLEX-KAZATOMPROM,LIMITED LIABILITY COMPANY | | | | 1 | |
| ML | MAGNOX LIMITED | 1 | | | 21 | |
| MSM | MINISTRY OF MEDIUM MACHINE BUILDING OF THE USSR (MINSREDMASH) | | | | 1 | |
| MTE | MINTOPENERGO OF UKRAINE - MINISTRY OF FUEL AND ENERGY OF UKRAINE | | | | 4 | |
| MYAPC | MAINE YANKEE ATOMIC POWER CO. | | | | 1 | |
| NASA | NUCLEOELECTRICA ARGENTINA S.A. | 3 | | | | |
| NBEPC | NEW BRUNSWICK ELECTRIC POWER COMMISSION | 1 | | | | |
| NDNP | FUJIAN NINGDE NUCLEAR POWER COMPANY LTD. | 2 | 2 | | | |
| NEK | NUKLERANA ELEKTRARNA KRŠKO | 1 | | | | |
| NEXTERA | NEXTERA ENERGY RESOURCES, LLC | 4 | | | | |
| NMC | NUCLEAR MANAGEMENT CO. | | | | 1 | |
| NNEGC | STATE ENTERPRISE "NATIONAL NUCLEAR ENERGY GENERATING COMPANY 'ENERGOATOM" | 15 | 2 | | | |
| NPCIL | NUCLEAR POWER CORPORATION OF INDIA LTD. | 21 | 5 | | | 4 |
| NPPDCO | NUCLEAR POWER PRODUCTION & DEVELOPEMENT CO. OF IRAN | 1 | | | | 3 |
| NPQJVC | NUCLEAR POWER PLANT QINSHAN JOINT VENTURE COMPANY LTD. | 4 | | | | |
| NSP | NORTHERN STATES POWER CO.(SUBSIDIARY OF XCEL ENERGY) | 3 | | | | |
| NUCLENOR | NUCLENOR, S.A. | | | 1 | | |
| OH | ONTARIO HYDRO | | | | 2 | |
| OKG | OKG AKTIEBOLAG | 3 | | | | |
| OPG | ONTARIO POWER GENERATION | 10 | | | 2 | |
| OPPD | OMAHA PUBLIC POWER DISTRICT | 1 | | | | |
| PAEC | PAKISTAN ATOMIC ENERGY COMMISSION | 3 | 2 | | | |
| PAKS Zrt | PAKS NUCLEAR POWER PLANT LTD | 4 | | | | |
| PE | PREUSSENELEKTRA KERNKRAFT GMBH&CO KG | | | | 1 | |
| PG&E | PACIFIC GAS AND ELECTRIC COMPANY | 2 | | | 1 | |

