



***Blue Ribbon Commission  
on America's Nuclear Future  
Reactor & Fuel Cycle Technology Subcommittee***

B&W Nuclear Energy, Inc.

## The Babcock & Wilcox Company

### Government Operations

B&W Technical  
Services Group, Inc.



B&W Nuclear  
Operations Group,  
Inc.



### Power Generation Systems

B&W Power  
Generation Group,  
Inc.



B&W Nuclear Energy,  
Inc.



***50+ years of continuous nuclear engineering and manufacturing***

***12,000 nuclear professionals***

***Only U.S. company with N-Stamp for NSSS vessel manufacturing***

***Fabricated >1,100 NSSS components and pressure vessels***

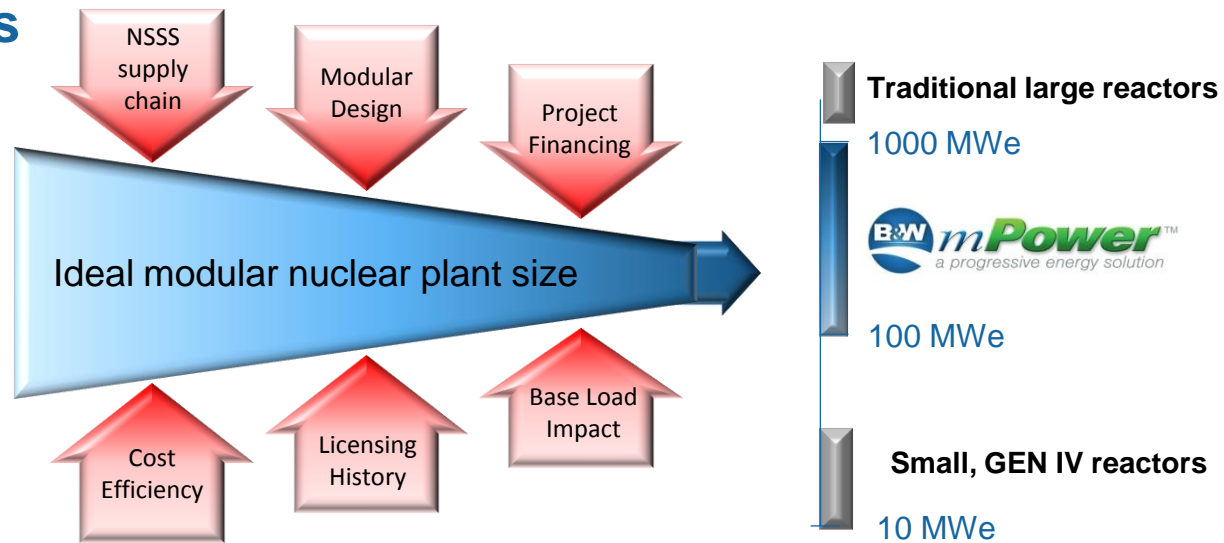
***Manufactured approximately 300 steam generators worldwide***

***U.S. nuclear manufacturing in Indiana, Ohio, Virginia***

# A Shifting Nuclear Landscape

## Geopolitical Motivators

- Climate Change legislation
- Energy independence
- Strained supply chain
- Field craft labor availability
- Transmission capacity
- Water and land rights
- Tight capital markets



*One size does not fit all ...*

# Today's Nuclear New Build Imperatives

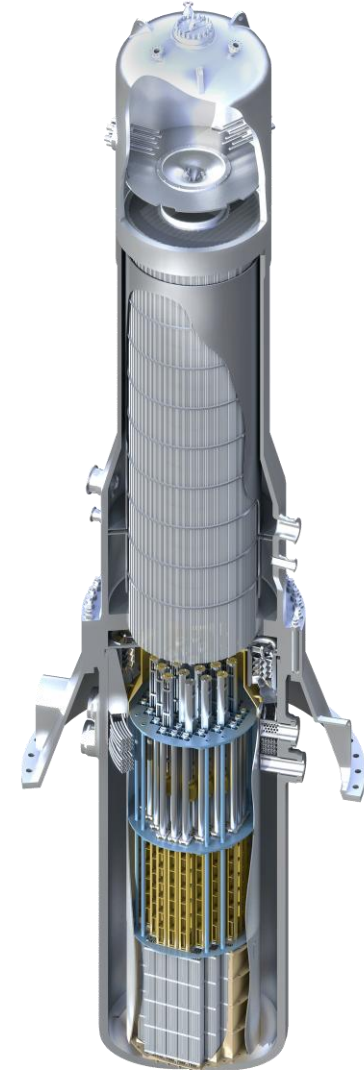
- Don't "bet the company" on one project
- **Practical, proven technology**
- **Utilize existing nuclear infrastructure**
- "Repower" carbon-intensive facilities
- Incremental power additions





