### **NUSCALE POWER**

# THE NUSCALE POWER MODULE™ TECHNICAL SPECIFICATIONS

The NuScale Power Module design is based on proven pressurized water-cooled reactor technology and represents a 17-year and \$1.6 billion investment.



## Per Module



77 MWe (gross) Electrical Power generating capability



Capacity factor >95 percent



76' x 15' cylindrical containment vessel with reactor and steam generator



# **Technical Specifications**

Plant Operation Objective	60 years
Thermal Power (per module)	250 MWt
Electrical Power (per module)	77 MWe (gross)
Thermal Efficiency	>30 percent
Steam Generators Number	2 independent tube bundles
	integrated into reactor vessel
Configuration	Once through helical
Operating Cycle Length	18-21 months
Outage Duration	10 days
Reactor Type	Integral Pressurized Water Reactor

### **Containment Parameters:**

Design Temperature	316°C (600°F)
Design Pressure	83 bar (1200 psia)
Nominal Operating Pressure	<0.07 bar (<1 psia)
Vessel Max Diameter	4.6 m (15 ft)
Vessel Height	23.2 m (76 ft)

## **Reactor Core**

Fuel Type	UO <sub>2</sub>
Fuel Enrichment	<4.95 percent
No. of Fuel Assemblies	37 (17 x 17 pin array)
Core Height	2 m
Coolant	Light water
Primary System Parameters:	
Design Temperature	343°C (650°F)
Design Pressure	152 bar (2200 psia)
Nominal Operating Pressure	138 bar (2000 psia)
Secondary System Parameters:	
Design Temperature	343°C (650°F)
Feedwater Temperature	93°C (200°F)
Turbine Inlet Pressure	33 bar (475 psia)

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#### About NuScale Power

NuScale Power Corporation (NYSE: SMR) is the industry-leading provider of proprietary and innovative advanced small modular reactor nuclear technology, with a mission to help power the global energy transition by delivering safe, scalable, and reliable carbon-free energy. As the first and only SMR to have its design certified by the U.S. Nuclear Regulatory Commission, NuScale is well positioned to serve diverse customers across the world.