## TABLE 24. OPERATORS: ABBREVIATIONS AND SUMMARY — continued

| Operator code | Full name | Number of reactors, as of 31 Dec. 2014 | | | | |
|---|---|---|---|---|---|---|
| | | Operational | Construction | LT shut down | Shut down | Planned |
| PORTGE | PORTLAND GENERAL ELECTRIC CO. | | | | 1 | |
| PPL_SUSQ | PPL SUSQUEHANNA, LLC | 2 | | | | |
| PROGRESS | PROGRESS ENERGY | 4 | | | 1 | 1 |
| PSCC | PUBLIC SERVICE CO. OF COLORADO | | | | 1 | |
| PSEG | PSEG NUCLEAR LLC | 3 | | | | |
| QNPC | QINSHAN NUCLEAR POWER COMPANY | 1 | 1 | | | |
| RAB | RINGHALS AB | 4 | | | | |
| RCPA | RURAL COOPERATIVE POWER ASSOC. | | | | 1 | |
| REA | JOINT STOCK COMPANY 'CONCERN ROSENERGOATOM' | 34 | 9 | | 4 | 22 |
| RWE | RWE POWER AG | | | | 2 | |
| SCE | SOUTHERN CALIFORNIA EDISON CO. | | | | 3 | |
| SCE&G | SOUTH CAROLINA ELECTRIC & GAS CO. | 1 | 2 | | | |
| SDNPC | SHANDONG NUCLEAR POWER COMPANY LTD | | 2 | | | 2 |
| SE,plc | SLOVENSKÉ ELEKTRÁRNE, A.S. | 4 | 2 | | | |
| SENA | SOCIETE D'ENERGIE NUCLEAIRE FRANCO-BELGE DES ARDENNES | | | | 1 | |
| SHIKOKU | SHIKOKU ELECTRIC POWER CO.,INC | 3 | | | | |
| SL | SELLAFIELD LIMITED | | | | 4 | |
| SMNPC | SANMEN NUCLEAR POWER CO.,LTD. | | 2 | | | 2 |
| SMUD | SACRAMENTO MUNICIPAL UTILITY DISTRICT | | | | 1 | |
| SNEC | SAXTON NUCLEAR EXPIRAMENTAL REACTOR CORPORATION | | | | 1 | |
| SNN | SOCIETATEA NATIONALA NUCLEARELECTRICA S.A. | 2 | | | | |
| SNPDP | STATE NUCLEAR POWER DEMONSTRATION PLANT CO,LTD | | | | | 2 |
| SOGIN | SOCIETA GESTIONE IMPANTI NUCLEARI S.P.A. | | | | 4 | |
| SOUTHERN | SOUTHERN NUCLEAR OPERATING COMPANY, INC. | 6 | 2 | | | |
| STP | STP NUCLEAR OPERATING CO. | 2 | | | | |
| TEPCO | TOKYO ELECTRIC POWER COMPANY | 11 | | | 6 | 2 |
| TNPC | GUANGDONG TAISHAN NUCLEAR POWER JOINT VENTURE COMPANY LIMITED (TNPC) | | 2 | | | |
| TOHOKU | TOHOKU ELECTRIC POWER CO., INC | 4 | | | | 1 |
| TPC | TAIWAN POWER CO. | 6 | 2 | | | |
| TQNPC | THE THIRD QINSHAN JOINTED VENTURE COMPANY LTDA. | 2 | | | | |
| TVA | TENNESSEE VALLEY AUTHORITY | 6 | 1 | | | |

## TABLE 24. OPERATORS: ABBREVIATIONS AND SUMMARY — continued

| Operator code | Full name | Number of reactors, as of 31 Dec. 2014 | | | | |
|---|---|---|---|---|---|---|
| | | Operational | Construction | LT shut down | Shut down | Planned |
| TVO | TEOLLISUUDEN VOIMA OYJ | 2 | 1 | | | |
| UFG | UNION FENOSA GENERATION S.A. | | | | 1 | |
| UKAEA | UNITED KINGDOM ATOMIC ENERGY AUTHORITY | | | | 4 | |
| VAK | VERSUCHSATOMKRAFTWERK KAHL GMBH | | | | 1 | |
| WCNOC | WOLF CREEK NUCLEAR OPERATION CORP. | 1 | | | | |
| YAEC | YANKEE ATOMIC ELECTRIC CO. | | | | 1 | |
| YJNPC | YANGJIANG NUCLEAR POWER COMPANY | 1 | 5 | | | |
| not specified | | | | | | 35 |
| TOTAL | | 438 | 70 | 2 | 150 | 96 |

