

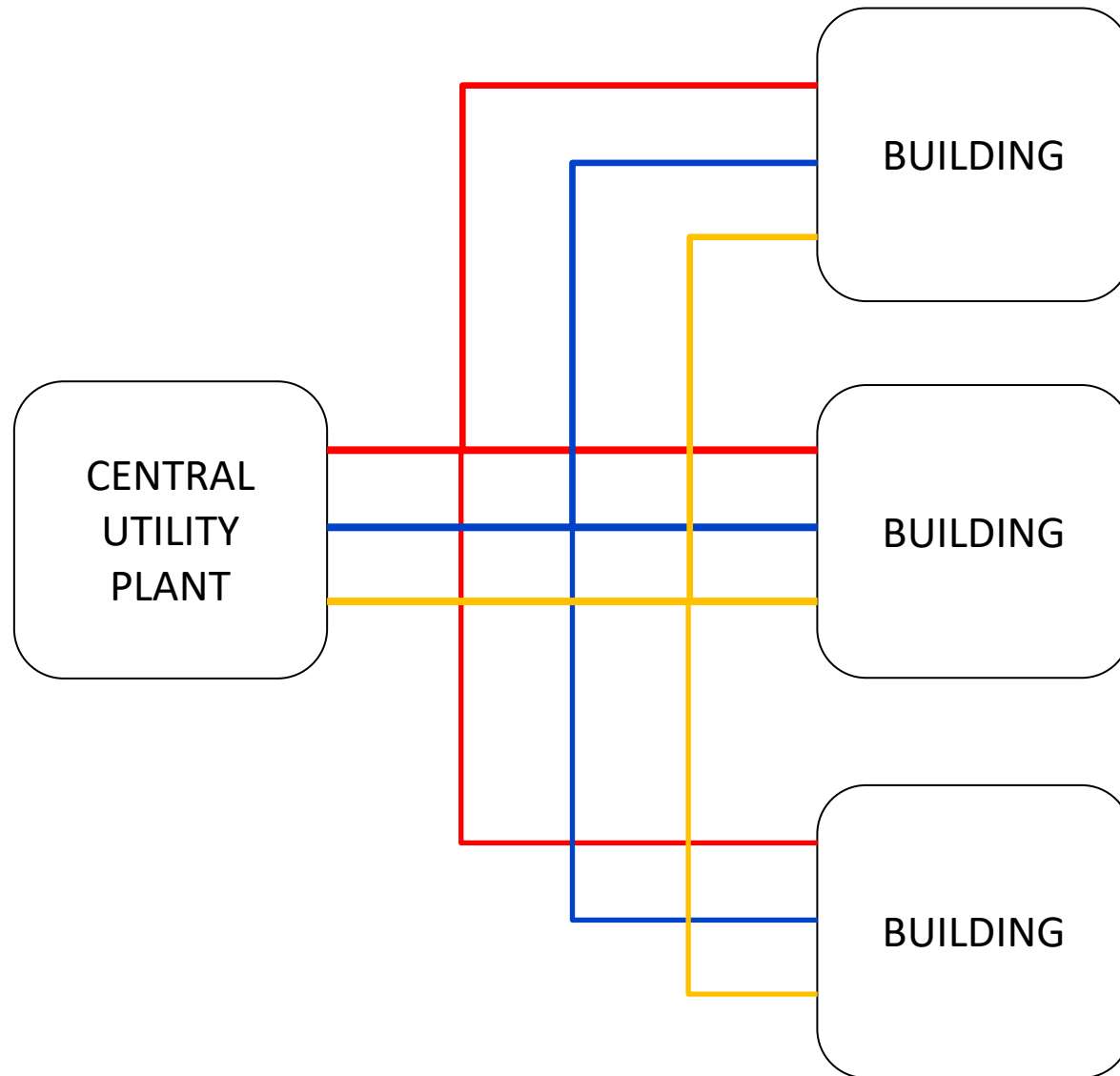
Use of Nuclear Energy in District Energy Applications

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What is District Energy?



- **DISTRICT HEATING**
 - STEAM
 - HOT WATER
- **DISTRICT COOLING**
 - CHILLED WATER
- **DISTRICT POWER**
 - NORMAL POWER
 - EMERGENCY POWER

Where is District Energy Used?

- Airports
- Higher Education
- Cities
- Government Facilities
- Healthcare Facilities
- Military Facilities
- Manufacturing Facilities



District Energy Has Been Used for Nearly 150 Years Globally

District Energy Process Needs

- Steam Distribution
 - Pressure: 15-300 PSIG
 - Temperature: Saturated Steam
- Hot Water Distribution
 - Pressure: 75-150 PSIG
 - Temperature: 120 – 220 DEG F
- Chilled Water Distribution
 - Pressure: 75-150 PSIG
 - Temperature: 38-44 DEG F
- Electrical Distribution
 - Medium Voltage: 4-15 KV



Typical District Energy Technologies



HEAT RECOVERY
STEAM GENERATORS



CHILLERS



COMBUSTION TURBINES



BOILERS



STEAM TURBINES



RECIPROCATING ENGINES

District Energy Market Drivers

DE-CARBONIZATION

RELIABILITY AND
RESILIENCY

Nuclear Energy is Well Suited to Fill These Needs

Challenges to using Nuclear Energy in District Energy

- Technical
- Project Development and Execution
- Regulatory
- Permitting
- Policy
- Financial
- Insurance
- Public Acceptance
- Ownership Models
- Operations & Maintenance
- Security

Nuclear in District Energy Applications (Nuldea) Initiative



+ 10 other universities, healthcare facilities and district energy utilities

Mission: Enable Nuclear Energy as an Option for the District Energy Market by 2026

A blue-tinted photograph of four people, two men and two women, standing together. They are dressed in professional attire, including lab coats and a hard hat. The text 'Together...Shaping the Future of Energy™' is overlaid in white on the image.

Together...Shaping the Future of Energy™