

# Current Status of Nuclear Power Plants in Japan

as of February 5, 2021, JAIF

	Plant Name	Reactor Type	Output MWe	Commercial Operation	Age	Current Status	Review on Conformity to the New Regulatory Requirements			Note	
							Application by operator	Official approval by NRA	Restart of commercial operation		
OP	JAPC	TOKAI-2	BWR	1,100	1978	42	Outage (2011.03.11~)	2014.05.20	2018.09.26	NRA approved a beyond 40-year operating license for Tokai-2 on November 7, 2018. Work on safety measures will be completed in December 2022.	
		TSURUGA-2	PWR	1,160	1987	33	Outage (2011.05.07~)	2015.11.05			
	Hokkaido EPC	TOMARI-1	PWR	579	1989	31	Outage (2011.04.22~)	2013.07.08			
		TOMARI-2	PWR	579	1991	29	Outage (2011.08.26~)	2013.07.08			
		TOMARI-3	PWR	912	2009	11	Outage (2012.05.05~)	2013.07.08			
	Tohoku EPC	ONAGAWA-2	BWR	825	1995	25	Outage (2010.11.06~)	2013.12.27	2020.02.26	Work on safety measures will be completed in FY 2022.	
		ONAGAWA-3	BWR	825	2002	19	Outage (2011.03.11~)				
		HIGASHIDORI-1	BWR	1,100	2005	15	Outage (2011.02.06~)	2014.06.10			
	TEPCO	KASHIWAZAKI KARIWA-1	BWR	1,100	1985	35	Outage (2011.08.06~)				
		KASHIWAZAKI KARIWA-2	BWR	1,100	1990	30	Outage (2007.07.05~)				
		KASHIWAZAKI KARIWA-3	BWR	1,100	1993	27	Outage (2007.07.16~)				
		KASHIWAZAKI KARIWA-4	BWR	1,100	1994	26	Outage (2007.07.16~)				
		KASHIWAZAKI KARIWA-5	BWR	1,100	1990	30	Outage (2012.01.25~)				
		KASHIWAZAKI KARIWA-6	ABWR	1,356	1996	24	Outage (2012.03.26~)	2013.09.27	2017.12.27		
		KASHIWAZAKI KARIWA-7	ABWR	1,356	1997	23	Outage (2011.08.23~)	2013.09.27	2017.12.27	Work on safety measures will be completed in April 2021.	
	Chubu EPC	HAMAOKA-3	BWR	1,100	1987	33	Outage (2010.11.29~)	2015.06.16			
		HAMAOKA-4	BWR	1,137	1993	27	Outage (2011.05.13~)	2014.02.14			
		HAMAOKA-5	ABWR	1,380	2005	16	Outage (2011.05.14~)				
	Hokuriku EPC	SHIKA-1	BWR	540	1993	27	Outage (2011.03.01~)				
		SHIKA-2	ABWR	1,358	2006	14	Outage (2011.03.11~)	2014.08.12			
	Kansai EPC	MIHAMA-3	PWR	826	1976	44	Outage (2011.05.14~)	2015.03.17	2016.10.05	NRA approved a beyond 40-year operating license for Mihama-3 on November 16, 2016. Work on safety measures was completed in September 18, 2020.	
		TAKAHAMA-1	PWR	826	1974	46	Outage (2011.01.10~)	2015.03.17	2016.04.20		
		TAKAHAMA-2	PWR	826	1975	45	Outage (2011.11.25~)	2015.03.17	2016.04.20	NRA approved a beyond 40-year operating license for Takahama-1 & -2 on June 20, 2016. Work on safety measures for Takahama-1 was completed in September 18, 2020. Work on safety measures for Takahama-2 will be completed in April 2021.	
		TAKAHAMA-3	PWR	870	1985	36	Operable	2013.07.08	2015.02.12	2016.02.26	*Takahama-3 was shut down on January 6, 2020 for a periodic inspection. It extended the suspension period, due to the detailed investigations of damaged SG tube and is scheduled to resume power generation after February 2021.
		TAKAHAMA-4	PWR	870	1985	35	Operable	2013.07.08	2015.02.12	2017.06.16	*Takahama-4 was shut down on October 7, 2020 for a periodic inspection. The ending date of the regular inspection is undecided due to damage to steam generator heat transfer tube.
		OHI-3	PWR	1,180	1991	29	Operable	2013.07.08	2017.05.24	2018.04.10	Ohi-3 was shut down on July 20, 2020 for a periodic inspection. It extended the suspension period, due to the confirmation of scratches on the welded part of pressurizer spray system piping. The ending date of the regular inspection is undecided due to the fact that piping replacement will be done during the same period.
		OHI-4	PWR	1,180	1993	28	Operable	2013.07.08	2017.05.24	2018.06.05	Ohi-4 was shut down on November 3, 2020 for a periodic inspection. It resumed power generation on January 17, 2021, and will start commercial operation in mid-February 2021.
	Chugoku EPC	SHIMANE-2	BWR	820	1989	31	Outage (2012.01.27~)	2013.12.25			
	Shikoku EPC	IKATA-3	PWR	890	1994	26	Operable	2013.07.08	2015.07.15	2016.09.07	Ikata-3 was shut down on December 26, 2019 for a periodic inspection. The periodic inspection was suspended on January 25, 2020, due to some troubles, but was resumed on August 5, 2020, upon the local approvals. Hiroshima High Court made a provisional injunction against the restart of Ikata-3 on January 17, 2020. Shikoku EPC filed an objection against it and a suspension of execution on February 19, 2020.
	Kyushu EPC	GENKAI-3	PWR	1,180	1994	26	Operable	2013.07.12	2017.01.18	2018.05.16	Genkai-3 was shut down on September 18, 2020 for a periodic inspection. It resumed power generation on November 23, 2020, and started commercial operation on December 22, 2020.
		GENKAI-4	PWR	1,180	1997	23	Operable	2013.07.12	2017.01.18	2018.07.19	Genkai-4 was shut down on December 19, 2020 for a periodic inspection. It is scheduled to resume power generation in early March 2021, and start commercial operation in early April 2021.
		SENDAI-1	PWR	890	1984	36	Operable	2013.07.08	2014.09.10	2015.09.10	*Sendai-1 was shut down on March 16, 2020 for a periodic inspection. It resumed power generation on November 19, 2020, and started commercial operation on December 15, 2020.
		SENDAI-2	PWR	890	1985	35	Operable	2013.07.08	2014.09.10	2015.11.17	*Sendai-2 was shut down on May 20, 2020 for a periodic inspection. It resumed power generation on December 24, 2020, and started commercial operation on January 22, 2021.
Total	33 units		33,083				25 units	16 units	9 units		