## TABLE 25. NSSS SUPPLIERS: ABBREVIATIONS AND SUMMARY

| NSSS supplier code | Full name of nuclear steam supply system supplier | Number of reactors, as of 31 Dec. 2014 | | | | |
|---|---|---|---|---|---|---|
| | | Operational | Construction | LT shut down | Shut down | Planned |
| A/F/W | ASSOCIATION ACEC,FRAMATOME ET WESTINGHOUSE. | | | | 1 | |
| ABBATOM | ABBATOM (FORMERLY ASEA-ATOM) | 7 | | | 2 | |
| AC | ALLIS CHALMERS | | | | 3 | |
| ACECOWEN | ACECOWEN ( ACEC-COCKERILL-WESTINGHOUSE ) | 4 | | | | |
| ACLF | (ACECOWEN - CREUSOT LOIRE - FRAMATOME) | 1 | | | | |
| AECL | ATOMIC ENERGY OF CANADA LTD. | 8 | | | 3 | |
| AECL/DAE | ATOMIC ENERGY OF CANADA LTDA AND DEPARTMENT OF ATOMIC ENERGY(INDIA) | 1 | | | | |
| AECL/DHI | ATOMIC ENERGY OF CANADA LTD./DOOSAN HEAVY INDUSTRY & CONSTRUCTION | 3 | | | | |
| AEE | ATOMENERGOEXPORT | 8 | | | 6 | |
| AEG | ALLGEMEINE ELEKTRICITAETS-GESELLSCHAFT | | | | 1 | |
| AEG,GE | ALLGEMEINE ELECTRICITAETS-GESELLSCHAFT, GENERAL ELECTRIC COMPANY (US) | | | | 1 | |
| AEG,KWU | ALLGEMEINE ELEKTRICITAETS GESELLSCHAFT, KRAFTWERK UNION AG | | | | 2 | |
| AMN/GETS | ANSALDO MECCANICO NUCLEARE SPA / GENERAL ELECTRIC TECHNICAL SERVICES CO | | | | 1 | |
| APC | ATOMIC POWER CONSTRUCTION LTD. | 2 | | | 2 | |
| AREVA | AREVA, 27-29, RUE LE PELETIER, 75433 PARIS CEDEX 09URL: WWW.AREVA.COM | | 4 | | | 1 |
| ASE | JOINT-STOCK COMPANY ATOMSTROYEXPORT | 1 | 4 | | | 1 |
| ASEASTAL | ASEA-ATOM / STAL-LAVAL | 2 | | | 1 | |
| ASPALDO | ASPALDO | | | | 1 | |
| AtEE | ATOMENERGOEXPORT | | | | 6 | |
| B&W | BABCOCK & WILCOX CO. | 6 | | | 4 | |
| BBK | BROWN BOVERI-KRUPP REAKTORBAU GMBH | | | | 1 | |
| BBR | BROWN BOVERI REAKTOR GMBH | | | | 1 | |
| CE | COMBUSTION ENGINEERING CO. | 12 | | | 3 | |
| CEA | COMMISSARIAT A L'ENERGIE ATOMIQUE | | | | 1 | |
| CFHI | CHINA FIRST HEAVY INDUSTRIES | 1 | 7 | | | |
| CGE | CANADIAN GENERAL ELECTRIC | 1 | | | 1 | |
| CNCLNEY | CNIM-CONSTRUCTIONS NAVALES ET INDUSTRIELLES DE MEDITERRANEE CL - CREUSOT LOI | | | | 1 | |
| CNEA | COMISIÓN NACIONAL DE ENERGÍA ATÓMICA | | 1 | | | |
| CNNC | CHINA NATIONAL NUCLEAR CORPORATION | 7 | 2 | | | |
| DEC | DONGFANG ELECTRIC CORPORATIONDEC-NPIC-FANP | 5 | 6 | | | 7 |

