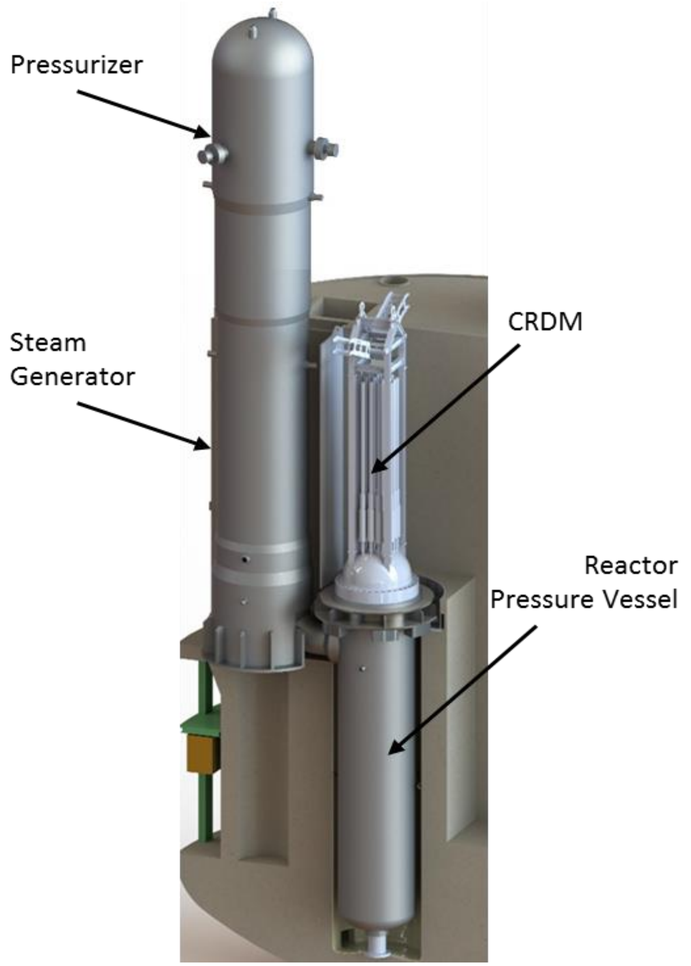
www.holtec.com
www.smrllc.com

Holtec SMR-160 Technology

Safe, Secure, Reliable, Flexible, Economical

Clean Energy to Support the World's Energy Needs



January 2022

Richard M. Springman
Senior Vice President of International Projects

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Holtec Proprietary Information

SMR-160… A natural progression for Holtec's technology portfolio started over 10 years ago…

Heat Transfer Equipment

Designer and manufacturer of heat transfer equipment with projects in over 35 countries

Horizontal Steam Generator

Air Cooled Condensers

NSSS and BOP Equipment Design

Spent Fuel and Waste Management

Over 40% of the world's commercial spent nuclear fuel is stored using Holtec's technologies

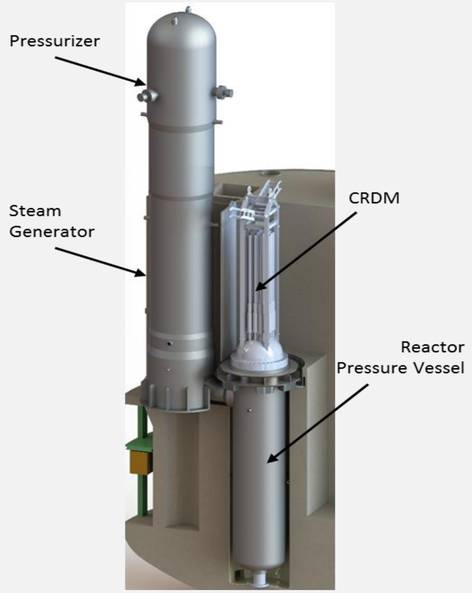
Nuclear Fuel Storage and Transport

High Capacity Fuel Storage Racks

Fuel Management, Handling, Operations

SMR-160 (160 MWe)

Development and licensing of walk-away-safe small modular reactor with passive safety



SMR-160

Manufacturing, Construction, Site Services

Three US Manufacturing Facilities and International Site Construction and Site Services Business

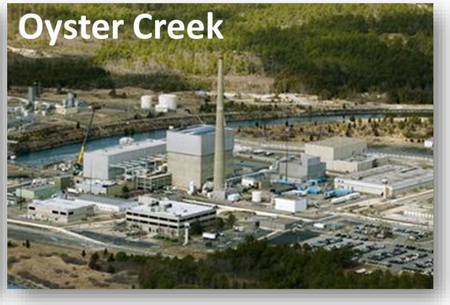
Holtec's Advanced Manufacturing Division

Holtec's Site Services and Site Construction

Design Input from Manufacturing, Construction, Site Experience

Safe, Efficient and Compliant Decommissioning

Owner and Licensee of Pilgrim, Oyster Creek, Indian Point 1-3 with 8-year decommissioning plans and Palisades acquisition pending in 2022



