

Notes & References

In April 2024 Georgia Power finished building the Vogtle nuclear plant at a cost of \$35 billion. The two reactors had a combined capacity of 2,228 megawatts (MW). Therefore, the cost was \$15.7 million per MW (US\$) or \$21.8 million per MW (CDN\$). The four new Darlington reactors would have a total capacity of 1200 MW. $1200 \text{ MW} \times \$21.8 \text{ million per MW} = \26.2 billion .

[Click here for more on Vogtle's \\$35 billion cost](#)

[Learn More: Vogtle's 2,228 MW capacity](#)

The Tennessee Valley Authority (TVA) is proposing to build small modular reactors (SMRs) at Clinch River, Tennessee. According to pages E-3 and E-9 of its Integrated Resource Plan 2025, (September 2024), the overnight capital cost of the first unit would be \$17,949 per kW (US\$) and \$12,471 per kW (US\$) for subsequent units. That is, according to TVA, the total overnight capital cost of a four-unit nuclear station with a capacity of 1,200 MW would be \$23.1 billion (CDN\$). Overnight cost is the total cost of a construction project if no interest charges are incurred during construction – as if the project was completed “overnight”. In fact, long-duration nuclear projects incur very significant interest charges. Therefore, their actual costs are significantly higher than their overnight costs.

[TVA's Integrated Resource Plan 2025](#)