《Restart of shutdown NPPs》

- NRA (established on 2012.09.19) reviews the following applications by operators in conformity with new regulatory requirements (standards) which came into effect on 2013.07.08.
  - Changes in reactor installment license (After preliminary approval, a month of public consultation will be normally conducted for official permission)/Plan for construction works (Construction Permit Application)/Operational safety programs (Technical Specification)
- In addition to the NRA approval of the above applications, inspections before & after reactor start-up (Pre-Operational Inspection) are required before resuming commercial operation. Consent of local governments is also required for restart (but is not legally binding).
- Takahama-3 & -4, Ikata-3 and Genkai-3 were granted restart permission by the regulator (NRA) based on the assumption of using MOX fuel.
- \*The new regulatory standard requires the installation of specialized safety facilities within 5 years of approval of the main construction plan. On April 24, 2019, NRA decided on a policy to shut down restarted reactors which do not meet the above requirement. Kyushu Electric Power officially announced on October 3, 2019 that Sendai-1 and Sendai-2 will be voluntarily shut down on March 16, 2020 and May 20, 2020, respectively due to delay in completion of the specialized safety facilities. Similarly, Kansai Electric Power officially announced on January 29, 2020 that Takahama-3 will be voluntarily shut down on August 2, 2020 and Takahama-4 on October 7, 2020.

