Review on Conformity to the New Regulatory Requirements Output Commercial Owner Plant Name Reactor Type Current Status Age Official approval Application by Restart of MWe Operation operator by NRA commercial operation 1,100 TOKAI-2 46 Outage (2011.03.11~) BWR 1978 2014.05.20 2018.09.26 JAPC Not permitted by Outage (2011.05.07~) **TSURUGA-2** PWR 1,160 1987 37 2015.11.05 NRA (2024.11.13) TOMARI-1 579 35 Outage (2011.04.22~) PWR 1989 2013.07.08 TOMARI-2 PWR 1991 33 Outage (2011.08.26~) Hokkaido EPC 579 2013.07.08 TOMARI-3 PWR 912 2009 15 Outage (2012.05.05~) 2013.07.08 **ONAGAWA-2** BWR 825 1995 29 Operable 2013.12.27 2020.02.26 2024.12.26 Tohoku EPC Outage (2011.03.11~) **ONAGAWA-3** BWR 825 2002 22 HIGASHIDORI-1 BWR 1,100 2005 19 Outage (2011.02.06~) 2014.06.10 **KASHIWAZAKI KARIWA-1** BWR 1,100 1985 39 Outage (2011.08.06~) 34 **KASHIWAZAKI KARIWA-2** BWR 1,100 1990 Outage (2007.07.05~) **KASHIWAZAKI KARIWA-3** BWR 1,100 1993 31 Outage (2007.07.16~) **KASHIWAZAKI KARIWA-4** BWR 1,100 1994 30 Outage (2007.07.16~) TEPCO **KASHIWAZAKI KARIWA-5** BWR 1,100 1990 34 Outage (2012.01.25~) **KASHIWAZAKI KARIWA-6** ABWR 1.356 1996 28 Outage (2012.03.26~) 2013.09.27 2017.12.27 1,356 27 **KASHIWAZAKI KARIWA-7** ABWR 1997 Outage (2011.08.23~) 2013.09.27 2017.12.27 1987 37 HAMAOKA-3 BWR 1,100 Outage (2010.11.29~) 2015.06.16 31 Chubu EPC HAMAOKA-4 BWR 1,137 1993 Outage (2011.05.13~) 2014.02.14 HAMAOKA-5 ABWR 1,380 2005 19 Outage (2011.05.14~) 540 1993 31 SHIKA-1 BWR Outage (2011.03.01~) Hokuriku EPC SHIKA-2 ABWR 1,358 2006 18 Outage (2011.03.11~) 2014.08.12 OP MIHAMA-3 PWR 826 1976 48 Operable 2015.03.17 2016.10.05 2021.07.27 TAKAHAMA-1 PWR 826 1974 50 2015.03.17 2016.04.20 2023.8.28 Operable **TAKAHAMA-2** PWR 826 1975 49 2015.03.17 2016.04.20 2023.10.16 Operable TAKAHAMA-3 870 2013.07.08 2016.02.26 PWR 1985 40 2015.02.12 Operable Kansai EPC **TAKAHAMA-4** PWR 870 1985 39 2013.07.08 2015.02.12 2017.06.16 Operable OHI-3 PWR 1,180 1991 33 Operable 2013.07.08 2017.05.24 2018.04.10 2017.05.24 OHI-4 31 2013.07.08 PWR 1.180 1993 Operable 2018.06.05 Chugoku EPC SHIMANE-2 BWR 820 1989 35 2013.12.25 2021.09.15 2025.01.10 Operable 10.2025. Shikoku EPC IKATA-3 PWR 890 1994 30 Operable 2013.07.08 2015.07.15 2016.09.07 **GENKAI-3** PWR 1,180 1994 30 Operable 2013.07.12 2017.01.18 2018.05.16 **GENKAI-4** PWR 1,180 1997 27 2013.07.12 2017.01.18 2018.07.19 Operable Kyushu EPC SENDAI-1 PWR 890 1984 40 2013.07.08 2014.09.10 2015.09.10 Operable SENDAI-2 890 2013.07.08 2014.09.10 PWR 1985 39 Operable 2015.11.17 Total 33 units 33.083 25 units 17 units 14 units

Current Status of Nuclear Power Plants in Japan

《Restart of shutdown NPPs》

NRA (estat ed 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. Nuclear operator will be required to make a technical evaluation of reactor deterioration at the 30th year of operation and every ten years thereafter, and issue a long-term facility management plan

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NRA approved a beyond 40-year operating license for Tokai-2 on November 7, 2018. Work on safety measures cluding the installation of specialized safety facility (SSF) will be completed in December 2026. On August 28, 2024, NRA approved a draft of a review report regarding a safety examination of Tsuruga-2, saying the reactor does not meet regulatory standards

Onagawa-2 resumed power generation on November 15, 2024 and started commercial operation on Decembe 26 2024

The ending date of work on safety measures is undecided.