## TABLE 25. NSSS SUPPLIERS: ABBREVIATIONS AND SUMMARY — continued

| NSSS supplier code | Full name of nuclear steam supply system supplier | Number of reactors, as of 31 Dec. 2014 | | | | |
|---|---|---|---|---|---|---|
| | | Operational | Construction | LT shut down | Shut down | Planned |
| DHICKAEC | DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO.LTD./KOREA ATOMICENERGY RESEARCH I | 2 | | | | |
| DHICKOPC | DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO.LTD./KOREA POWER ENGINEERING COMPA | 9 | 5 | | | |
| EE/B&W/T | THE ENGLISH ELECTRIC CO. LTD / BABCOCK & WILCOX CO. / TAYLOR WOODROW CONSTRU | 1 | | | 5 | |
| EL/WEST | ELETTRONUCLEARE ITALIANA / WESTINGHOUSE ELECTRIC CORP. | | | | 1 | |
| FAEA | FEDERAL ATOMIC ENERGY AGENCY | 1 | | | 5 | |
| FRAM | FRAMATOME | 66 | | | 3 | |
| FRAMACEC | FRAMACECO ( FRAMATOME-ACEC-COCKERILL ) | 2 | | | | |
| GA | GENERAL ATOMIC CORP. | | | | 2 | |
| GAAA | GROUPEMENT ATOMIQUE ALSACIENNE ATLANTIQUE | | | | 1 | |
| GE | GENERAL ELECTRIC CO. | 45 | 2 | 1 | 12 | |
| GE,AEG | GENERAL ELECTRIC COMPANY (US), ALLGEMEINE ELEKTRICITAETS- GESELLSCHAFT | | | | 1 | |
| GE/GETSC | GENERAL ELECTRIC CO. / GENERAL ELECTRIC TECHNICAL SERVICES CO. | | | | 1 | |
| GE/T | GENERAL ELECTRIC CO. / TOSHIBA CORPORATION | | | | 2 | |
| GEC | GENERAL ELECTRIC COMPANY (UK) | | | | 3 | |
| GETSCO | GENERAL ELECTRIC TECHNICAL SERVICES CO. | 2 | | | | |
| GNEPRWRA | GENERAL NUCLEAR ENGINEERING & PUERTO RICO WATER RESOURCES AUTHORITY (US) | | | | 1 | |
| GTM | GRANDS TRAVAUX DE MARSEILLE | | | | 1 | |
| H/G | HITACHI GE NUCLEAR ENERGY, LTD. | | 1 | | | 1 |
| HITACHI | HITACHI LTD. | 9 | 1 | | 2 | |
| HRB | HOCHTEMPERATUR-REAKTORBAU GMBH | | | | 1 | |
| IA | INTERATOM INTERNATIONALE ATOMREAKTORBAU GMBH | | | | 1 | |
| ICL/FE | INTERNATIONAL COMBUSTION LTD. / FAIREY ENGINEERING LTD. | | | | 1 | |
| IZ | IZHORSKIYE ZAVODY | 3 | 2 | | | |
| KEPCO | KOREA ELECTRIC POWER CORPORATION | | 3 | | | 1 |
| KWU | SIEMENS KRAFTWERK UNION AG | 12 | 1 | | 9 | |
| LEVIVIER | LEVIVIER | | | | 2 | |
| MAEC-KAZ | MAEC-KAZATOMPROMMANGISHLAK ATOMIC ENERGY COMPLEX-KAZATOMPROM,LIMITED LIABILI | | | | 1 | |
| MAEP | MINATOMENERGOPROM, MINISTRY OF NUCLEAR POWER AND INDUSTRY | 1 | 1 | | 2 | |
| MHI | MITSUBISHI HEAVY INDUSTRIES LTD. | 20 | | | | 2 |
| MSM | MINISTRY OF MEDIUM MACHINE BUILDING OF THE USSR (MINSREDMASH) | | | | 5 | |
| NGA | NATIONALE GESELLSCHAFT ZUR FÖRDERUNG DER INDUSTRIELLEN ATOMTECHNIK | | | | 1 | |