Part 50 License Holder, Public Engagement, Security Services, Waste, NPP Operations

SMR 160 Program Overview

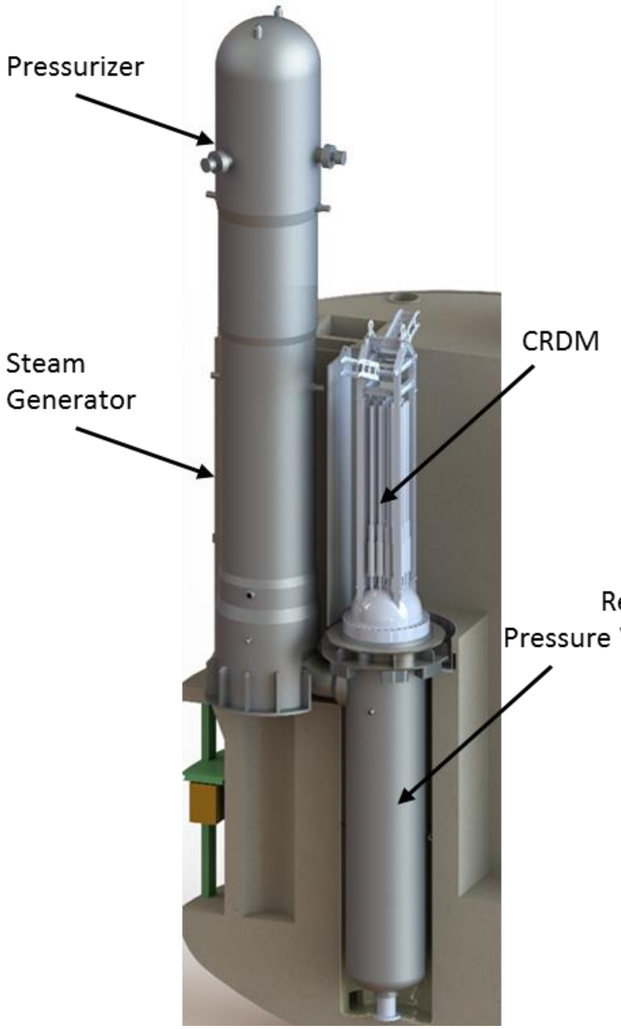
- **Holtec has been developing the SMR-160 at our own cost for 10 years**
  - ✔ 10CFR50 Program Extension to Reactor Development
  - ✔ Programs and Processes Established
  - ✔ Document Control System Enhanced and Extended
  - ✔ Candidate Design Complete
  - ✔ Advanced Manufacturing Division (AMD) for SMR-160 constructed and operational; manufacturing process testing ongoing
  - ✔ VDR Phase 1 Complete with CNSC in Canada
  - ✔ Early Engagement Process Started with USNRC (Docket No. 99902049)

- **U.S. DOE Grant for Integral & Separate Effects T/H Testing (ISET) Program Validating Passive Safety Systems with INL Award (2019)**
- **U.S. DOE Advanced Reactor Demonstration Program (ARDP) Risk Reduction Pathway Award (2020)**
  - ✔ 147.5 Million USD Program (DOE grant is 116.1 Million USD)
  - ✔ Program for Completion of the Preliminary Safety Analysis Report (PSAR)
  - ✔ Detailed Design for construction release in USA

