



**NUCLEAR POWER PLANT - MAJOR CATEGORY CONSTRUCTION COST BENCHMARKS –  
US Dollar Cost per kW | Power Plant Rating 750 MW to 1,400 MW | 2023 USA South East - Location**

REF	DESCRIPTION	\$ COST	% OF TOTAL
1	General Equipment / Nuclear Generation Island	1,507	22.7%
2	Site Work, Civil, Piling, Roads & Buildings	535	8.1%
3	Structural Steel / Exterior Enclosure	385	5.8%
4	Piping (Above & Below Ground)	463	7.0%
5	Electrical Work / Instrumentation - Controls & Switchyard	470	7.1%
6	Insulation / Painting & Minor Work	157	2.4%
7	Balance of Plant	561	8.5%
8	Construction Labor (Average Labor Rate \$72 / Hour)	1,141	17.2%
9	Field In-Directs / Preliminaries	319	4.8%
10	Detailed Design & Procurement Services (Average Home Office Blended Engineering / Procurement Rate \$108 / Hour)	659	9.9%
11	Project Management Environmental Studies / Permitting	189	2.8%
12	Construction Management & Project Controls	123	1.9%
13	Commissioning / Capital Spare Parts	130	2.0%
<b>Total Cost per kW</b>		<b>6,639</b>	<b>100.00</b>
Low Total Cost per kW -30%		\$4,647	
High Total Cost per kW +30%		\$8,631	

The following table provides current construction benchmark costs for a Nuclear Power Plant. This benchmark can be calibrated for Canada and European countries.

The values in the table include the following:

- Item 1 Includes All Reactors, Steam Turbines / Condensers, Heat Exchangers & Pressure Vessels
- Item 2 Includes All General Excavations, Ponds, Foundations, Gatehouses, Admin / Maintenance Buildings
- Item 3 Includes All Structural Steel & Platform
- Item 4 Includes All Piping Systems & Utilities
- Item 7 Includes All Misc. Equipment & Construction Bulks

If you have any questions or comments on this report, please contact:

John G. McConville, CCP  
Operations Director – Compass International  
(609) 577-4505  
sales@compassinternational.net



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**COMPASS INTERNATIONAL**  
(215) 504-9777  
[compassinternational.net](https://compassinternational.net)  
[sales@compassinternational.net](mailto:sales@compassinternational.net)