

EU op NPPs

Nuclear power stations in the EU – operating reactors

source: IAEA PRIS database – <http://www.iaea.org/pris>

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> 40 years
 35 – 40 years
 30 – 35 years

X less than 3 years from original technical design life-time
X older than original technical design life-time
X Within 3 years of a periodic safety review

country	power station	type reactor	reference unit power	starting date	age (years) as of today		fixed closure date	average per country age (years)		
BE	Doel 1	PWR	433	28/08/1974	44 years 10 months	X	2025	39	 	
	Doel 2	PWR	433	21/08/1975	43 years 10 months	X	2025			
	Doel 3	PWR	1006	23/06/1982	37 years 0 months		139			2022
	Doel 4	PWR	1038	08/04/1985	34 years 3 months					2025
	Tihange 1	PWR	962	07/03/1975	44 years 4 months	X	2025			
	Tihange 2	PWR	1008	13/10/1982	36 years 9 months					2022
	Tihange 3	PWR	1038	15/06/1985	34 years 0 months					2025
BG	Kozloduy 5	PWR	963	29/11/1987	31 years 7 months			29	 	
	Kozloduy 6	PWR	963	02/08/1991	27 years 11 months	X				
CZ	Dukovany 1	PWR	468	24/02/1985	34 years 4 months	X		28	 	
	Dukovany 2	PWR	471	30/01/1986	33 years 5 months	X				
	Dukovany 3	PWR	468	14/11/1986	32 years 7 months	X				
	Dukovany 4	PWR	471	11/06/1987	32 years 1 months	X				
	Temelín 1	PWR	1026	21/12/2000	18 years 6 months	X				
	Temelín 2	PWR	1026	29/12/2002	16 years 6 months					
FI	Loviisa 1	PWR	507	08/02/1977	42 years 5 months	X		40	 	
	Loviisa 2	PWR	502	04/11/1980	38 years 8 months	X				
	Olkiluoto 1	BWR	880	02/09/1978	40 years 10 months	X				
	Olkiluoto 2	BWR	880	18/02/1980	39 years 4 months	X				
FR	Belleville 1	PWR	1310	14/10/1987	31 years 9 months			34	 	
	Belleville 2	PWR	1310	06/07/1988	30 years 0 months	X				
	Blayais 1	PWR	910	12/06/1981	38 years 1 months	X				
	Blayais 2	PWR	910	17/07/1982	36 years 12 months					
	Blayais 3	PWR	910	17/08/1983	35 years 10 months					
	Blayais 4	PWR	910	16/05/1983	36 years 1 months					

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Bugey 2	PWR	910	10/05/1978	41 years 2 months	X
Bugey 3	PWR	910	21/09/1978	40 years 9 months	X
Bugey 4	PWR	880	08/03/1979	40 years 4 months	X
Bugey 5	PWR	880	31/07/1979	39 years 11 months	X
Cattenom 1	PWR	1300	13/11/1986	32 years 8 months	
Cattenom 2	PWR	1300	17/09/1987	31 years 9 months	
Cattenom 3	PWR	1300	06/07/1990	28 years 0 months	X
Cattenom 4	PWR	1300	27/05/1991	28 years 1 months	X
Chinon B1	PWR	905	30/11/1982	36 years 7 months	
Chinon B2	PWR	905	29/11/1983	35 years 7 months	
Chinon B3	PWR	905	20/10/1986	32 years 8 months	
Chinon B4	PWR	905	14/11/1987	31 years 7 months	
Chooz B1	PWR	1500	30/08/1996	22 years 10 months	
Chooz B2	PWR	1500	10/04/1997	22 years 2 months	
Civaux 1	PWR	1495	24/12/1997	21 years 6 months	
Civaux 2	PWR	1495	24/12/1999	19 years 6 months	X
Cruas 1	PWR	915	29/04/1983	36 years 2 months	
Cruas 2	PWR	915	06/09/1984	34 years 10 months	
Cruas 3	PWR	915	14/05/1984	35 years 1 months	
Cruas 4	PWR	915	27/10/1984	34 years 8 months	
Dampierre 1	PWR	890	23/03/1980	39 years 3 months	X
Dampierre 2	PWR	890	10/12/1980	38 years 7 months	X
Dampierre 3	PWR	890	30/01/1981	38 years 5 months	X
Dampierre 4	PWR	890	18/08/1981	37 years 10 months	X
Fessenheim 1	PWR	880	06/04/1977	42 years 3 months	X
Fessenheim 2	PWR	880	07/10/1977	41 years 9 months	X
Flamanville 1	PWR	1330	04/12/1985	33 years 7 months	
Flamanville 2	PWR	1330	08/08/1986	32 years 11 months	
Golfech 1	PWR	1310	07/06/1990	29 years 1 months	X
Golfech 2	PWR	1310	18/06/1993	26 years 0 months	
Gravelines 1	PWR	910	13/03/1980	39 years 4 months	X
Gravelines 2	PWR	910	26/08/1980	38 years 10 months	X
Gravelines 3	PWR	910	12/12/1980	38 years 7 months	X
Gravelines 4	PWR	910	14/06/1981	38 years 0 months	X
Gravelines 5	PWR	910	28/08/1984	34 years 10 months	
Gravelines 6	PWR	910	01/08/1985	33 years 11 months	

