

NSIR AP1000 Overview





Tougher New Generation: AP1000

- Ultimately cooled by natural convection
- No vulnerability at service water intake
- No vulnerability to loss of emergency diesel generators
- No vulnerability to station black-out
- Ability to shutdown and maintain safe shutdown for > 72 hours with no operator action

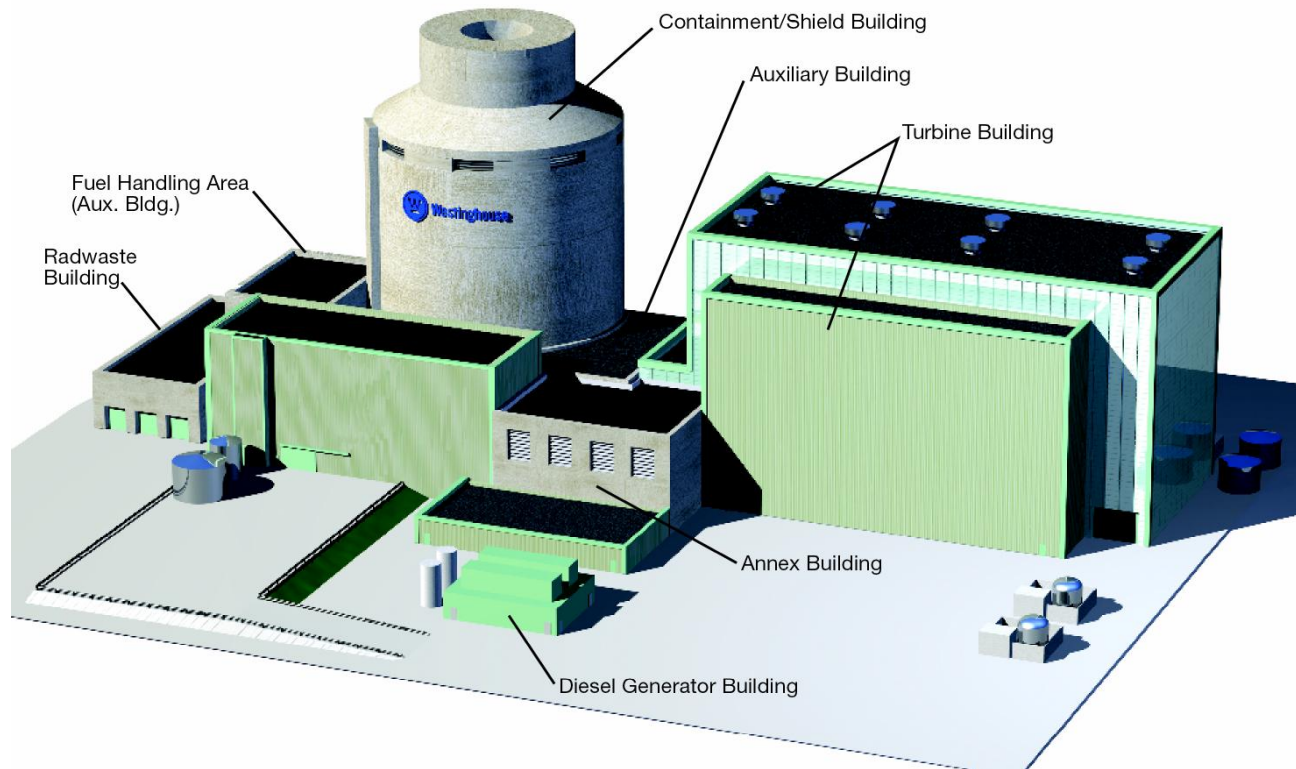


Security Considerations in Design

