Table 21 · Moving Down the New-Build Cost Curve: What Is 'N'?

Reactor Type	Claimed Lot Size for NOAK	Projected Improvement
French (P4 series); South Korean (OPR-1000 reactor series)	10 reactors or more consecutively [a]	25% reduction in overall costs
Advanced nuclear reactors (U.S.)	10-20 reactor deployments [b]	Reduction of OCC from >US$10,000/kWe to US$3,600/kWe
Gen IV	Next plant after 8 GWe constructed; for fuel fabrication and reprocessing, 32 GWe for each reactor type [c]	
SMRs	At least 10 to 15 projects, i.e. between 3 GW and 4.5 GW of capacity for standard 300-MW modules [d]	
	Rolls-Royce, 470 MW SMR [e] 5 to 10 units	18% drop in total costs Business case based on "selling many hundreds" by 2050
	NuScale marketing targets are for between 56 and 140 "12-packs" by 2042 [f]	
	Production runs of hundreds or thousands of units [g]	

Sources: (a) MIT, 2022;[1552] (b) U.S. DOE, 2023;[1553] (c) Gen IV International Forum, 2007;[1554] (d) Wood Mackenzie, 2023;[1555] (e) Rolls-Royce, 2021; and Sampson, 2022;[1556] (f) Rothwell, 2022;[1557] (g) Glaser et. al., 2022[1558]

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