Based on Proven LWR design; developed by a TEAM of industry leaders

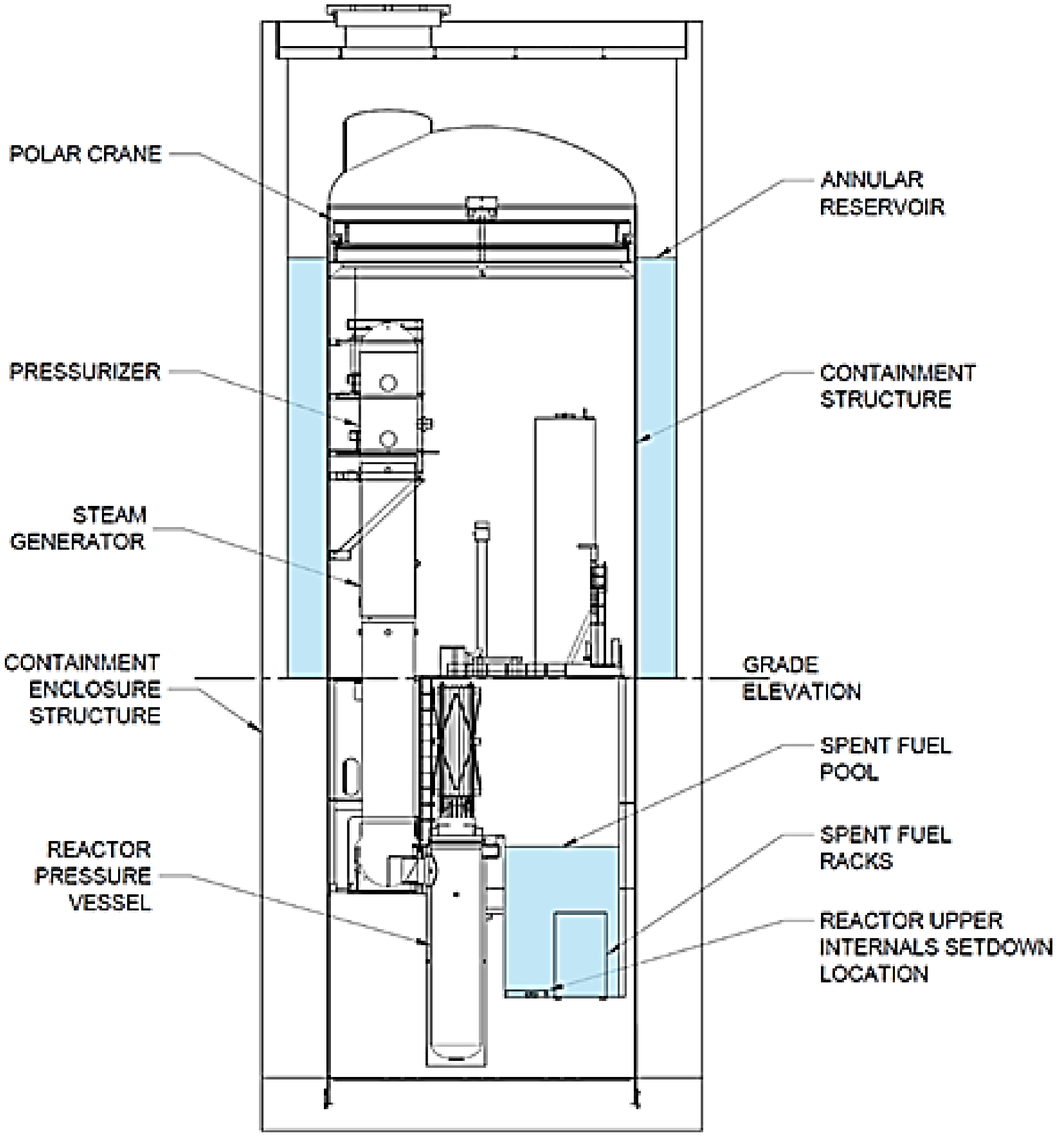
- **Design leverages seven decades of LWR operating experience**
  - ✔ Licensing effort benefits from the established body of USNRC regulations
  - ✔ A robust supply chain and globally recognized partners

- **TEAM HOLTEC consists of technology leaders in their respective fields:**
  - ✔ **Hyundai Engineering & Construction**
    - **Scope**: BOP Detailed Design, Construction, Commissioning
    - **Reference**: Constructed 18 Plants in Korea and Barakah 1-4 in UAE
  - ✔ **Kiewit**
    - **Scope**: Cooperation on Construction in North America
    - **Reference**: Constructed 70% of Combined Cycle Plants in North America and Major DOE Nuclear Facility Projects
  - ✔ **Mitsubishi Electric**
    - **Scope**: MELTAC Control System and licensing support
    - **Reference**: NRC acceptance in U.S. & proven use in Japan, China
  - ✔ **Framatome**
    - **Scope**: Fuel design and licensing support
    - **Reference**: Standard 17x17 PWR Nuclear Fuel Assembly



Essential Design Features of SMR-160

- Standard PWR Core Configuration and Fuel Design
- All NSSS components, safety systems, and Spent Fuel Pool are protected Inside Containment Structure
- Reactor Core located below Grade Elevation, reducing radiological dose
- Containment Enclosure Structure is thick steel-concrete-steel structure, resistant against accidents and sabotage
- Natural circulation for primary circuit normal operation and all conceivable accident conditions
- Containment Structure acts as large heat exchanger during LOCA
- Annular Reservoir of water provides intermediary heat-sink for emergency cooling systems with capacity to passively cool reactor under loss of power accidents *indefinitely (*1.3 MM Gallons of water)



SMR-160 Containment Enclosure Structure and Internals

SMR-160 Advantages

- **SMR-160 is “Advanced” due to Novel and Passive Safety Systems**
  - Safe shutdown is fully passive under all design basis events
  - Provides for regulatory confidence and supports public acceptance
  - A generation ahead by design…
- **Flexibility (Multi-Purpose Applications)**
  - Electricity production
  - Hydrogen production
  - Desalination
  - Process Heat
- **LWR reactor technology already deployed Globally**
  - Lower risk
  - Established technology knowledge base
  - Established supply chain
  - Established licensing basis and precedence
- **Consistent Backend Management Strategy with Operating Plants**
  - Similar waste streams and used nuclear fuel as existing LWR Units
  - Proven technologies for spent fuel and waste management already deployed Globally
- **Proven Project Delivery Team**