

History of Microreactors in DOD Army Nuclear Power Program (1954– 1977)

- **Goal: Develop reactors for remote and isolated sites.**
- **Largely scaled-down version of technologies used for large reactors**
- **Objectives:**
 - Reduction or elimination of dependence on fuel sources
 - Reduction or elimination of logistics necessary for conventional power plants
 - Reliable operation
 - Limited refueling and maintenance
 - Reduced crew size, with goal of unattended operation
 - Transportability, mobility, and reaction times compatible with mission or equipment supported
 - Improved cost-effectiveness
- **Cost and reliability issues prevented these reactor designs from meeting Army’s needs**

Reactor			Operation	
Name	Type	T/E (MW)	Start	Shut
SL-1	BWR		1958	1961*
SM-1	PWR	10/1.85	1957	1973
ML-1	DGCR (N2)	3.4/0.33	1962	1966
SM-1A	PWR	20/1.6	1962	1972
PM-1	PWR	9.5/1	1962	1968
PM-2A	PWR	10/1.6	1961	1964
PM-3A	PWR	9.3/1.5	1962	1972
MH-1A	PWR	45/10	1965	1977

