



ULTRA SAFE NUCLEAR

BOOTSTRAPPING TO NEW NUCLEAR

Micro Modular Reactor

Start with Remote and Off-grid Applications

Expand to Process Heat and Hydrogen Production

Decarbonize Global Energy Markets

Ultra Safe is ready for deployment

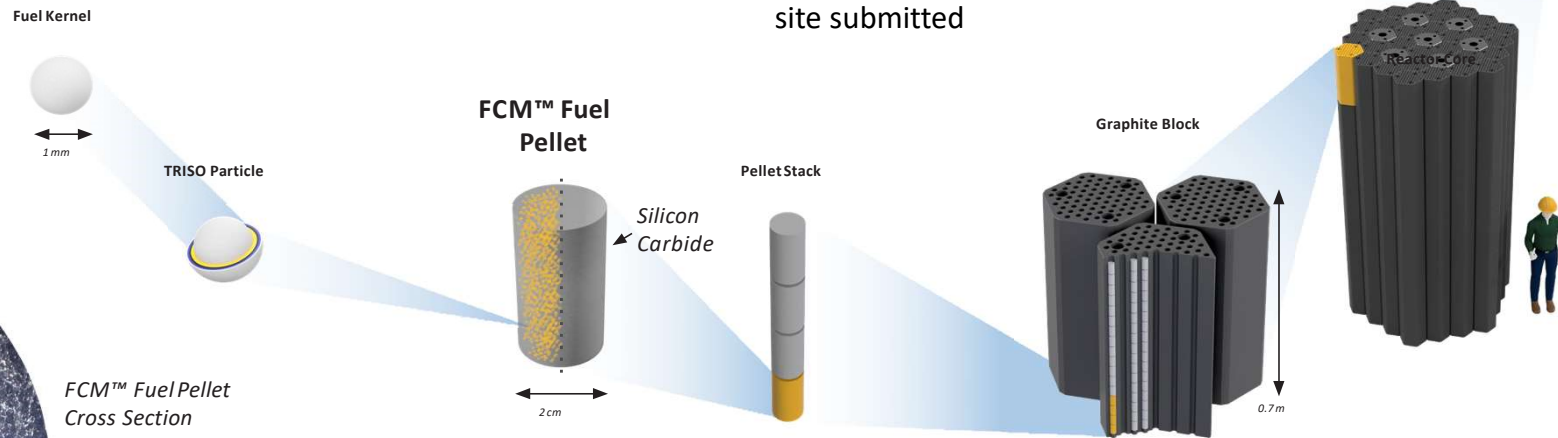
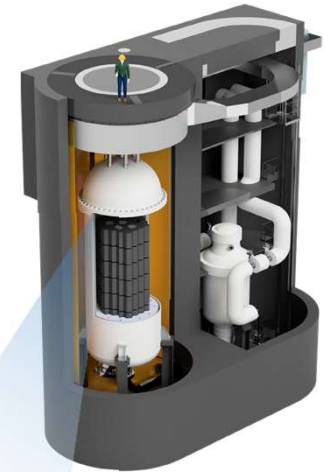
It is versatile and safe

- Entire Power Plant designed for mass manufacture
- Reactor safety profile same as renewables
- Micro-grid with easy coupling to renewables
- 1 - 10 units per power plant
- Simple and safe storage after use

We can make it

- Supply chain agreements developed
- Only 2.5 years away from full license and construction start
- High Technology Readiness Level for all systems
- Vendor Design Review Phase 1 completed
- Environmental Assessment for 1st site submitted

