

Current Status of Nuclear Power Plants in Japan

as of February 7, 2023, 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	44	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 including the installation of specialized safety facility (SSF) will be completed in September 2024.
		TSURUGA-2	PWR	1,160	1987	35	Outage (2011.05.07～)	2015.11.05			
	Hokkaido EPC	TOMARI-1	PWR	579	1989	33	Outage (2011.04.22～)	2013.07.08			
		TOMARI-2	PWR	579	1991	31	Outage (2011.08.26～)	2013.07.08			
		TOMARI-3	PWR	912	2009	13	Outage (2012.05.05～)	2013.07.08			
	Tohoku EPC	ONAGAWA-2	BWR	825	1995	27	Outage (2010.11.06～)	2013.12.27	2020.02.26		Work on safety measures will be completed in November 2023. Onagawa-2 is scheduled to resume power generation in February 2024.
		ONAGAWA-3	BWR	825	2002	21	Outage (2011.03.11～)				
		HIGASHIDORI-1	BWR	1,100	2005	17	Outage (2011.02.06～)	2014.06.10			
	TEPCO	KASHIWAZAKI KARIWA-1	BWR	1,100	1985	37	Outage (2011.08.06～)				
		KASHIWAZAKI KARIWA-2	BWR	1,100	1990	32	Outage (2007.07.05～)				
		KASHIWAZAKI KARIWA-3	BWR	1,100	1993	29	Outage (2007.07.16～)				
		KASHIWAZAKI KARIWA-4	BWR	1,100	1994	28	Outage (2007.07.16～)				
		KASHIWAZAKI KARIWA-5	BWR	1,100	1990	32	Outage (2012.01.25～)				
		KASHIWAZAKI KARIWA-6	ABWR	1,356	1996	26	Outage (2012.03.26～)	2013.09.27	2017.12.27		
		KASHIWAZAKI KARIWA-7	ABWR	1,356	1997	25	Outage (2011.08.23～)	2013.09.27	2017.12.27		The ending date of work on safety measures is undecided.
	Chubu EPC	HAMAOKA-3	BWR	1,100	1987	35	Outage (2010.11.29～)	2015.06.16			
		HAMAOKA-4	BWR	1,137	1993	29	Outage (2011.05.13～)	2014.02.14			
		HAMAOKA-5	ABWR	1,380	2005	18	Outage (2011.05.14～)				
	Hokuriku EPC	SHIKA-1	BWR	540	1993	29	Outage (2011.03.01～)				
		SHIKA-2	ABWR	1,358	2006	16	Outage (2011.03.11～)	2014.08.12			
	Kansai EPC	MIHAMA-3	PWR	826	1976	46	Operable	2015.03.17	2016.10.05	2021.07.27	NRA approved a beyond 40-year operating license for Mihama-3 on November 16, 2016. It was shut down on October 23, 2021, for a periodic inspection. Mihama-3 resumed power generation on September 1, 2022 and started commercial operation on September 26, 2022. SSF for Mihama-3 has been available since July 28, 2022. (The deadline of installation of SSF for Mihama-3 was October 25, 2021. The original schedule of resuming power generation was August 12, 2022, but had been delayed due to the leakage of water at the auxiliary reactor building.)
		TAKAHAMA-1	PWR	826	1974	48	Outage (2011.01.10～)	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 on September 18, 2020. The work on safety measures for Takahama-2 was completed on January 31, 2022. The deadline of installation of SSFs for Takahama-1 & 2 was June 9, 2021. SSF of Takahama-1 will be available around May 2023, and that of Takahama-2 will be around June 2023. Takahama-1 is scheduled to resume power generation on June 3, 2023, and Takahama-2 will be on July 15, 2023.
		TAKAHAMA-2	PWR	826	1975	47	Outage (2011.11.25～)	2015.03.17	2016.04.20		
		TAKAHAMA-3	PWR	870	1985	38	Operable	2013.07.08	2015.02.12	2016.02.26	Takahama-3 was shut down on March 1, 2022, for a periodic inspection. It resumed power generation on July 26, 2022 and started commercial operation on August 19, 2022. It also started a special inspection to prepare for the application of a beyond 40-year operating license on September 22, 2022, and ended on November 17, 2022. Kansai EPC decided to apply for the extension of operating license of a beyond 40 years on November 25, 2022.