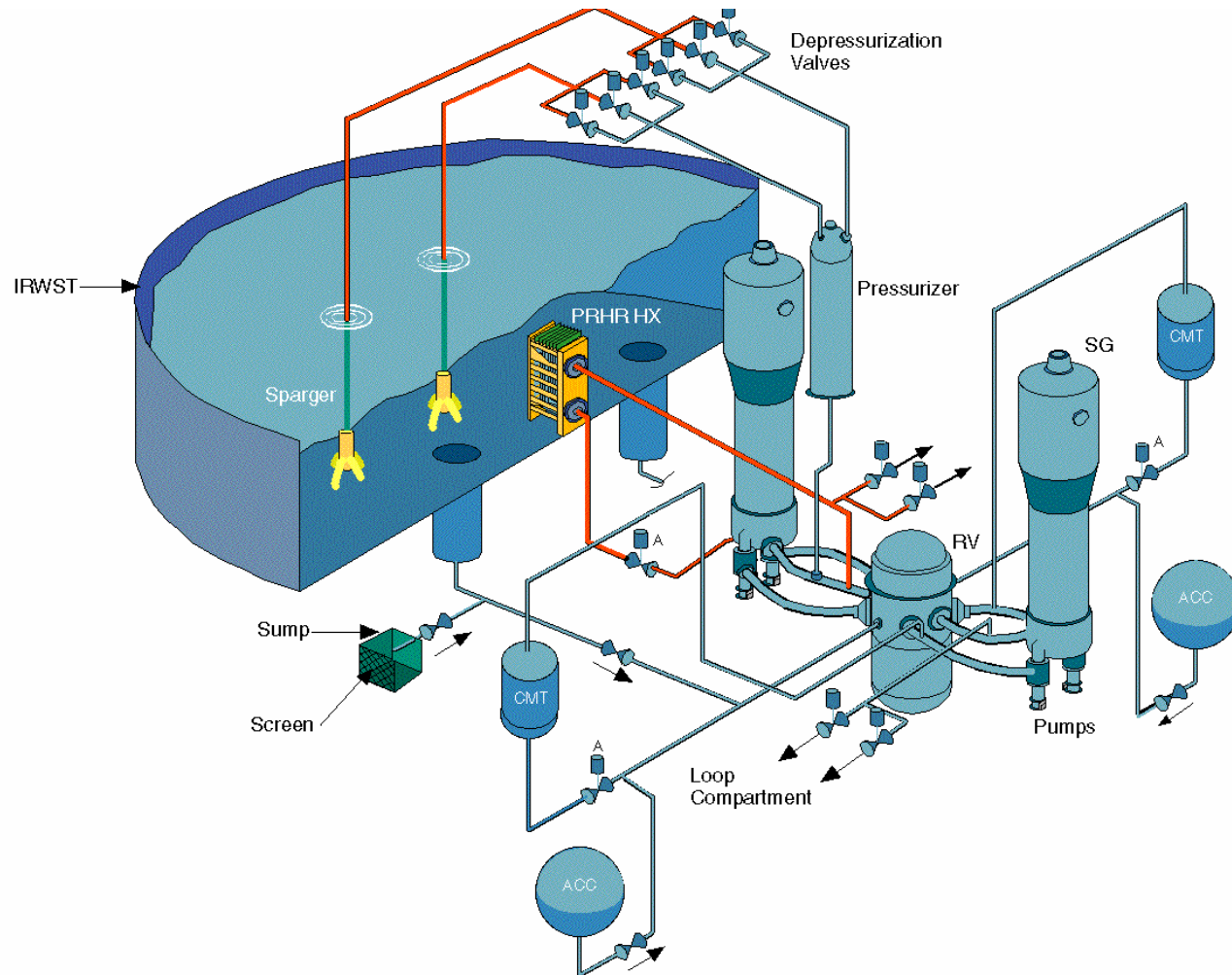
- Vital equipment is that required for maintenance of safe shutdown, and fuel storage
- AP1000 vital equipment lies within:
 - Containment/Shield building
 - Portions of auxiliary building
 - Within reinforced concrete perimeters and interior walls
- Compact plant makes it easier to monitor & control
- Access points are few, monitored, locked and alarmed.