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	Nogent 1	PWR	1310	21/10/1987	31 years 8 months		
	Nogent 2	PWR	1310	14/12/1988	30 years 6 months	X	
	Paluel 1	PWR	1330	22/06/1984	35 years 0 months		
	Paluel 2	PWR	1330	14/09/1984	34 years 10 months		
	Paluel 3	PWR	1330	30/09/1985	33 years 9 months		
	Paluel 4	PWR	1330	11/04/1986	33 years 3 months		
	Penly 1	PWR	1330	04/05/1990	29 years 2 months	X	
	Penly 2	PWR	1330	04/02/1992	27 years 5 months		
	St. Alban 1	PWR	1335	30/08/1985	33 years 10 months		
	St. Alban 2	PWR	1335	03/07/1986	32 years 0 months		
	St. Laurent B1	PWR	915	21/01/1981	38 years 5 months	X	
	St. Laurent B2	PWR	915	01/06/1981	38 years 1 months	X	
	Tricastin 1	PWR	915	31/05/1980	39 years 1 months	X	
	Tricastin 2	PWR	915	07/08/1980	38 years 11 months	X	
	Tricastin 3	PWR	915	10/02/1981	38 years 5 months	X	
	Tricastin 4	PWR	915	12/06/1981	38 years 1 months	X	
DE	Brokdorf	PWR	1410	14/10/1986	32 years 9 months		31/12/2021 32
	Emsland	PWR	1335	09/04/1988	31 years 3 months		31/12/2022
	Grohnde	PWR	1430	05/09/1984	34 years 10 months	X	31/12/2021
	Gundremmingen C	BWR	1344	02/11/1984	34 years 8 months	X	31/12/2021
	Isar 2	PWR	1485	22/01/1988	31 years 5 months		31/12/2022
	Neckarwestheim 2	PWR	1400	03/01/1989	30 years 6 months		31/12/2022
	Phillipsburg 2	PWR	1402	17/12/1984	34 years 6 months	X	31/12/2019
ES	Almaraz 1	PWR	1011	01/05/1981	38 years 2 months	X	34
	Almaraz 2	PWR	1006	08/10/1983	35 years 9 months		
	Asco 1	PWR	995	13/08/1983	35 years 11 months		
	Asco 2	PWR	997	23/10/1985	33 years 8 months		
	Cofrentes	BWR	1064	14/10/1984	34 years 9 months		
	Trillo 1	PWR	1066	23/05/1988	31 years 1 months		
	Vandellos 2	PWR	1087	12/12/1987	31 years 7 months		
HU	Paks 1	PWR	479	28/12/1982	36 years 6 months	X	33
	Paks 2	PWR	477	06/09/1984	34 years 10 months	X	
	Paks 3	PWR	473	28/09/1986	32 years 9 months	X	
	Paks 4	PWR	473	16/08/1987	31 years 10 months	X	
NL	Borssele	PWR	482	04/07/1973	45 years 0 months	X	45
RO	Cernavoda 1	PHWR	650	11/07/1996	22 years 12 months		17