## TABLE 25. NSSS SUPPLIERS: ABBREVIATIONS AND SUMMARY — continued

| NSSS supplier code | Full name of nuclear steam supply system supplier | Number of reactors, as of 31 Dec. 2014 | | | | |
|---|---|---|---|---|---|---|
| | | Operational | Construction | LT shut down | Shut down | Planned |
| NNC | NATIONAL NUCLEAR CORPORATION | 2 | | | | |
| NPC | NUCLEAR POWER CO. LTD. | 6 | | | | |
| NPCIL | NUCLEAR POWER CORPORATION OF INDIA LTD.VIKRAM SARABHAI BHAVAN, ANUSHAKTI NAG | 16 | 4 | | | |
| NPIC | NUCLEAR POWER INSTITUTE OF CHINA | 2 | 4 | | | 2 |
| OH/AECL | ONTARIO HYDRO / ATOMIC ENERGY OF CANADA LTD. | 18 | | | 2 | |
| PAA | PRODUCTION AMALGAMATION 'ATOMMASH', VOLGODONSK | 4 | | | | |
| PAIP | PRODUCTION AMALGAMATION IZHORSKY PLANT ATOMMASH,VOLGODONSK,RUSSIA | 11 | | | | |
| PPC | PWR POWER PROJECTS LTD | 1 | | | | |
| RDM | ROTTERDAMSE DROOGDOK MAATSCHAPPIJ (RDM) IN ROTTERDAM (NL) | | | | 1 | |
| ROSATOM | STATE ATOMIC ENERGY CORPORATION ROSATOM | 34 | 9 | | | 24 |
| S/KWU | SIEMENS/KRAFTWERK UNION AG | 1 | | | | |
| SACM | SOCIETE ALSACIENNE DE CONSTRUCTIONS MECANIQUES | | | | 2 | |
| SHE | SHANGHAI ELECTRIC | 1 | | | | |
| SIEM,KWU | SIEMENS AG, KRAFTWERK UNION AG | | | | 2 | |
| SIEMENS | SIEMENS AG, POWER GENERATION | 2 | | | 1 | |
| SKODA | SKODA CONCERN NUCLEAR POWER PLANT WORKS | 10 | 2 | | 1 | |
| T/H/F/M | TOSHIBA / HITACHI / FUJI ELECTRIC HOLDINGS / MITSUBISHI HEAVY INDUSTRIES | | | 1 | | |
| TBD | TBD | | | | | 1 |
| TNPG | THE NUCLEAR POWER GROUP LTD. | 4 | | | 10 | |
| TOSHIBA | TOSHIBA CORPORATION | 13 | | | 4 | |
| Tsinghua | TSINGHUA UNIVERSITY | | 1 | | | |
| UEC | UNITED ENGINEERS AND CONTRACTORS | | | | 1 | |
| UKAEA | UNITED KINGDOM ATOMIC ENERGY AUTHORITY | | | | 10 | |
| WH | WESTINGHOUSE ELECTRIC CORPORATION | 70 | 7 | | 11 | 4 |
| WH/MHI | WESTINGHOUSE ELECTRIC CORPORATION / MITSUBISHI HEAVY INDUSTRIES LTD. | 1 | 2 | | | 2 |
| not specified | | | 1 | | | 50 |
| TOTAL | | 438 | 70 | 2 | 150 | 96 |

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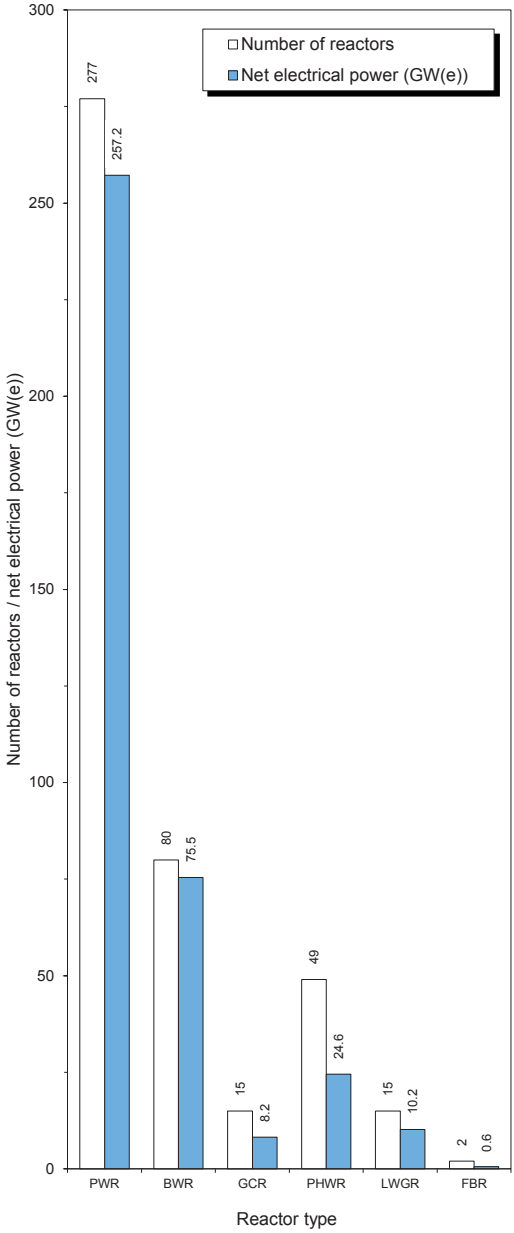