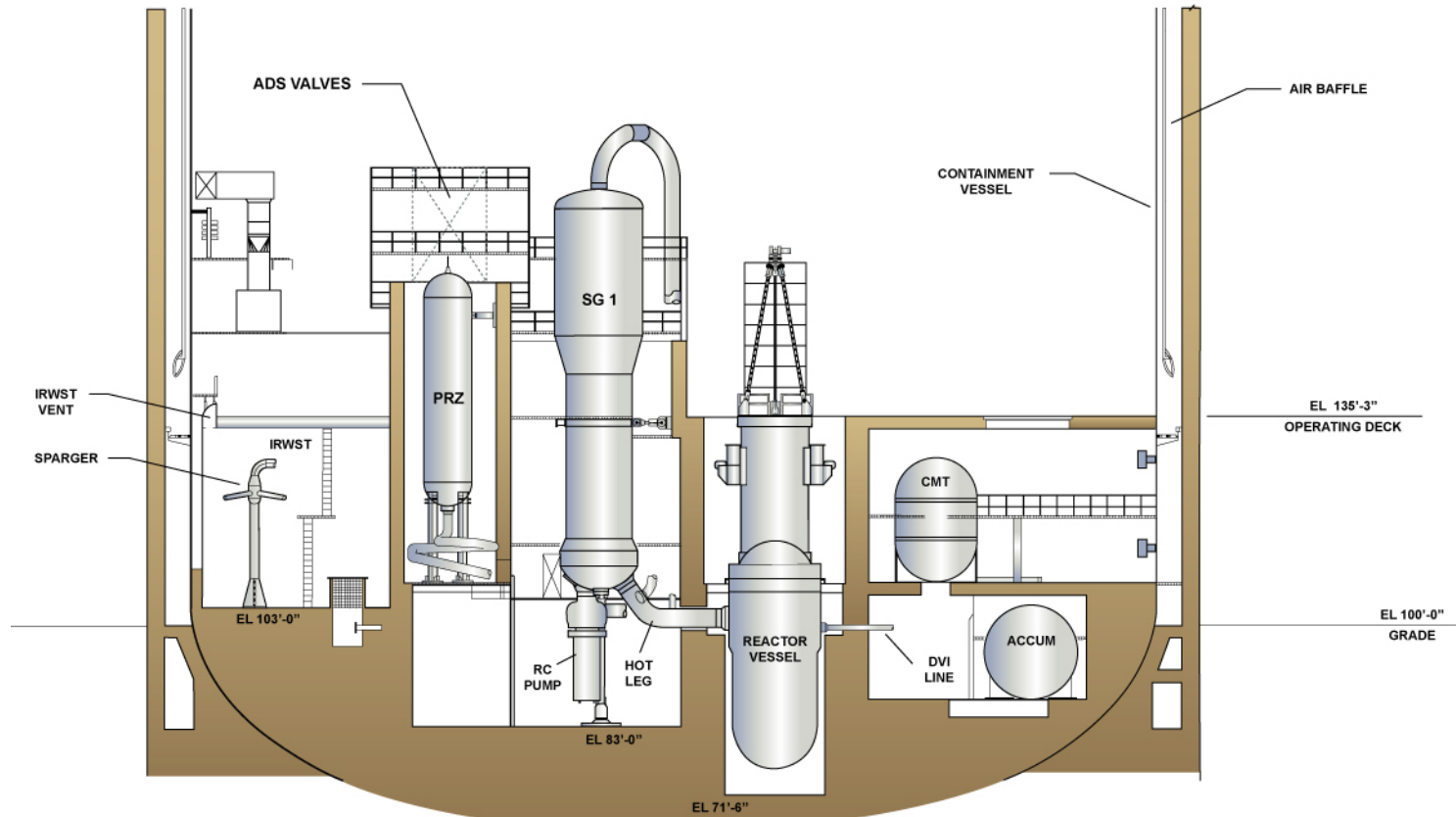
The Westinghouse AP1000



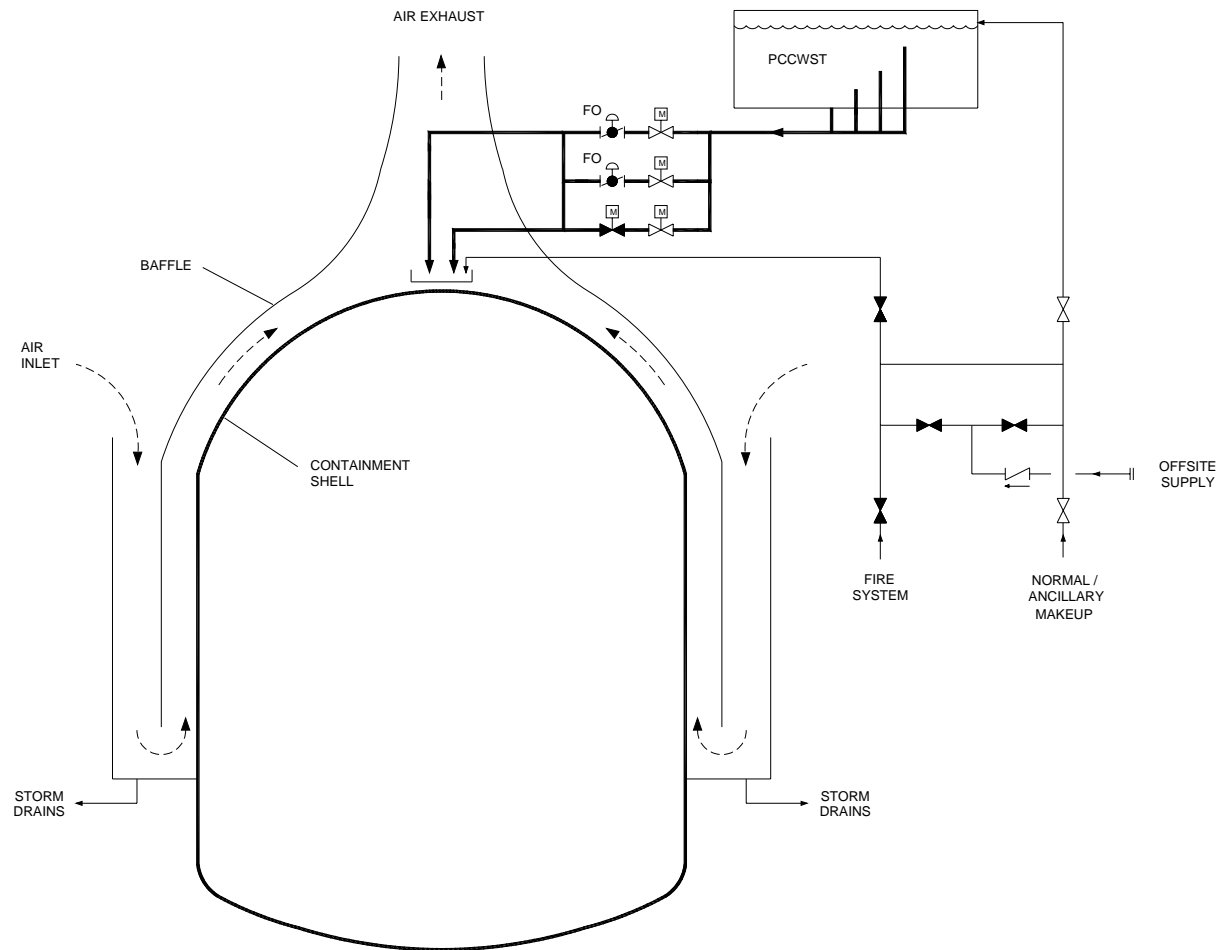
Passive Core Cooling