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	Cernavoda 2	PHWR	650	07/08/2007	11 years 11 months			
SK	Bohunice 3	PWR	471	20/08/1984	34 years 10 months	X		27
	Bohunice 4	PWR	471	09/08/1985	33 years 11 months	X		
	Mochovce 1	PWR	436	04/07/1998	20 years 0 months	X		
	Mochovce 2	PWR	436	20/12/1999	19 years 6 months	X		
SI	Krsko	PWR	688	02/10/1981	37 years 9 months	X		37
SE	Forsmark 1	BWR	986	06/06/1980	39 years 1 months	X		39
	Forsmark 2	BWR	1116	26/01/1981	38 years 5 months	X		
	Forsmark 3	BWR	1159	05/03/1985	34 years 4 months			
	Oskarshamn 3	BWR	1400	03/03/1985	34 years 4 months			
	Ringhals 1	BWR	881	14/10/1974	44 years 9 months	X		
	Ringhals 2	PWR	904	17/08/1974	44 years 11 months	X		
	Ringhals 3	PWR	1062	07/09/1980	38 years 10 months	X		
	Ringhals 4	PWR	1104	23/06/1982	37 years 0 months			
UK	Dungeness B1	GCR	525	03/04/1983	36 years 3 months	X		35
	Dungeness B2	GCR	525	29/12/1985	33 years 6 months			
	Hartlepool A1	GCR	595	01/08/1983	35 years 11 months	X		
	Hartlepool A2	GCR	585	31/10/1984	34 years 8 months			
	Heysham A1	GCR	580	09/07/1983	35 years 0 months	X		
	Heysham A2	GCR	575	11/10/1984	34 years 9 months	X		
	Heysham B1	GCR	615	12/07/1988	30 years 12 months			
	Heysham B2	GCR	615	11/11/1988	30 years 8 months			
	Hinkley Point B1	GCR	480	30/10/1976	42 years 8 months	X		
	Hinkley Point B2	GCR	475	05/02/1976	43 years 5 months	X		
	Hunterston B1	GCR	480	06/02/1976	43 years 5 months	X		
	Hunterston B2	GCR	485	31/03/1977	42 years 3 months	X		
	Sizewell B	PWR	1198	14/02/1995	24 years 4 months			
	Torness 1	GCR	590	25/05/1988	31 years 1 months			
	Torness 2	GCR	595	03/02/1989	30 years 5 months			

Near EU countries participating in the stress tests

CH	Beznau 1	PWR	365	17/07/1969	49 years 12 months	X		44
	Beznau 2	PWR	265	23/10/1971	47 years 8 months	X		
	Goesgen	PWR	1010	02/02/1979	40 years 5 months	X		
	Leibstadt	BWR	1220	24/05/1984	35 years 1 months			

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	Muehleberg	BWR	373	01/07/1971	48 years 0 months	X	20/12/2019	
UA	Khmelnitski 1	PWR	950	31/12/1987	31 years 6 months	X		30
	Khmelnitski 2	PWR	950	07/08/2004	14 years 11 months			
	Rovno 1	PWR	381	31/12/1980	38 years 6 months	X		
	Rovno 2	PWR	376	30/12/1981	37 years 6 months	X		
	Rovno 3	PWR	950	21/12/1986	32 years 6 months			
	Rovno 4	PWR	950	10/10/2004	14 years 8 months			
	South Ukraine 1	PWR	950	31/12/1982	36 years 6 months			
	South Ukraine 2	PWR	950	06/01/1985	34 years 6 months			
	South Ukraine 3	PWR	950	20/09/1989	29 years 9 months	X		
	Zaporozhe 1	PWR	950	10/12/1984	34 years 7 months			
	Zaporozhe 2	PWR	950	22/07/1985	33 years 11 months			
	Zaporozhe 3	PWR	950	10/12/1986	32 years 7 months			
	Zaporozhe 4	PWR	950	18/12/1987	31 years 6 months			
	Zaporozhe 5	PWR	950	14/08/1989	29 years 11 months	X		
	Zaporozhe 6	PWR	950	19/10/1995	23 years 8 months			

Other European reactors (reactors in Russia outside Europe are excluded)

AM	Metsamor 2	PWR	376	05/01/1980	39 years 6 months	X		39
RU	Balakovo 1	PWR	950	28/12/1985	33 years 6 months			30
	Balakovo 2	PWR	950	8/10/1987	31 years 9 months			
	Balakovo 3	PWR	950	25/12/1988	30 years 6 months			
	Balakovo 4	PWR	950	11/4/1993	26 years 2 months			
	Beloyarsk 3	FBR	560	8/4/1980	39 years 3 months	X		
	Beloyarsk 4	FBR	820	10/12/2015	3 years 6 months			
	Kalinin 1	PWR	950	9/5/1984	35 years 2 months			
	Kalinin 2	PWR	950	3/12/1986	32 years 7 months			
	Kalinin 3	PWR	950	16/12/2004	14 years 6 months			
	Kalinin 4	PWR	950	24/11/2011	7 years 7 months			
	Kola 1	PWR	411	29/6/1973	46 years 0 months	X		
	Kola 2	PWR	411	9/12/1974	44 years 7 months	X		
	Kola 3	PWR	411	24/3/1981	38 years 3 months	X		
	Kola 4	PWR	411	11/10/1984	34 years 9 months	X		

