Table 23 | Chinese Nuclear Reactors in Operation (as of 1 July 2019)

Reactor	Model	Net Capacity (MWe)	Construction Start	Grid Connection	Commercial Operation
Changjiang-1	CNP-600	601	25/04/2010	07/11/2015	25/12/2015
Changjiang-2	CNP-600	601	21/11/2010	20/06/2016	12/08/2016
Daya Bay-1	M310	944	07/08/1987	31/08/1993	01/02/1994
Daya Bay-2	M310	944	07/04/1988	07/02/1994	06/05/1994
Fangchenggang-1	CPR-1000	1 000	30/07/2010	25/10/2015	01/01/2016
Fangchenggang-2	CPR-1000	1 000	23/12/2010	15/07/2016	01/10/2016
Fangjiashan-1	CPR-1000	1 012	26/12/2008	04/11/2014	15/12/2014
Fangjiashan-2	CPR-1000	1 012	17/07/2009	12/01/2015	12/02/2015
Fuqing-1	CPR-1000	1 000	21/11/2008	20/08/2014	22/11/2014
Fuqing-2	CPR-1000	1 000	17/06/2009	06/08/2015	16/10/2015
Fuqing-3	CPR-1000	1 000	31/12/2010	07/09/2016	24/10/2016
Fuqing-4	CPR-1000	1 000	01/10/2012	29/07/2017	17/09/2017
Haiyang-1	AP-1000	1 170	24/09/2009	17/08/2018	22/10/2018
Haiyang-2	AP-1000	1 170	21/06/2010	13/10/2018	09/01/2019
Hongyanhe-1	CPR-1000	1 061	18/08/2007	01/02/2013	06/06/2013
Hongyanhe-2	CPR-1000	1 061	28/03/2008	23/11/2013	13/05/2014
Hongyanhe-3	CPR-1000	1 061	07/03/2009	23/03/2015	16/08/2015
Hongyanhe-4	CPR-1000	1 061	15/08/2009	01/04/2016	19/09/2016
Ling Ao-1	M310	950	15/05/1997	26/02/2002	28/05/2002
Ling Ao-2	M310	950	28/11/1997	15/12/2002	08/01/2003
Ling Ao-3	CPR-1000	1 007	15/12/2005	15/07/2010	15/09/2010
Ling Ao-4	CPR-1000	1007	15/06/2006	03/05/2011	07/08/2011
Ningde-1	CPR-1000	1 018	18/02/2008	28/12/2012	15/04/2009
Ningde-2	CPR-1000	1 018	12/11/2008	04/01/2014	04/05/2014
Ningde-3	CPR-1000	1 018	08/01/2010	21/03/2015	10/06/2015
Ningde-4	CPR-1000	1018	29/09/2010	29/03/2016	21/06/2016
Qinshan-1	CNP-300	298	20/03/1985	15/12/1991	01/04/1994
Qinshan 2-1	CNP-600	610	02/06/1996	06/02/2002	15/04/2002
Qinshan 2-2	CNP-600	610	01/04/1997	01/03/2004	03/05/2004
Qinshan 2-3	CNP-600	619	28/03/2006	01/08/2010	05/10/2010
Qinshan 2-4	CNP-600	619	28/01/2007	25/11/2011	30/12/2011
Qinshan 3-1	CANDU 6	677	08/06/1998	09/10/2002	31/12/2002
Qinshan 3-2	CANDU 6	677	25/09/1998	12/06/2003	24/07/2003
Sanmen-1	AP-1000	1 157	19/04/2009	30/06/2018	21/09/2018
Sanmen-2	AP-1000	1 157	15/12/2009	24/08/2018	05/11/2018

Reactor	Model	Net Capacity (MWe)	Construction Start	Grid Connection	Commercial Operation
Taishan-1	EPR-1750	1 660	28/10/2009	29/06/2018	13/12/2018
Taishan-2	EPR-1750	1 660	15/04/2010	28/06/2019	
Tianwan-1	VVER V-428	990	20/10/1999	12/05/2006	17/05/2007
Tianwan-2	VVER V-428	990	20/10/2000	14/05/2007	16/08/2007
Tianwan-3	VVER V-428M	1 045	22/12/2012	30/12/2017	14/02/2018
Tianwan-4	VVER V-428M	1 045	27/09/2013	27/10/2018	22/12/2018
Yangjiang-1	CPR-1000	1 000	16/12/2008	31/12/2013	25/03/2014
Yangjiang-2	CPR-1000	1 000	04/06/2009	10/03/2015	05/06/2015
Yangjiang-3	CPR-1000	1 000	15/11/2010	18/10/2015	01/01/2016
Yangjiang-4	CPR-1000	1 000	17/11/2012	08/01/2017	15/03/2017
Yangjiang-5	ACPR-1000	1 000	18/09/2013	23/05/2018	12/08/2018
Yangjiang-6	ACPR-1000	1 000	31/12/2013	29/06/2019	
Total Reactors in Operation: 47 Reactors / 45.5 GWe					

Sources: WNISR with IAEA-PRIS, 2019

Table 24 | Chinese Nuclear Reactors in LTO

Reactor	Model	Net Capacity (MWe)	Construction Start	Grid Connection	Commercial Operation
CEFR	BN-20	20	10/05/2000	21/07/2011	

Sources: WNISR with IAEA-PRIS, 2019

Note

The China Experimental Fast Reactor (CEFR) is not primarily a power generating reactor. However, as it was connected to the grid in 2011 at about 40 percent power and achieved full power for 72 hours starting 18 December 2014[1361], it is included in the WNISR. According to one source in China, the reactor has not been operating since December 2014, as it is lacking fuel. Other sources are also pointing to fuel issues.[1362] We have therefore decided to take it off the operational status and put it into Long-Term Outage (LTO) as of December 2014. In January 2017, an agreement entered into force, for Russian Rosatom's subsidiary TVEL fabricating fuel for CEFR in 2017 and 2018 for loading into the reactor in 2019.[1363]. In July 2019, Rosatom announced that TVEL had delivered "a batch of fuel" for the CEFR reactor. [1364]

1361 - See *Xinhua in China Securities Journal*, "China experimental fast reactor runs at full capacity", 19 December 2014, see http://www.cs.com.cn/english/ei/201412/t20141219_4595461.html, accessed 28 May 2018.

1362 - Marl Hibbs, "Rethinking China's Fast Reactor", *Arms Control Wonk*, 17 February 2017, see https://www.armscontrolwonk.com/archive/1202830/rethinking-chinas-fast-reactor/, accessed 28 May 2018.

1363 - *NEI*, "Russia to supply more fuel for China's fast reactor", 5 January 2017, see http://www.neimagazine.com/news/newsrussia-to-supply-more-fuel-for-chinas-fast-reactor-5709961, accessed 28 May 2018.

1364 - Rosatom, "TVEL Fuel Company of ROSATOM Supplied Fuel for China Experimental Fast Reactor", 9 July 2019, see https://www.rosatom.ru/en/press-centre/news/tvel-fuel-company-of-rosatom-supplied-fuel-for-china-experimental-fast-reactor-/, accessed 25 July 2019.