Micro-Reactors

Policy and Regulatory Opportunities

Marc Nichol, Director New Reactor Deployment April 25, 2019





Deployment Timeline





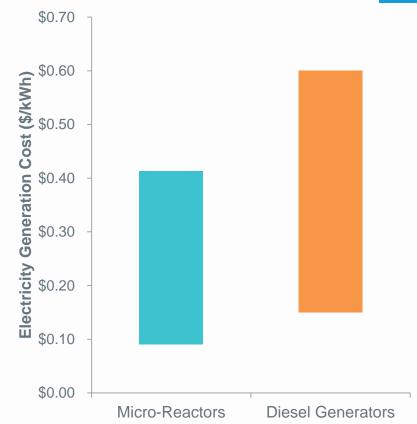
Fuel Timeline





Estimated Costs

- Diesel generator costs
 - Primarily fuel costs
 - Fuel from \$2.86/gallon to \$4.89/gallon
- Micro-reactor costs
 - Include used fuel disposal and decommissioning
 - 10 year fuel life
 - 40 year plant life
 - 95% capacity factor



- Right-size requirements
 - Emergency preparedness
 - Security
 - Siting
 - Staffing
- Streamline reviews
 - Environmental
 - Safety

Federal Policy Opportunities

ŊĒI

- Support clarification of the technical basis
 - Cross-cutting R&D
 - Demonstrations
- Support deployment
 - Power purchase agreements
 - Loan guarantees
 - Fuel
 - Supply chain
- Fulfill used fuel responsibilities

State Policy Opportunities

ŊĒI

- Equal treatment with other generation sources
 - Clean energy policies
 - Reducing barriers to entry
- Support the formation of an industrial base
 - Lower financing barriers
 - Incentives for supply chain
- Provide infrastructure support
 - Training
 - Transportation improvements
- Foster stakeholder engagement