Most Safety Equipment Within Containment

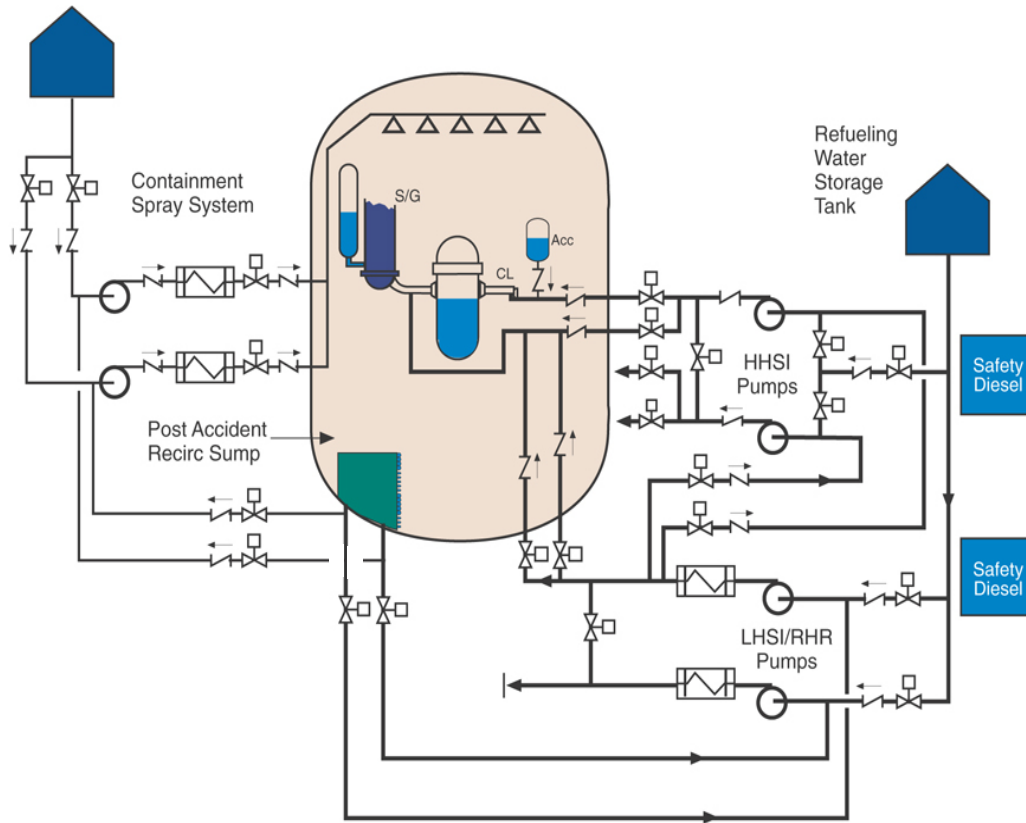


Passive Containment Cooling System