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Kursk 1	RBMK	925	19/12/1976	42 years 6 months	X
Kursk 2	RBMK	925	28/1/1979	40 years 5 months	X
Kursk 3	RBMK	925	17/10/1983	35 years 8 months	X
Kursk 4	RBMK	925	2/12/1985	33 years 7 months	X
Leningrad 2-1	PWR	1085	9/3/2018	1 years 3 months	
Leningrad 1	RBMK	925	21/12/1973	45 years 6 months	X
Leningrad 2	RBMK	925	11/7/1975	43 years 0 months	X
Leningrad 3	RBMK	925	7/12/1979	39 years 7 months	X
Leningrad 4	RBMK	925	9/2/1981	38 years 5 months	X
Novovorenezh 2-1	PWR	1114	5/8/2016	2 years 11 months	
Novovorenezh 4	PWR	385	28/12/1972	46 years 6 months	X
Novovorenezh 5	PWR	950	31/5/1980	39 years 1 months	X
Rostov 1	PWR	950	30/3/2001	18 years 3 months	
Rostov 2	PWR	950	18/3/2010	9 years 3 months	
Rostov 3	PWR	950	27/12/2014	4 years 6 months	
Rostov 4	PWR	1011	2/2/2018	1 years 5 months	
Smolensk 1	RBMK	925	9/12/1982	36 years 7 months	X
Smolensk 2	RBMK	925	31/5/1985	34 years 1 months	X
Smolensk 3	RBMK	925	17/1/1990	29 years 5 months	X

Average EU nuclear power stations age (years): **34**
 Average EU (excl. UK) nuclear power stations age (years): **34**
 Average Europe nuclear power stations age (years): **33**

EU oldest NPPs

Nuclear power stations in the EU – operating reactors

source: IAEA PRIS database – <http://www.iaea.org/pris>

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Oldest EU and surrounding nuclear power stations (years):

country	power station	type reactor	reference unit power	starting date	age (years) as of today	closure date
CH	Beznau 1	PWR	365	17/07/1969	49 years 12 months	X
CH	Muehleberg	BWR	373	01/07/1971	48 years 0 months	X 20/12/2019
CH	Beznau 2	PWR	265	23/10/1971	47 years 8 months	X
NL	Borssele	PWR	482	04/07/1973	45 years 0 months	X
RU	Leningrad 1	RBMK	925	21/12/1973	45 years 6 months	X
SE	Ringhals 2	PWR	904	17/08/1974	44 years 11 months	X
BE	Doel 1	PWR	881	28/08/1974	44 years 10 months	X 2025
SE	Ringhals 1	BWR	475	14/10/1974	44 years 9 months	X
BE	Tihange 1	PWR	480	07/03/1975	44 years 4 months	X 2025
BE	Doel 2	PWR	480	21/08/1975	43 years 10 months	X 2025
RU	Leningrad 2	RBMK	925	11/7/1975	43 years 0 months	X
UK	Hinkley Point B2	GCR	485	05/02/1976	43 years 5 months	X
UK	Hunterston B1	GCR	1010	06/02/1976	43 years 5 months	X
UK	Hinkley Point B1	GCR	986	30/10/1976	42 years 8 months	X
RU	Kursk 1	RBMK	925	19/12/1976	42 years 6 months	X
FI	Loviisa 1	PWR	1062	08/02/1977	42 years 5 months	X
UK	Hunterston B2	GCR	381	31/03/1977	42 years 3 months	X
FR	Fessenheim 1	PWR	1116	06/04/1977	42 years 3 months	X
FR	Fessenheim 2	PWR	1011	07/10/1977	41 years 9 months	X
FR	Bugey 2	PWR	688	10/05/1978	41 years 2 months	X
FI	Olkiluoto 1	BWR	376	02/09/1978	40 years 10 months	X
FR	Bugey 3	PWR	1104	21/09/1978	40 years 9 months	X
RU	Kursk 2	RBMK	925	28/1/1979	40 years 5 months	X
CH	Goesgen	PWR	479	02/02/1979	40 years 5 months	X
FR	Bugey 4	PWR	950	08/03/1979	40 years 4 months	X
FR	Bugey 5	PWR	525	31/07/1979	39 years 11 months	X
RU	Leningrad 3	RBMK	925	7/12/1979	39 years 7 months	X
FI	Olkiluoto 2	BWR	580	18/02/1980	39 years 4 months	X
FR	Gravelines 1	PWR	995	13/03/1980	39 years 4 months	X
FR	Dampierre 1	PWR	595	23/03/1980	39 years 3 months	X
FR	Tricastin 1	PWR	1006	31/05/1980	39 years 1 months	X
SE	Forsmark 1	BWR	1220	06/06/1980	39 years 1 months	X
FR	Tricastin 2	PWR	477	07/08/1980	38 years 11 months	X
FR	Gravelines 2	PWR	471	26/08/1980	38 years 10 months	X
SE	Ringhals 3	PWR	1064	07/09/1980	38 years 10 months	X
FI	Loviisa 2	PWR	575	04/11/1980	38 years 8 months	X
FR	Dampierre 2	PWR	585	10/12/1980	38 years 7 months	X
FR	Gravelines 3	PWR	950	12/12/1980	38 years 7 months	X
UA	Rovno 1	PWR	1159	31/12/1980	38 years 6 months	X
FR	St. Laurent B1	PWR	1400	21/01/1981	38 years 5 months	X
SE	Forsmark 2	BWR	471	26/01/1981	38 years 5 months	X
FR	Dampierre 3	PWR	950	30/01/1981	38 years 5 months	X
RU	Leningrad 4	RBMK	925	9/2/1981	38 years 5 months	X
FR	Tricastin 3	PWR	997	10/02/1981	38 years 5 months	X
ES	Almaraz 1	PWR	950	01/05/1981	38 years 2 months	X
FR	St. Laurent B2	PWR	525	01/06/1981	38 years 1 months	X
FR	Blayais 1	PWR	473	12/06/1981	38 years 1 months	X
FR	Tricastin 4	PWR	950	12/06/1981	38 years 1 months	X

