

THE ECONOMIES OF SMALL™

The majority of the 104 commercial nuclear plants currently operating in the United States exceed 1,000 megawatts of generating capacity. That's roughly enough power to serve Seattle. NuScale's generating system fills a niche for affordable reactors scalable up to 540 megawatts.

The NuScale system captures the Economies of Small.” In brief, here's how:

Adaptable to demand. NuScale's plant can be sized to fit demand and expanded as needs dictate. This scalable approach helps avoid over-building or under-building and controls both capital and operating costs.

Less financial risk and lower capital costs. Smaller, modular, scalable plants require a significantly smaller capital investment putting less total money at risk. A 540 MWe NuScale plant is estimated to cost approximately \$2.5 billion before financing. The cost of large nuclear plants starts at \$5 billion to \$7 billion.

Easier to build. The NuScale reactor and containment is fabricated entirely in a factory and delivered to the site. That greatly simplifies construction shortening it to about 36 months. Further, there is an estimated eight-to-one productivity advantage in assembly-line manufacturing over on-site fabrication.

Siting advantages. The smaller footprint and output of a NuScale power plant gives it many siting advantages. For example, the design is ideally suited as a replacement for coal fired power plants. A new NuScale plant can use the same transmission grid and infrastructure and workforce.

Easier to operate and maintain. Relatively simple design and standardized components equate to a robust supply chain. Every NuScale component can be made in the USA. Modularity allows a plant to keep running when a given unit is down for refueling or repairs.

Safer operations. NuScale's natural convection system for circulating water makes unnecessary the large primary and backup pumps commonly found in larger plants. This simpler design means fewer things to go wrong and a more reliable response if they do.

In short, thanks to the Economies of Small™, with a NuScale plant there is:

- less to design
- less to license
- less to build
- less to operate
- less to maintain