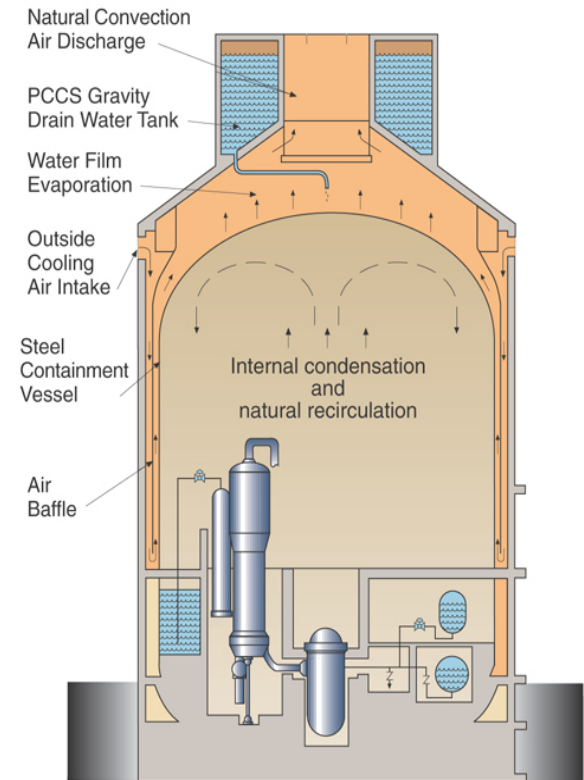


AP1000 Use of Passive Safety Systems Eliminates Need for Safety Pumps and AC Power