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FR	Gravelines 4	PWR	473	14/06/1981	38 years 0 months	X	
FR	Dampierre 4	PWR	950	18/08/1981	37 years 10 months	X	
SI	Krsko	PWR	950	02/10/1981	37 years 9 months	X	
UA	Rovno 2	PWR	950	30/12/1981	37 years 6 months	X	
RU	Smolensk 1	RBMK	925	9/12/1982	36 years 7 months	X	
BE	Doel 3	PWR	1066	23/06/1982	37 years 0 months		2022
SE	Ringhals 4	PWR	590	23/06/1982	37 years 0 months		
FR	Blayais 2	PWR	615	17/07/1982	36 years 12 months		
BE	Tihange 2	PWR	615	13/10/1982	36 years 9 months		2022
FR	Chinon B1	PWR	1087	30/11/1982	36 years 7 months		
HU	Paks 1	PWR	595	28/12/1982	36 years 6 months	X	
UA	South Ukraine 1	PWR	950	31/12/1982	36 years 6 months	X	
UK	Dungeness B1	GCR	950	03/04/1983	36 years 3 months	X	
FR	Cruas 1	PWR	1198	29/04/1983	36 years 2 months		
FR	Blayais 4	PWR	950	16/05/1983	36 years 1 months		
UK	Heysham A1	GCR	650	09/07/1983	35 years 0 months	X	
UK	Hartlepool A1	GCR	436	01/08/1983	35 years 11 months	X	
ES	Asco 1	PWR	436	13/08/1983	35 years 11 months		
FR	Blayais 3	PWR	950	17/08/1983	35 years 10 months		
ES	Almaraz 2	PWR	950	08/10/1983	35 years 9 months		
RU	Kursk 3	RBMK	925	17/10/1983	35 years 8 months	X	
FR	Chinon B2	PWR	650	29/11/1983	35 years 7 months		
FR	Cruas 3	PWR	915	14/05/1984	35 years 1 months		
CH	Leibstadt	BWR	1190	24/05/1984	35 years 1 months		
FR	Paluel 1	PWR	1330	22/06/1984	35 years 0 months		
SK	Bohunice 3	PWR	472	20/08/1984	34 years 10 months	X	
FR	Gravelines 5	PWR	910	28/08/1984	34 years 10 months		
DE	Grohnde	PWR	1360	05/09/1984	34 years 10 months	X	31/12/2021
FR	Cruas 2	PWR	915	06/09/1984	34 years 10 months		
HU	Paks 2	PWR	473	06/09/1984	34 years 10 months	X	
FR	Paluel 2	PWR	1330	14/09/1984	34 years 10 months		
UK	Heysham A2	GCR	575	11/10/1984	34 years 9 months	X	
ES	Cofrentes	BWR	1064	14/10/1984	34 years 9 months		
FR	Cruas 4	PWR	915	27/10/1984	34 years 8 months		
UK	Hartlepool A2	GCR	595	31/10/1984	34 years 8 months		
DE	Gundremmingen C	BWR	1288	02/11/1984	34 years 8 months	X	31/12/2021
UA	Zaporozhe 1	PWR	950	10/12/1984	34 years 7 months		
DE	Phillipsburg 2	PWR	1402	17/12/1984	34 years 6 months	X	31/12/2019
UA	South Ukraine 2	PWR	950	06/01/1985	34 years 6 months		
CZ	Dukovany 1	PWR	471	24/02/1985	34 years 4 months	X	
SE	Oskarshamn 3	BWR	1400	03/03/1985	34 years 4 months		
SE	Forsmark 3	BWR	1170	05/03/1985	34 years 4 months		
BE	Doel 4	PWR	1039	08/04/1985	34 years 3 months		2025
RU	Smolensk 2	RBMK	925	31/5/1985	34 years 1 months	X	
BE	Tihange 3	PWR	1046	15/06/1985	34 years 0 months		2025
UA	Zaporozhe 2	PWR	950	22/07/1985	33 years 11 months	X	
FR	Gravelines 6	PWR	910	01/08/1985	33 years 11 months		
SK	Bohunice 4	PWR	472	09/08/1985	33 years 11 months	X	
FR	St. Alban 1	PWR	1335	30/08/1985	33 years 10 months		
FR	Paluel 3	PWR	1330	30/09/1985	33 years 9 months		
ES	Asco 2	PWR	997	23/10/1985	33 years 8 months		
RU	Kursk 4	RBMK	925	2/12/1985	33 years 7 months	X	
FR	Flamanville 1	PWR	1330	04/12/1985	33 years 7 months		
UK	Dungeness B2	GCR	520	29/12/1985	33 years 6 months		
CZ	Dukovany 2	PWR	427	30/01/1986	33 years 5 months	X	
FR	Paluel 4	PWR	1330	11/04/1986	33 years 3 months		