**Figure 1. Number of operational reactors by type and net electrical power (as of 31 Dec. 2014).**

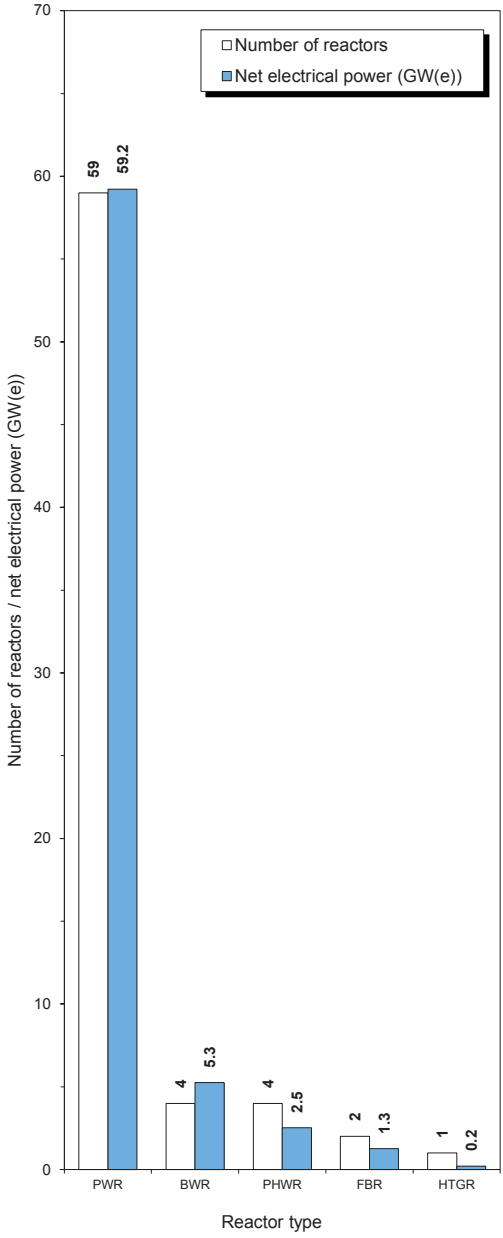


**Figure 2. Reactors under construction by type and net electrical power (as of 31 Dec. 2014).**

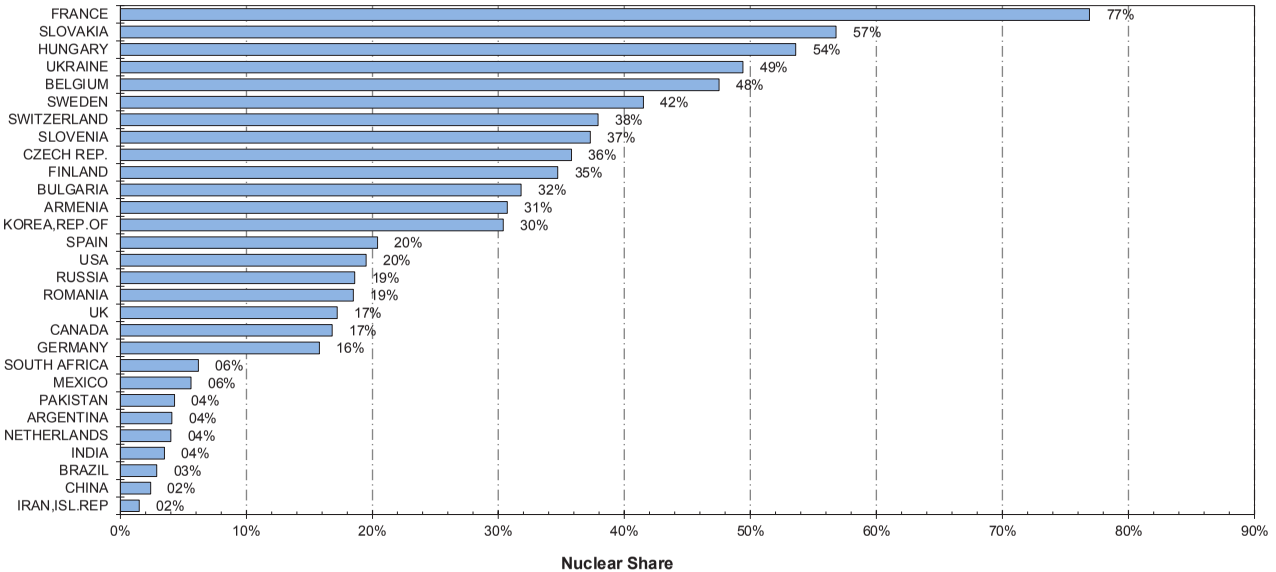


**Figure 3. Nuclear share of electricity generation (as of 31 Dec. 2014).**

Note: The nuclear share of electricity supplied in Taiwan, China was 18.9% of the total.