		TAKAHAMA-4	PWR	870	1985	37	Operable	2013.07.08	2015.02.12	2017.06.16	Takahama-4 was shut down on June 8, 2022, for a periodic inspection, and started a special inspection to prepare for the application of a beyond 40-year operating license on September 22, 2022, and ended on November 17, 2022. Kansai EPC decided to apply for the extension of operating license of a beyond 40 years on November 25, 2022. Resumption of operations postponed on October 21, 2022, due to the pressurizer defect. It resumed power generation on November 6, 2022 and started commercial operation on December 1, 2022. It has been suspended since January 30, 2023, due to a rapid decrease in the number of neutrons.
		OHI-3	PWR	1,180	1991	31	Operable	2013.07.08	2017.05.24	2018.04.10	Ohi-3 was shut down on August 23, 2022, for a periodic inspection, due to the deadline of the installation of SSF on August 24, 2022. SSF was available on December 8, 2022. Ohi-3 resumed power generation on December 18, 2022 and started commercial operation on January 12, 2023.
		OHI-4	PWR	1,180	1993	30	Operable	2013.07.08	2017.05.24	2018.06.05	Ohi-4 was shut down on March 11, 2022, for a periodic inspection. Ohi-4 resumed power generation on July 17, 2022 and started commercial operation on August 12, 2022. SSF was available on August 10, 2022.
	Chugoku EPC	SHIMANE-2	BWR	820	1989	33	Outage (2012.01.27～)	2013.12.25	2021.09.15		Work on safety measures will be completed in FY 2023.
	Shikoku EPC	IKATA-3	PWR	890	1994	28	Operable	2013.07.08	2015.07.15	2016.09.07	Ikata-3 resumed power generation on December 6, 2021 and started commercial operation on January 24, 2022.
	Kyushu EPC	GENKAI-3	PWR	1,180	1994	28	Operable	2013.07.12	2017.01.18	2018.05.16	Genkai-3 was shut down on January 21, 2022, for a periodic inspection. The deadline of installation of SSF for Genkai-3 is August 24, 2022. SSF was available on December 5, 2022. It resumed power generation on December 12, 2022, and started commercial operation on January 10, 2023.
		GENKAI-4	PWR	1,180	1997	25	Operable	2013.07.12	2017.01.18	2018.07.19	Genkai-4 was shut down on April 30, 2022. It resumed power generation on July 13, 2022, and started commercial operation on August 9, 2022. It was shut down on September 12, 2022, for a periodic inspection, due to the deadline of the installation of SSF on September 13, 2022. SSF was available on February 2, 2023. It will resume power generation on February 9, 2023, and will start commercial operation in early March 2023.
		SENDAI-1	PWR	890	1984	38	Operable	2013.07.08	2014.09.10	2015.09.10	Sendai-1 was shut down on October 17, 2021, for a periodic inspection. It resumed power generation on December 20, 2021 and started commercial operation on January 17, 2022. Kyushu EPC applied to NRA for a beyond 40-year operating license renewal on October 12, 2022.
		SENDAI-2	PWR	890	1985	37	Operable	2013.07.08	2014.09.10	2015.11.17	Sendai-2 was shut down on February 21, 2022, for a periodic inspection. It resumed power generation on June 13, 2022, and started commercial operation on July 11, 2022. Kyushu EPC applied to NRA for a beyond 40-year operating license renewal on October 12, 2022.
	Total	33 units		33,083				25 units	17 units	10 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 of draft review report, 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.

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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			

	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 2040.
	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 in December 2011.)
		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)