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FR	St. Alban 2	PWR	1335	03/07/1986	32 years 0 months	
FR	Flamanville 2	PWR	1330	08/08/1986	32 years 11 months	
HU	Paks 3	PWR	473	28/09/1986	32 years 9 months	X
DE	Brokdorf	PWR	1410	14/10/1986	32 years 9 months	31/12/2021
FR	Chinon B3	PWR	905	20/10/1986	32 years 8 months	
FR	Cattenom 1	PWR	1300	13/11/1986	32 years 8 months	
CZ	Dukovany 3	PWR	471	14/11/1986	32 years 7 months	X
UA	Zaporozhe 3	PWR	950	10/12/1986	32 years 7 months	
UA	Rovno 3	PWR	950	21/12/1986	32 years 6 months	X
CZ	Dukovany 4	PWR	471	11/06/1987	32 years 1 months	X
HU	Paks 4	PWR	473	16/08/1987	31 years 10 months	X
FR	Cattenom 2	PWR	1300	17/09/1987	31 years 9 months	
FR	Belleville 1	PWR	1310	14/10/1987	31 years 9 months	
FR	Nogent 1	PWR	1310	21/10/1987	31 years 8 months	
FR	Chinon B4	PWR	905	14/11/1987	31 years 7 months	
BG	Kozloduy 5	PWR	953	29/11/1987	31 years 7 months	
ES	Vandellos 2	PWR	1045	12/12/1987	31 years 7 months	
UA	Zaporozhe 4	PWR	950	18/12/1987	31 years 6 months	
UA	Khmelnitski 1	PWR	950	31/12/1987	31 years 6 months	
DE	Isar 2	PWR	1410	22/01/1988	31 years 5 months	31/12/2022
DE	Emsland	PWR	1329	09/04/1988	31 years 3 months	31/12/2022
ES	Trillo 1	PWR	1003	23/05/1988	31 years 1 months	
UK	Torness 1	GCR	600	25/05/1988	31 years 1 months	
FR	Belleville 2	PWR	1310	06/07/1988	30 years 0 months	
UK	Heysham B1	GCR	620	12/07/1988	30 years 12 months	
UK	Heysham B2	GCR	620	11/11/1988	30 years 8 months	
FR	Nogent 2	PWR	1310	14/12/1988	30 years 6 months	
DE	Neckarwestheim 2	PWR	1310	03/01/1989	30 years 6 months	31/12/2022
UK	Torness 2	GCR	605	03/02/1989	30 years 5 months	
UA	Zaporozhe 5	PWR	950	14/08/1989	29 years 11 months	
UA	South Ukraine 3	PWR	950	20/09/1989	29 years 9 months	
RU	Smolensk 3	RBMK	925	17/11/1990	29 years 5 months	X
FR	Penly 1	PWR	1330	04/05/1990	29 years 2 months	
FR	Golfech 1	PWR	1310	07/06/1990	29 years 1 months	
FR	Cattenom 3	PWR	1300	06/07/1990	28 years 0 months	
FR	Cattenom 4	PWR	1300	27/05/1991	28 years 1 months	
BG	Kozloduy 6	PWR	953	02/08/1991	27 years 11 months	
FR	Penly 2	PWR	1330	04/02/1992	27 years 5 months	
FR	Golfech 2	PWR	1310	18/06/1993	26 years 0 months	
UK	Sizewell B	PWR	1188	14/02/1995	24 years 4 months	
UA	Zaporozhe 6	PWR	950	19/10/1995	23 years 8 months	
RO	Cernavoda 1	PHWR	650	11/07/1996	22 years 12 months	
FR	Chooz B1	PWR	1500	30/08/1996	22 years 10 months	
FR	Chooz B2	PWR	1500	10/04/1997	22 years 2 months	
FR	Civaux 1	PWR	1495	24/12/1997	21 years 6 months	
SK	Mochovce 1	PWR	436	04/07/1998	20 years 0 months	
SK	Mochovce 2	PWR	436	20/12/1999	19 years 6 months	
FR	Civaux 2	PWR	1495	24/12/1999	19 years 6 months	
CZ	Temelín 1	PWR	963	21/12/2000	18 years 6 months	
CZ	Temelín 2	PWR	963	29/12/2002	16 years 6 months	
UA	Khmelnitski 2	PWR	950	07/08/2004	14 years 11 months	
UA	Rovno 4	PWR	950	10/10/2004	14 years 8 months	
RO	Cernavoda 2	PHWR	650	07/08/2007	11 years 11 months	
RU	Leningrad 2-1	PWR	1085	9/3/2018	1 years 3 months	