Micro Modular Reactor



FCM™ Fuel Pellet Cross Section

MMR Energy System Layout for Remote Off-grid

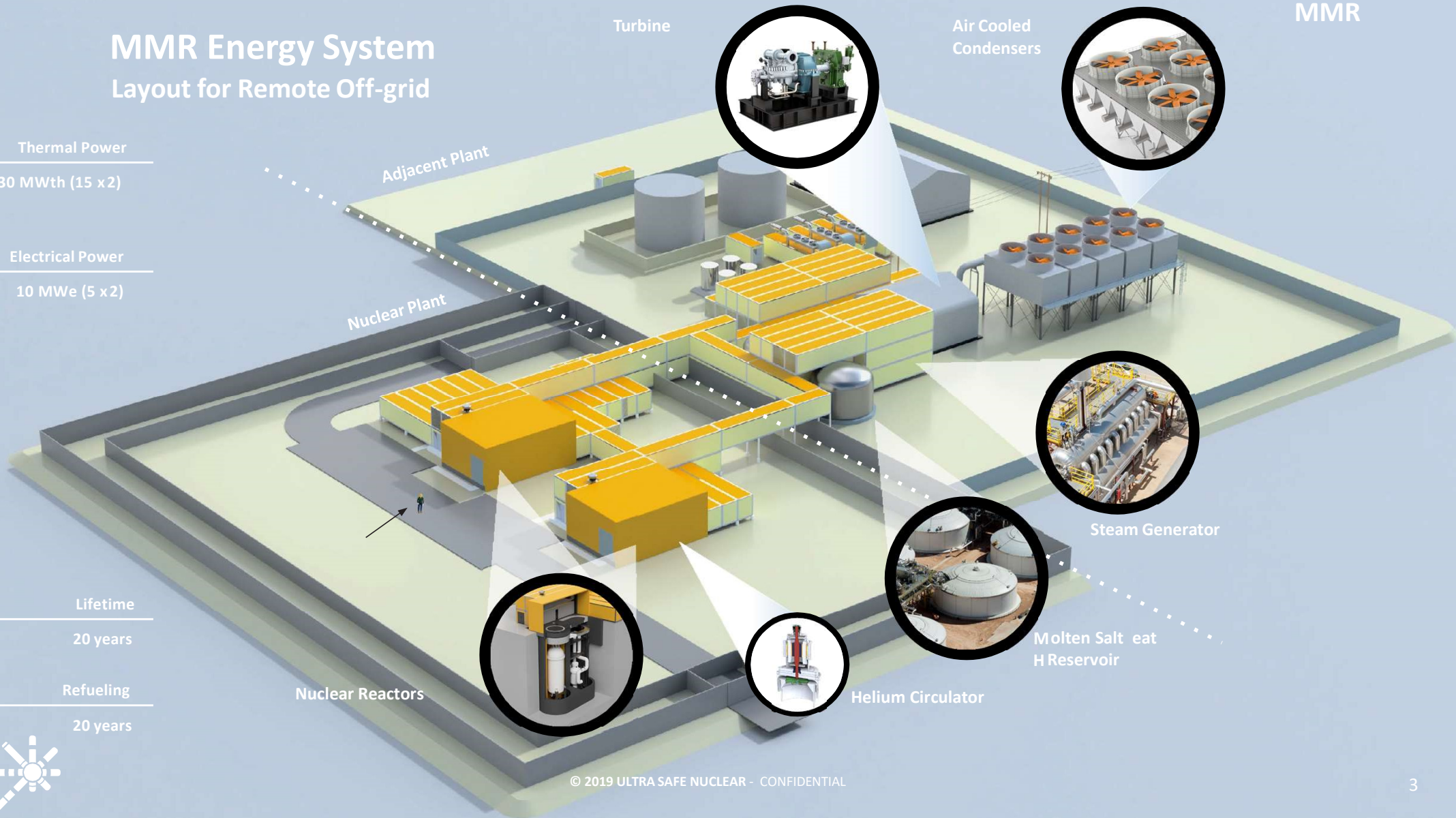
MMR

Thermal Power
30 MWth (15 x 2)

Electrical Power
10 MWe (5 x 2)