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								Application by operator	Preliminary approval by NRA	Official approval by NRA	
UC	J-power	OHMA	ABWR	1,383	TBD	—	Under Construction	2014.12.16			Resumed construction on October 1, 2012.
	TEPCO	HIGASHIDORI-1	ABWR	1,385	TBD	—	Under Construction				Stopped construction after March 11, 2011.
	Chugoku EPC	SHIMANE-3	ABWR	1,373	TBD	—	Under Construction	2018.08.10			
	Total	3 units		4,141				2 unit			* On August 28, 2018, TEPCO started a geological survey comprehensively for the Higashidori nuclear power plant in Aomori Prefecture.

	Owner	Plant Name	Reactor Type	Output MWe	Operation ended or Permanent shut down	Note
CD	JAEA	JPDR	BWR	12	1976.03.18	Decommissioning completed on April 31, 1996.
		FUGEN	ATR	165	2003.03.29	Decommissioning started on February 12, 2008, and to be completed in FY 2033.
	JAPC	TOKAI	GCR	166	1998.03.31	Decommissioning started in 2001, and to be completed in FY 2030.
	Chubu EPC	HAMAOKA-1	BWR	540	2009.01.30	Decommissioning started on November 18, 2009, and to be completed in FY 2036.
		HAMAOKA-2	BWR	840	2009.01.30	Decommissioning started on November 18, 2009, and to be completed in FY 2036.
	TEPCO	FUKUSHIMA Daiichi-1	BWR	460	2012.04.19	(Decommissioning to be completed 30-40 years after the cold shutdown.)
		FUKUSHIMA Daiichi-2	BWR	784	2012.04.19	
		FUKUSHIMA Daiichi-3	BWR	784	2012.04.19	
		FUKUSHIMA Daiichi-4	BWR	784	2012.04.19	
		FUKUSHIMA Daiichi-5	BWR	784	2014.01.31	(Fukushima-Daiichi -5& -6 are be utilized effectively to decommission Fukushima-Daiichi -1,2,3 & 4.)
		FUKUSHIMA Daiichi-6	BWR	1,100	2014.01.31	(Fukushima-Daiichi -5& -6 are be utilized effectively to decommission Fukushima-Daiichi -1,2,3 & 4.)
	JAPC	TSURUGA-1	BWR	357	2015.04.27	Decommissioning to be completed in FY 2039.
	Kansai EPC	MIHAMA-1	PWR	340	2015.04.27	Decommissioning to be completed in FY 2045.
		MIHAMA-2	PWR	500	2015.04.27	Decommissioning to be completed in FY 2045.
	Kyushu EPC	GENKAI-1	PWR	559	2015.04.27	Decommissioning to be completed in FY 2054.
	Chugoku EPC	SHIMANE-1	BWR	460	2015.04.30	Decommissioning to be completed in FY 2045.
	Shikoku EPC	IKATA-1	PWR	566	2016.05.10	Decommissioning to be completed in FY 2056.
	JAEA	MONJU	FBR	280	2017.12.06*	Decommissioning to be completed in FY 2047.
	Kansai EPC	OHI-1	PWR	1,175	2018.03.01	Decommissioning to be completed in FY 2048.
		OHI-2	PWR	1,175	2018.03.01	Decommissioning to be completed in FY 2048.
Shikoku EPC	IKATA-2	PWR	566	2018.05.23	Decommissioning to be completed in FY 2059.	
Tohoku EPC	ONAGAWA-1	BWR	524	2018.12.21	Decommissioning to be completed in FY 2053.	
Kyushu EPC	GENKAI-2	PWR	559	2019.04.09	Decommissioning to be completed in FY 2054.	
TEPCO	FUKUSHIMA Daini-1	BWR	1,100	2019.09.30	Decommissioning to be completed in FY 2064.	
	FUKUSHIMA Daini-2	BWR	1,100	2019.09.30	Decommissioning to be completed in FY 2064.	
	FUKUSHIMA Daini-3	BWR	1,100	2019.09.30	Decommissioning to be completed in FY 2064.	
	FUKUSHIMA Daini-4	BWR	1,100	2019.09.30	Decommissioning to be completed in FY 2064.	
	Total	27 units		17,880		*Date of Application for Decommissioning Plan Approval.

OP: In operation/Operable UC: Under construction CD: Closed down In general, Decommissioning means "Dismantlement" in Japan.  
Based on public information released by each electric power company and Nuclear Regulation Authority (NRA)