EU oldest NPPs

age

	> 40 years
	35 – 40 years
	30 – 35 years

X
X

EU NPPs constr.plan

Nuclear power stations in the EU – under construction and planned

source: IAEA PRIS database – <http://www.iaea.org/pris>, Jan Haverkamp

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country	power station	type reactor	owner	constructor	reference unit power	year decision	Planned starting date	foreseen designs
BG	Kozloduy 7	PWR						
	Belene 1	PWR						
	Belene 1	PWR						
CZ	Temelín 3	PWR						
	Temelín 4	PWR						
	Dukovany 5	PWR						
FI	Olkiluoto 3	PWR	TVO	Areva	1600	2002	2019	EPR
	Olkiluoto 4	PWR						
	Hanhikivi 1		Fennovoima	Rosatom	1200	2010	2029	AES-2006
FR	Flamanville 3	PWR	EdF	EdF	1600	2006	2020	EPR
	Penly 3	PWR			1600			EPR
HU	Paks II -1		Paks II	Rosatom		2009	2030	AES-2006
	Paks II -2		Paks II	Rosatom		2009	2030	AES-2006
PL	1							AP1000, ABWR, EPR
	2							AP1000, ABWR, EPR
	3							AP1000, ABWR, EPR
	4							AP1000, ABWR, EPR
	5							AP1000, ABWR, EPR
	6							AP1000, ABWR, EPR
RO	Cernavoda 3	PHWR	Nuclearelectrica		650			CANDU6
	Cernavoda 4	PHWR	Nuclearelectrica		650			CANDU6
SK	Mochovce 3	PWR	SE		391	1982/2007	2019	VVER440/213
	Mochovce 4	PWR	SE		391	1982/2007	2020	VVER440/213
	Bohunice 5	PWR						
SI	Krsko 2						2025	AP1000
UK	Hinkley Point C1	PWR	EdF, CGN	EdF	1600	2012	2024	EPR
	Hinkley Point C2	PWR	EdF, CGN	EdF	1600	2012	2025	EPR
	Bradwell 1		CGN	CGN	1000			Hualong 1
	Bradwell 2		CGN	CGN	1000			Hualong 1
	Bradwell 3		CGN	CGN	1000			Hualong 1

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Dungeness							
Hartlepool							
Oldbury							ABWR
Moorside 1	NuGen	Toshiba / Westingho	1000				AP1000
Moorside 2	NuGen	Toshiba / Westingho	1000				AP1000
Moorside 3	NuGen	Toshiba / Westingho	1000				AP1000
Sizewell C	EdF/CGN	EdF	1600				EPR
Wylfa 3	Hitachi GE	Hitachi GE	1350				ABWR
Wylfa 4	Hitachi GE	Hitachi GE	1350				ABWR

