## **Ages of US Nuclear Power Plants\* at Closure**

<u>Plant</u>	Shutdown Date	Age	<u>Reason/notes</u>	
<b>Connecticut Yankee</b>	Dec., 1996	29 yrs	Steam tube damage, ECCS undersized	
Millstone I (CT)	July, 1998	28 yrs	Improper operation Cost of safety improvements	
Maine Yankee	August, 1997	25 yrs	Steam generator tube damage Electrical power cable separation	
Yankee Rowe (MA)	October, 1991	28 yrs.	Reactor vessel embrittlement Steam generator tube damage	
Indian Point I (NY)	Oct., 1974	12 yrs.	Lack of an Emergency Cooling System	
Shippingport (PA)	Oct., 1982	35 yrs	1 <sup>st</sup> commercial plant in US	
Peach Bottom I (PA)	Nov., 1974	7 yrs.	Helium cooled graphite core	
Three Mile Island II (PA)	March, 1979	4 mos.	Partial meltdown!	
Dresden I (IL)	Oct., 1978	18 yrs.	1 <sup>st</sup> full scale private funded plant	
Zion I (IL)	Feb., 1997	22 yrs.	Steam generator tube cracking, poor operation	
Zion II (IL)	Nov., 1996	22 yrs.	Steam generator tube cracking	
<b>Big Rock Point (MI)</b>	Aug., 1997	35 yrs.	Economics	
Fermi I	Sept., 1972	2 yrs.	Partial meltdown, 1966! Restarted (?) 1970-72	
La Crosse (WI)	April, 1987	17 yrs.	Economics	
Fort St. Vrain (CO)	Aug., 1989	10 yrs.	Helium cooled graphite core Control rod failure, never dependable	
Trojan I (OR)	Nov., 1992	16 yrs.	Steam generator cracking, economics	
San Onofre I (CA)	Nov., 1992	25 yrs.	Cost of seismic retrofit Steam generator tube cracking	
San Onofre II/III (CA)	January, 2012	30/29 yrs.	Steam generator tube cracking	
Humbold Bay (CA)	July, 1976	17 yrs.	2 <sup>nd</sup> oldest commercial plant	
Rancho Seco (CA)	June, 1989	15 yrs.	Poor operating history (39% capacity) Only nuke plant closed by referendum	
Kewaunee (WI)	May, 2013	39 yrs.	Economics	
Crystal River 3 (FL)	Sept., 2009	33 yrs.	Steam generator, containment cracking	

\* Includes **only** commercial plants of significant size shut down **prior** to initial license expiration (40 years)

## **Oldest Operating U.S. Nuclear Plants**

<u>Plant</u>	<u>Start Date</u>	Age	Issues
Nine Mile Pt. I	Dec., 1969	54 yrs.	Oldest running in US Internal cracking (worst nationally) Cooling system malfunctions
R.E. Ginna (NY)	June, 1970	53 yrs.	Radiation release in 1982; Steam generators replaced
Dresden II (IL)	June, 1970	53 yrs.	Cooling system failure, 1989
Point Beach I (WI)	Dec., 1970	53 yrs.	2 <sup>nd</sup> oldest in total hours run
H.B. Robinson (SC)	March, 1971	52 yrs.	Fined by NRC in 1997, 2004
Monticello (MN)	June, 1971	52 yrs.	GE mark I (Fukushima type) "Safety culture" issues

U.S. Commercial Plants Operating by/before 1973 = 38. Number of these still operating/43+ yrs. = 19 (50%)

## **Other Oldest Reactors around the World**

Beznau 1 (Switzerland)	1969	54 yrs.	Offline 2015-18. Decomm. target is 2029
Tarapur I/II (India)	1969	54 yrs.	Fukushima-type GE reactor
Pickering (Canada)	1971	52 yrs.	Slated for closure in 2024
Karachi I (Pakistan)	1972	48 yrs. (at shutdown)	Shut downs 2003, 2006 Closed 2021
Novovoronezh 4 (Russia)	1973	50 yrs.	
Calder Hall (UK)	1953	47 yrs. (at shutdown)	military/commercial

## Sources:

US Energy Info Administration: <u>http://www.eia.gov/cneaf/nuclear/page/nuc\_reactors/shutdown.html</u> Wikipedia: <u>http://en.wikipedia.org/wiki/List\_of\_nuclear\_reactors - Power\_station\_reactors\_19</u> Nuke plants list: <u>http://www.animatedsoftware.com/environm/no\_nukes/nukelist1.htm</u> Compiled by Doug Bogen, updated 12/2023 Seacoast Anti-Pollution League PO Box 1136, Portsmouth, NH 03802 603-431-5089