

Nuclear Reactors in South Korea



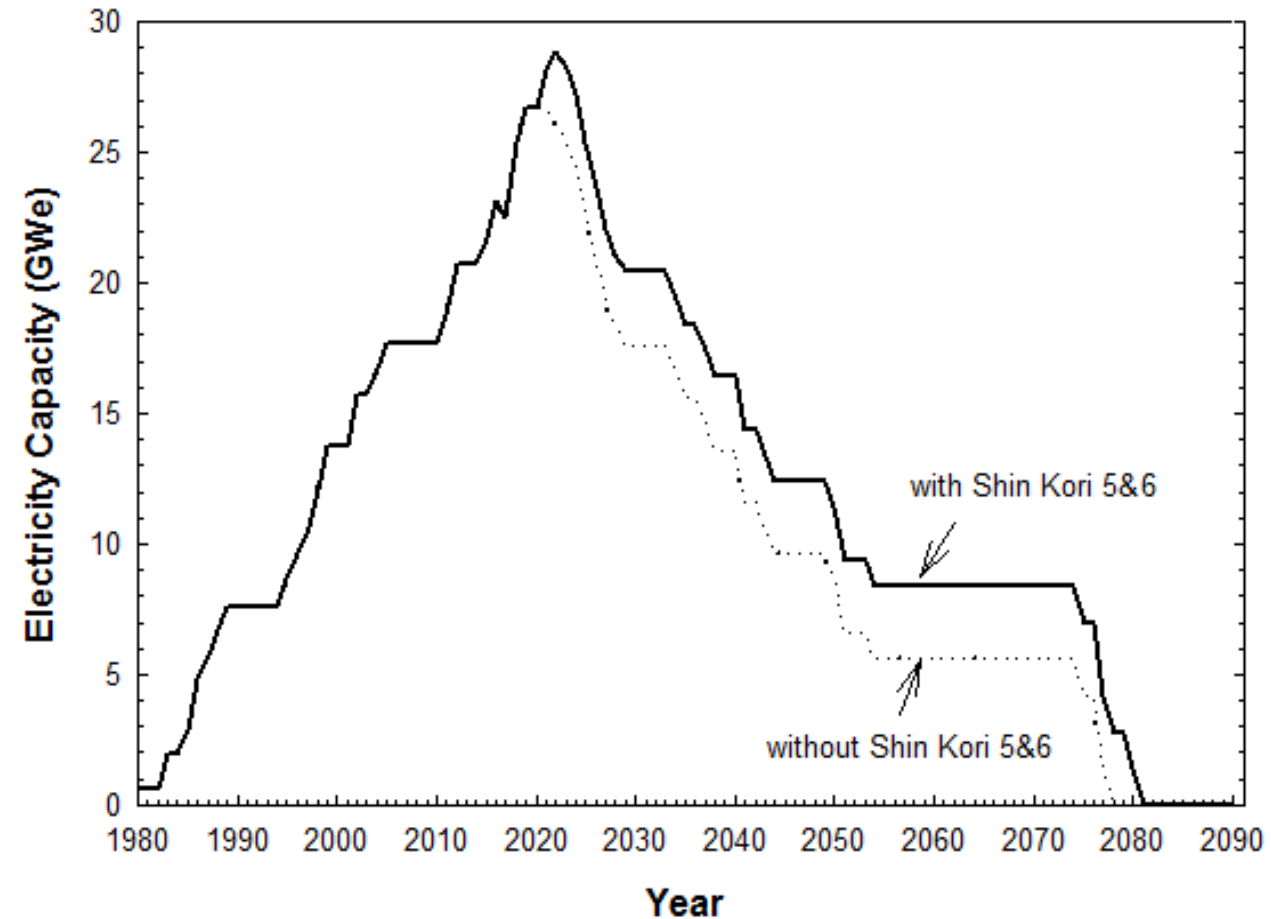
■ Operating
 ■ Under Construction
 ■ New connections to the grid
 ■ Shut-Down
 ■ Permanent Shutdown
 Source: <https://www.kaif.or.kr/eng/?c=bus&s=2>

Operational	Capacity (Mwe)	Power (Mwh/2018)	Availability (%/2018)	Capacity (%/2018)
23	21850	133,505,261	65.9	66.5