Near EU countries, incl. Russia near border

BY	Astravetz 1	PWR	Rosatom	1200	2006	2019	AES-2006
	Astravetz 2	PWR	Rosatom	1200	2006	2019	AES-2006
RU	Leningrad 2-2	PWR	Rosatom			2018	AES-2006
	Baltiisk 1 (Kalningrad)	PWR		1082		2017	AES-2006
TR	Akkuyu 1	PWR	Rosatom	1200	2010	2023	AES-2006
	Akkuyu 2	PWR	Rosatom	1200	2010	2024	AES-2006
	Sinop 1	PWR					ATMEA
	Sinop 2	PWR				2020	ATMEA
UA	Khmelnitski 3	PWR	Energoatom	950		2018	VVER1000
	Khmelnitski 4	PWR	Energoatom	950		2019	VVER1000

- project cancelled
- project stopped, unlikely to continue
- project has some chance to be implemented
- project running into serious trouble
- other projects are too vague to estimate chances on success

- AP1000** Westinghouse / Toshiba
- EPR** Framatom / EdF
- AWBR** Hitachi / GE
- AES-2006** Rosatom
- CANDU6** SNC Lavalin
- ATMEA** Mitsubishi/Framatom

EU NPPs constr.plan

financing model	Original budget construction (Bln€)	construction cost (estimated) (Bln€)	remarks
	3,4	10,15	EIA procedure started, no investors
			EIA procedure finalised; tender for construction cancelled; plans for revival
			EIA procedure finalised; tender for construction cancelled; plans for revival
			EIA procedure started in 2018
Turn-key, Mankala	3,2	9,6	under construction
			cancelled
BOO, Mankala		13	EIA procedure finalised; 34% participation Rosatom, problems with investors
own reserves	3,4	9,8	under construction; major investor (ENEL) quit; problems with lid and bottom reactor pressure vessel
			problems with investors, cancelled
sovereign loan	12	12,5	agreement with Rosatom for construction; EIA procedure finalised; state aid approved by European Commission
			agreement with Rosatom for construction; EIA procedure finalised; state aid approved by European Commission
			SEA for nuclear energy policy finalised; EIA procedure started; project on ice
			SEA for nuclear energy policy finalised; EIA procedure started; project on ice
			SEA for nuclear energy policy finalised; EIA procedure started; project on ice
			SEA for nuclear energy policy finalised; project on ice
			SEA for nuclear energy policy finalised; project on ice
			SEA for nuclear energy policy finalised; project on ice
			EIA procedure never properly finalised; agreement with CGNC
			EIA procedure never properly finalised; agreement with CGNC
corporate loans, bonds, write-offs	1,8	5,4	under construction; VVER440 – no real secondary containment; construction in breach with Aarhus Convention
			under construction; VVER440 – no real secondary containment; construction in breach with Aarhus Convention
			problems with finding investors, EIA procedure ongoing
			currently plans are on hold
Contracts for Difference, credit guarantees	15	18,5	EIA not transboundary; 2 complaints ongoing at European Court for illegal state aid (Austria, Luxembourg), C
			EIA not transboundary; 2 complaints ongoing at European Court for illegal state aid (Austria, Luxembourg), C
			China General Nuclear Power Group
			China General Nuclear Power Group
			China General Nuclear Power Group

EU NPPs constr.plan

NuGen was liquidated on 08/11/2018
 NuGen was liquidated on 08/11/2018
 NuGen was liquidated on 08/11/2018

Horizon = Hitachi / GE – waiting for operation Wylfa 3 and 4 – likely pull-out
 Toshiba / Westinghouse in trouble – considering pull-out
 Toshiba / Westinghouse in trouble – considering pull-out
 Toshiba / Westinghouse in trouble – considering pull-out
 EdF already in trouble at Hinkley Point C
 Horizon = Hitachi / GE – considering pull-out
 Horizon = Hitachi / GE – considering pull-out

Sovereign loan	12	12,5	<div style="background-color: red; color: black; padding: 2px;">Russian BOOT project, construction started</div> Russian BOOT project, construction started
			cancelled
BOO		12,5	<div style="background-color: red; color: black; padding: 2px;">Russian BOOT project, construction started</div> Russian BOOT project, construction started Mitsubishi cancelled interest Mitsubishi cancelled interest
			<div style="background-color: red; color: black; padding: 2px;">construction stalled</div> construction stalled

EU NPPs constr.plan

ion; European Court case expected
ion; European Court case expected

on; problems with sale by ENEL to EPH
on; problems with sale by ENEL to EPH

omplaint ECJ Greenpeace Energy e.V. not admitted), transboundary EIA ongoing Ireland
omplaint ECJ Greenpeace Energy e.V. not admitted), transboundary EIA ongoing Ireland