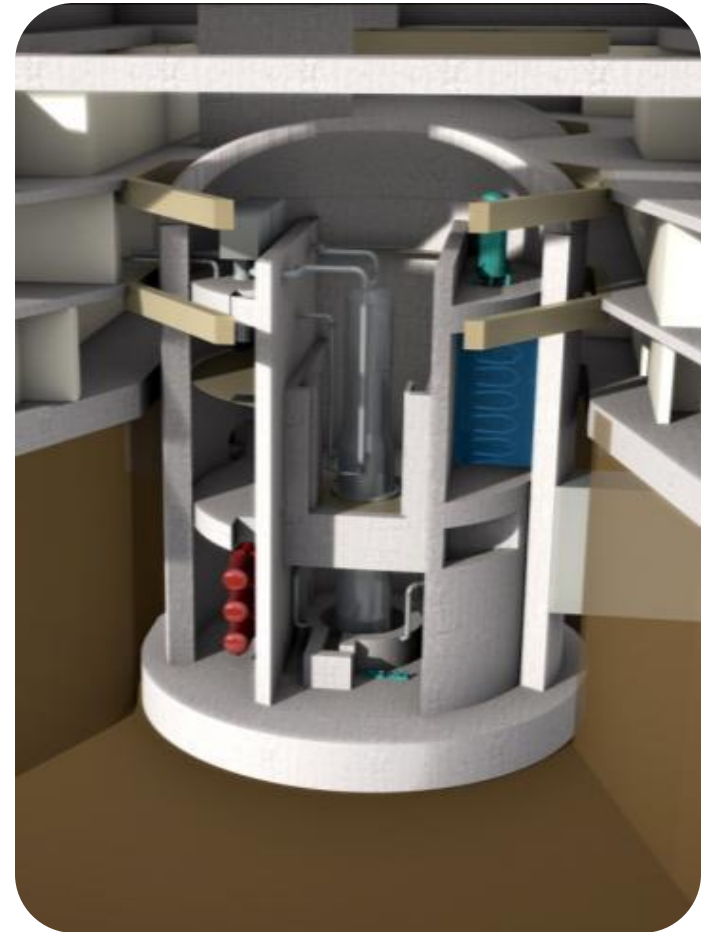
# A Generation III++ Reactor

- Integral 125 MWe modular reactor
- Proven Advanced Light Water Reactor technology
- Simple, passively safe design
- Utilizes “industry standard” PWR fuel
- 48+ month operating cycle between refueling
- Flexibility to accommodate advanced fuels
- Built in North America, in B&W factories



# Nuclear Island Features

- Underground nuclear island
- Enhanced security features
- No active core cooling systems
- Passive decay heat removal
- No emergency AC power – batteries only
- Factory-assembled reactor system
- Air-cooled condenser
- **Spent fuel storage for 60-year plant life**



*Simple integrated safety features*

# The Future of Light Water Reactor Technology

## Building on success ...

- Exceptional LWR plant performance delivering competitive economics
- Generally strong public support for operating fleet, technology “comfort”
- Ready now to provide low-risk, carbon-free, base-load power
- Emerging options for better deployment economics (SMRs, etc)

## A realistic, evolutionary, path forward ...

- Industry “mid term” commitment to LWR-based nuclear generation
- Continued reliance on fundamental LWR fuel technology
- Careful adoption of advanced fuels into deployed fleet
- “Long-term” transition to Gen-IV designs, paced by maturity

## Clear implications for Federal action ...

- Support for near-term SMR deployment
- Long-term accommodation of LWR fuel utilization