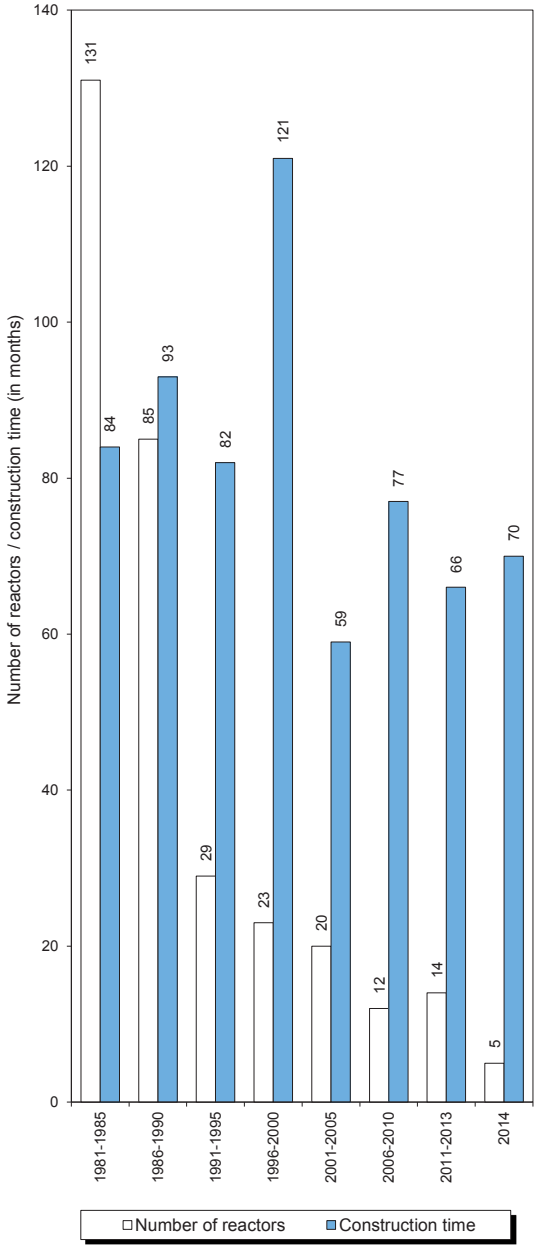


**Figure 4. Worldwide median construction time in months (as of 31 Dec. 2014).**

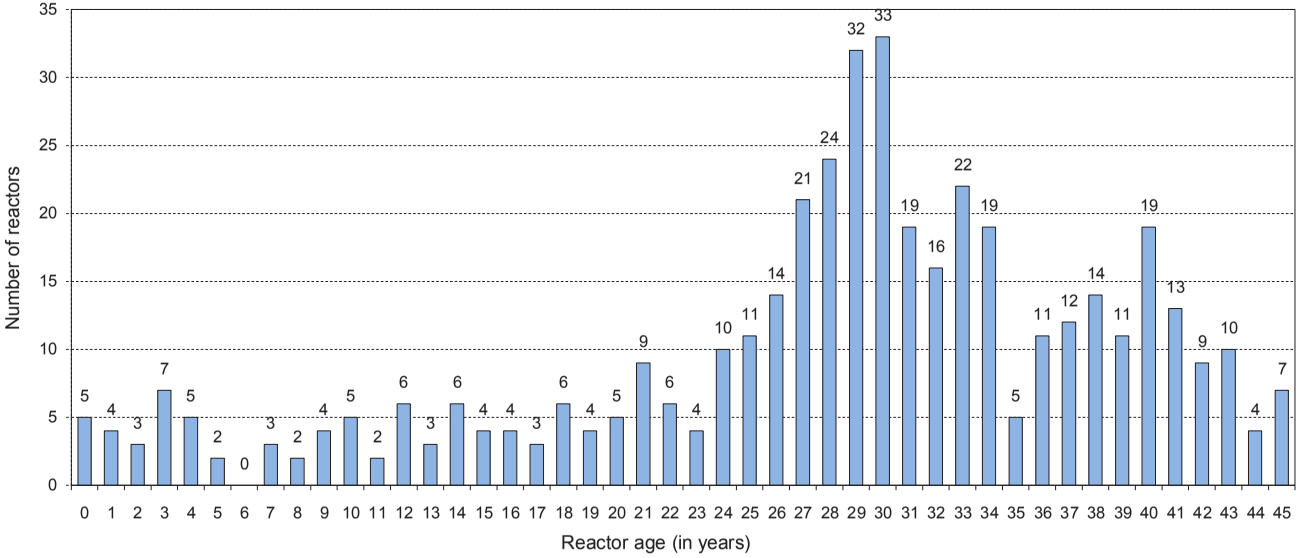


**Figure 5. Number of operational reactors by age (as of 31 Dec. 2014).