## NCSL: Military and Veterans Affairs Task Force

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Marc Nichol Senior Director, New Reactors





### Micro Reactor Technology

#### Designed to replace Diesel Generators



Oklo Aurora 1.5 MWe



Ultra Safe Nuclear Corporation 5 MWe



Westinghouse eVinci 5 MWe



BWXT BANR 17 MWe

- Very small size
  - Site as small as 0.1 acres, building ~size of a house
  - Reactor is road shippable, minimal site work
- Resilience withstand, mitigate or quickly recover from
  - Extreme natural events
  - Man-made physical and cyber threats
- Operations
  - Automatic operations, island mode and black-start
  - Flexible hybrid energy and renewables integration

#### Other Designs (not all inclusive)

- General Atomics
- HolosGen
- Hydromine
- NuGen
- NuScale
- Radiant
- X-energy

# Market Opportunities







Micro Mining / Industrial

Remote Villages Stationary Defense Installations

Mobile





Humanitarian and Disaster Relief

Ground Operations



### DoD Pursuit of Micro-Reactors

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### Movable

Project Pele



RFP (2019)

Operate (2024)

Fleet (TBD)

https://www.cto.mil/pele\_eis/

# <u>Fixed</u> Eielson Air Force Base



RFP (2023) Construct (2025)

Operate (2027)

https://www.eielson.af.mil/microreactor/