Lifetime
20 years

Refueling
20 years



Extensive modularization for factory manufacturing



10X BETTER



Less expensive design cost
US\$80M

Shorter construction time
6 months

Affordable project development
US\$10M

Less capital to build 1st units
US\$100M

Larger number of unit sales
10/year

Higher value power & heat
0.50 US\$/kWh

EPZ = 20 m*
Exclusion Area 2 Ha**

OTHERS

US\$800M

60 months

US\$100M

US\$5B

1/10 years

0.05 US\$/kWh

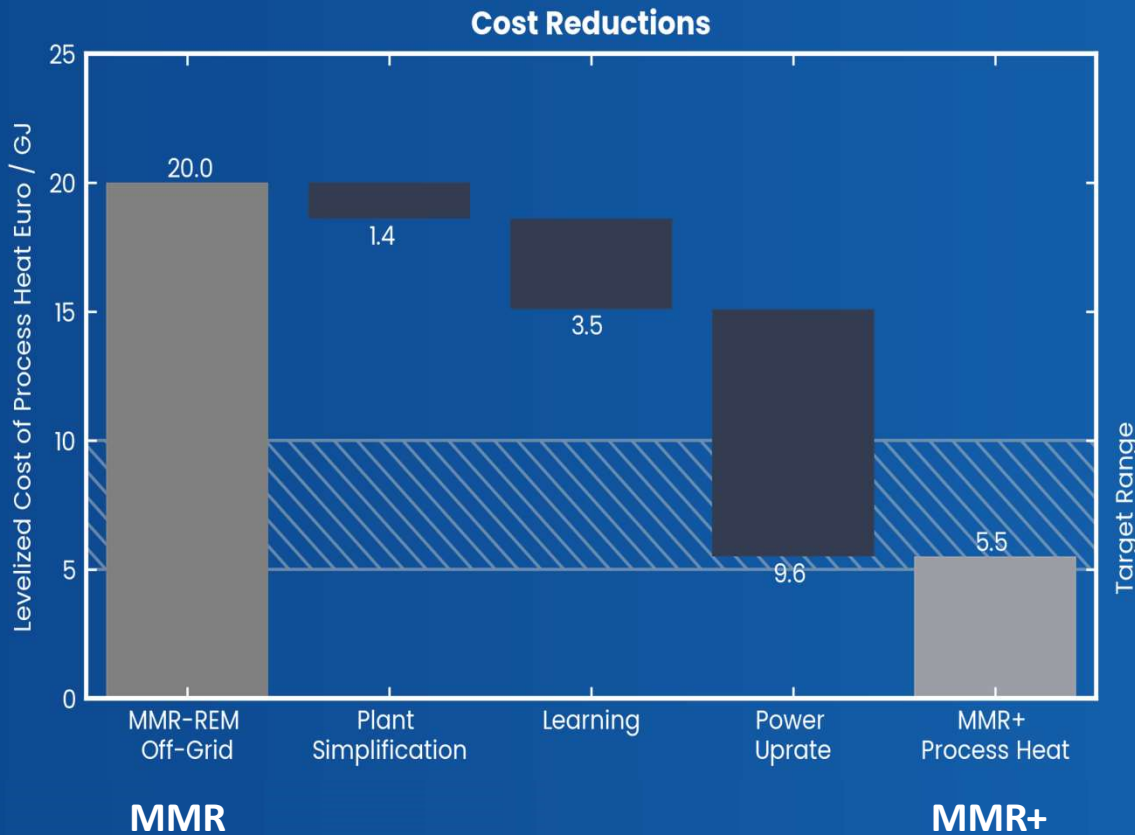
EPZ = 15 km
Exclusion Area 20 Ha



* Size of reactor citadel

** Area of power plant

Reduce costs, increase power, expand into larger markets



About Process Heat

- Process heat is used across industry to create goods and materials (370-630GW addressable)
- IEA predicts that industry will cause 42% of carbon emissions in 2040
- Renewables are not a good option due to storage, geography, and electrification requirements
- MMR can be placed on-site to provide carbon free process heat to industry



Company core from labs and industry

Francesco Venneri

Chief Scientist / Project Leader at Los Alamos National Laboratories, General Atomics, LogosTech

CEO

Pieter Venter

Manager of Engineering and Director of Power Operations at a Fortune 500 EPC • Plant Lead Engineer for PBMR

Director, Heat Supply System

Mark Mitchell

Design Team Lead at the Pebble Bed Modular Reactor

Executive VP

Niel Kemp

Plant Systems Engineer at PBMR • Professional Engineer

Director, Power Plant Engineering

Mark Davies

R&D of gas-cooled reactors including AGRs and PBMR

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Ultra Safe Team Origins
from Labs and Industry