**

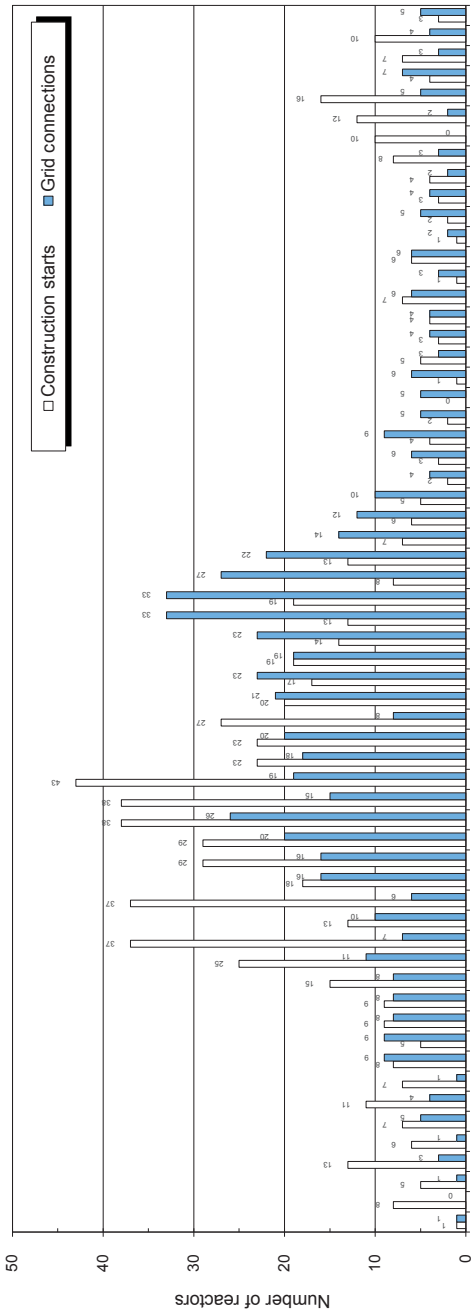


**Figure 6. Annual construction starts and connections to the grid (1954 to 2014).**

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