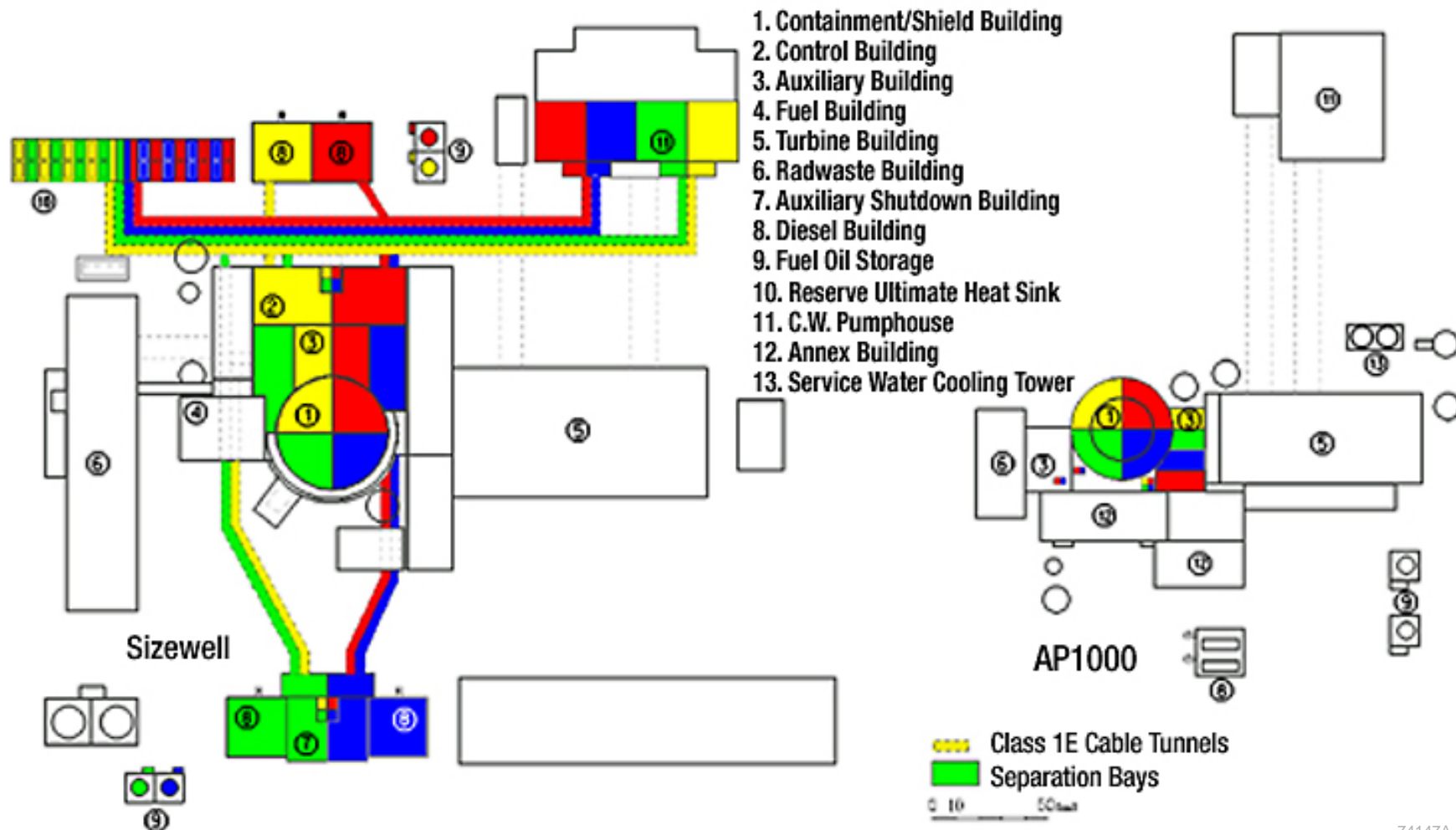
Standard PWR



AP1000



AP1000 is Smaller and Dramatically Simpler than Evolutionary Plants



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Security Considerations in Design

- Bullet and blast resistant doors, walls, floors, and ceilings
- Limited access pathways to vital equipment
- Protected response paths and defensive positions
- Uninterruptible power supply system dedicated as back-up for security and communications equipment
- Redundant two-way communication paths

Security Plans for Individual Sites

- Standardized requirements for AP1000 on:
 - Vehicle barrier standoff
 - Access control points
 - Security manning and positions
 - Lighting and communications
- Combined License Applicant responsible for details of:
 - Vehicle barrier system
 - Access control system
 - Security organization
 - Exterior security lighting
 - Communications