Fuel loading was completed on April 26, 2024. A Series of checks of the soundness of major equipment was arried out by June 12, 2024. The timing for restarting is undecided

NRA approved a beyond 40-year operating license for Mihama-3 on November 16,2016. SSF was available or July 28, 2022. Mihama-3 was shut down on October 25, 2023, for a periodic inspection. It resumed power generation on January 20, 2024, and started commercial operation on February 14, 2024. It shut down or October 15, 2024, due to reduction in the wall thickness of the seawater system return main pipe of the device used to cool the primary cooling water. It resumed power generation on November 21, 2024.

NRA approved a beyond 40-year operating license for Takahama-1 & -2 on June 20, 2016. SSF was available on July 14 and August 31, 2023, respectively. NRA approved long-term facility management plans for Takahama-2 on December 16, 2024. Takahama-1 was shut down on June 2, 2024, for a periodic insp resumed power generation on August 28, 2024. It started commercial operation on September 24, 2024. Takahama-2 was shut down on November 6, 2024 for a periodic inspection. It is scheduled to start com operation in early March 2025.

NRA approved a beyond 40-year operating license for Takahama-3 on May 29, 2023 and long-term facility management plans for Takahama-3 on January 17, 2024. SSF was available on December 11, 2020. Takahama-3 was shut down on September 18, 2023, for a periodic inspection. It started commercial operation on January 23, 2024. NRA approved a beyond 40-year operating license for Takahama-3 on May 29, 2024.

NRA approved a beyond 40-year operating license for Takahama-4 on May 29, 2023 and long-term facility management plans for Takahama-4 on January 17, 2024. SSF was available on March 25, 2021. Takahama-4 was shut down on December 16, 2023, for a periodic inspection. The damage of SG tube was confirmed or January 22, 2024. It started to resume power generation in April 26. It started commercial operation on May 21, 2024. NRA approved a beyond 40-year operating license for Takahama-4 on May 29, 2024.

SSF was available on December 8, 2022. NRA approved long-term facility management plans for Ohoi-3 on June 26, 2024. Ohi-3 was shut down on February 10, 2024, for a periodic inspection. It resumed powe generation on April 7, 2024 and started commercial operation on May 2, 2024. NRA approved long-term facility nanagement plans for Ohi-3 on June 26, 2024.

SSF was available on August 10, 2022. NRA approved long-term facility management plans for Ohoi-4 on June 26, 2024, Ohi-4 was shut down on August 31, 2023, for a periodic inspection, It was shut down on Decembe 14, 2024 for a periodic inspection. It is scheduled to start commercial operation in mid March 2025. Shimane-2 resumed power generation on December 23, 2024 and started commercial operation on January

SSF was available on October 5, 2021. Ikata-3 was shut down on July 19, 2024. It resumed power generation n October 18, 2024 and started commercial operation on November 12, 2024.

SSF was available on December 5, 2022. Genkai-3 was shut down on November 10, 2023, for a periodic inspection. It resumed power generation on February 2, 2024 and started commercial operation on February 29, 2024.

SSF was available on February 2, 2023. Genkai-4 was shut down on March 27, 2024, for a periodic inspection t resumed power generation on June 3, 2024, and started commercial operation in June 28, 2024.

NRA approved a beyond 40-year operating license for Sendai-1 on November 1, 2023 and long-term facility nanagement plans for Sendai-1 on November 29, 2024. SSF was available on November 11, 2020. Sendaiwas shut down on June 14, 2024, for a periodic inspection. It resumed power generation on August 29, 2024 It started commercial operation on September 25, 2024.

NRA approved a beyond 40-year operating license for Sendai-2 on November 1, 2023 and long-term facility management plans for Sendai-2 on November 29, 2024. SSF was available on December 16, 2020. Sendai-2 was shut down on September 14, 2024, for a periodic inspection. It resumed power generation on Novembe 30, 2024 and started commercial operation on December 25,2024

Current Status of Nuclear Power Plants in Japan

	Owner Plant Name		Quitaut	Commercial			Review on Conformity to the New Regulatory Requirements				
		Plant Name	Reactor Type	Output MWe	Commercial Operation	Age	Current Status	Application by operator	Preliminary approval by NRA	Official approval by NRA]
UC	J-power	ОНМА	ABWR	1,383	TBD	-	Under Construction	2014.12.16			Resu
Î	TEPCO	HIGASHIDORI-1	ABWR	1,385	TBD	-	Under Construction				Stop
	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	
	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 2042.	
		HAMAOKA-2	BWR	840	2009.01.30	Decommissioning started on November 18, 2009, and to be completed in FY 2042.	
		FUKUSHIMA Daiichi-1	BWR	460	2012.04.19		
	TEPCO	FUKUSHIMA Daiichi-2	BWR	784	2012.04.19	(Decommissioning to be completed 30-40 years after the cold shutdown in December 2011.)	
		FUKUSHIMA Daiichi-3	BWR	784	2012.04.19	(Decommissioning to be completed 30-40 years after the cold shutdown in December 2011.)	
		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.	
CD	Kansai EPC	MIHAMA-1	PWR	340	2015.04.27	Decommissioning to be completed in FY 2045.	
	Kansai EPC	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 2049.	
	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)

Note
esumed construction on October 1, 2012.
topped construction after March 11, 2011.