Prospects of Nuclear in South Korea

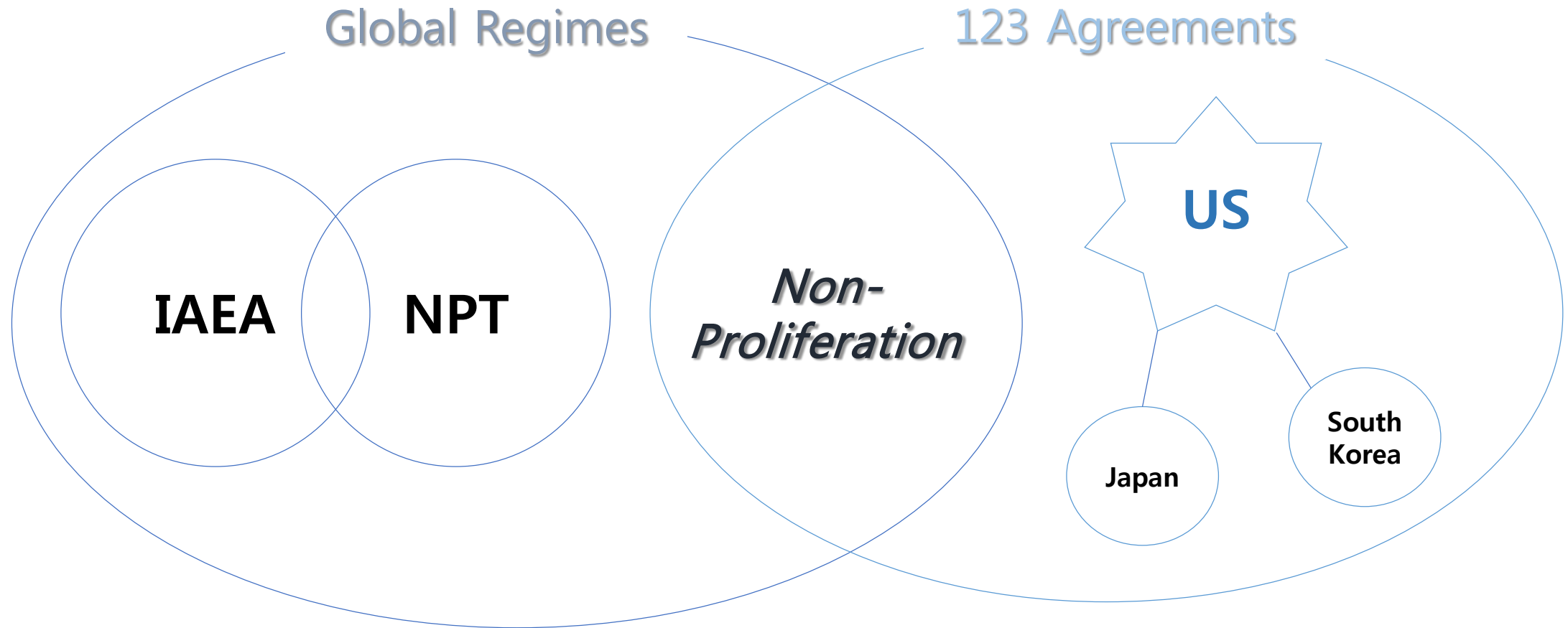
Reactor	Reactor Type	Capacity (MWe)	Operated since	To be closed
Shin Kori 4	APR-1400	1,400	2019 summer	2077
Shin Kori 5	APR-1400	1,400	2022/03	2080
Shin Kori 6	APR-1400	1,400	2023/03	2081
Shin Hanul 1	APR-1400	1,400	2018/12	2077
Shin Hanul 2	APR-1400	1,400	2019/10	2078

Source. World Nuclear Association and KHNP's Websites



Source. Kang Jung-min's calculation (2017)

Global Nuclear Governance and the US



123 Agreements and SNF Policies

Table 1. The List of US' Cooperation Partners Who Hold 123 Agreements

COUNTRY	Entry into Force	Expiration Dates	Note
Argentina	16-Oct-1997	16-Oct-2027	
Australia	22-Dec-2010	22-Dec-2040	with rolling 5-year extensions
Brazil	15-Sep-1999	15-Sep-2029	
Canada	21-Jul-1955	01-Jan-2030	with rolling 5-year extensions
China	29-Oct-2015	29-Oct-2045	
Egypt	29-Dec-1981	29-Dec-2021	
EURATOM*	12-Apr-1996	12-Apr-2026	with rolling 5-year extensions
IAEA	07-Aug-1959	07-Aug-2054	
India	06-Dec-2008	06-Dec-2048	with rolling 10-year extensions
Indonesia	30-Dec-1981	30-Dec-2031	
Japan	17-Jul-1988	17-Jul-2018	Remains in force until terminated by a Party
Kazakhstan	05-Nov-1999	05-Nov-2029	
South Korea	25-Nov-2015	25-Nov-2040	
Morocco	16-May-1981	16-May-2021	with rolling 5-year extensions
Norway	19-Jan-2017	19-Jan-2047	
Russia	11-Jan-2011	11-Jan-2041	
South Africa	04-Dec-1997	04-Dec-2022	
Switzerland	23-Jun-1998	23-Jun-2028	with rolling 5-year extensions
Taiwan**	22-Jun-2014	Indefinite	
Turkey	02-Jun-2008	02-Jun-2023	with rolling 5-year extensions
Ukraine	28-May-1999	28-May-2029	
United Arab Emirates	17-Dec-2009	17-Dec-2039	

Table 2. Variations among Nuclear Countries in Asia

COUNTRY	123 AGREEMENT	SNF POLICY	NPT
Bangladesh	No (Expired in 2012)	Not clear yet	Yes
China	Yes	Reprocessing	Yes
India	Yes	Reprocessing	No
Indonesia	Yes	Not clear yet	Yes
Japan	Yes	Reprocessing	Yes
Kazakhstan	Yes	Not clear yet	Yes
Malaysia	No	Not clear yet	Yes
Pakistan	No	Open to reprocessing	No
Philippines	No	Not clear yet	Yes
Saudi Arabia	No	Not clear yet	Yes
South Korea	Yes	Wait-and-see policy (Open to future recycling)	Yes
Taiwan	Yes	Direct disposal (in principle) but open to overseas reprocessing	No
Thailand	Yes	Not clear yet	Yes
UAE	Yes	Dual track (developing a national storage and disposal programme in parallel with exploring regional cooperation options)	Yes
Vietnam	Yes	Not clear yet	Yes

Source. Eunjung Lim (2019) "Expected Changes in Nuclear Governance and Suggestions for the Trilateral Cooperation", Paper Presented at the ISA Asia-Pacific Conference 2019, Singapore