ThorCon

- Cheap, clean, CO_2-free power in 8 years.
- A new, multi-billion-dollar industry.

service ship

turbine/generator halls

passive cooling

nuclear plant
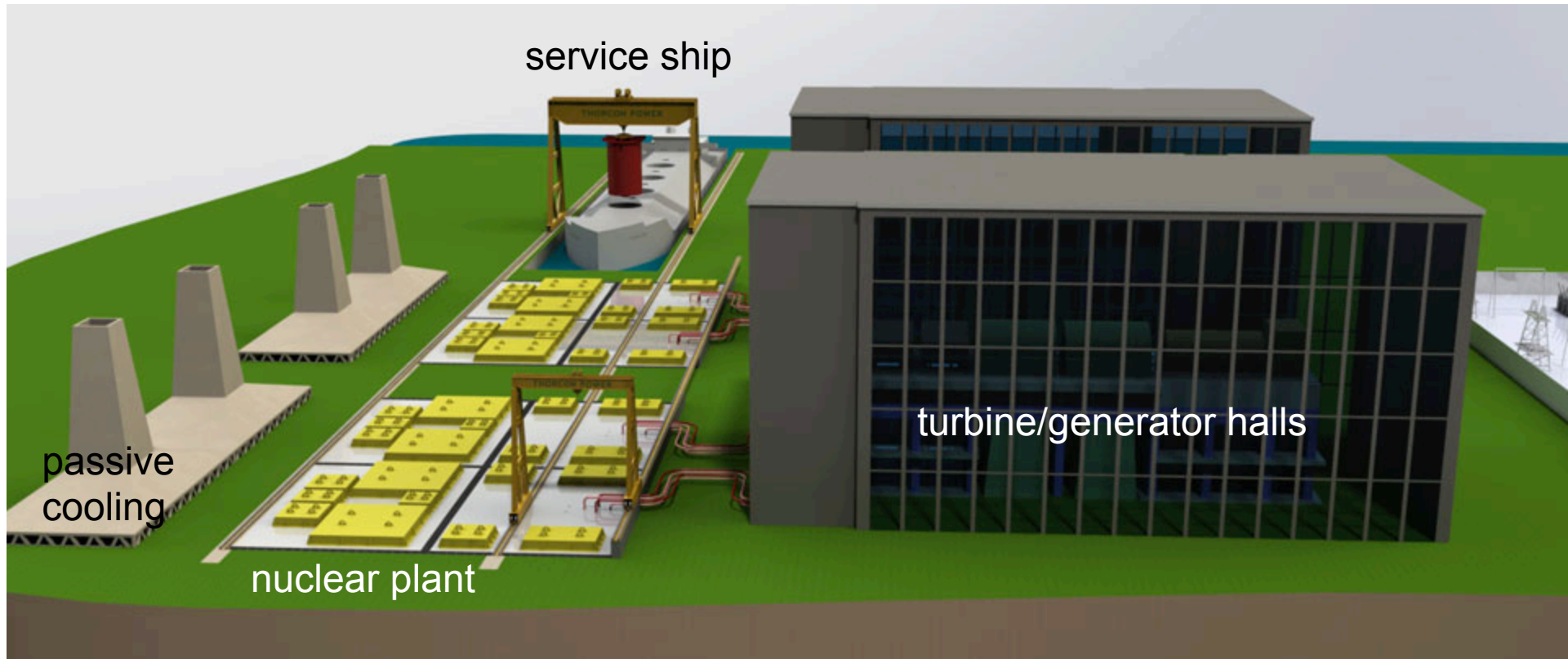
ThorCon is based on Oak Ridge Labs' proven nuclear power technology.
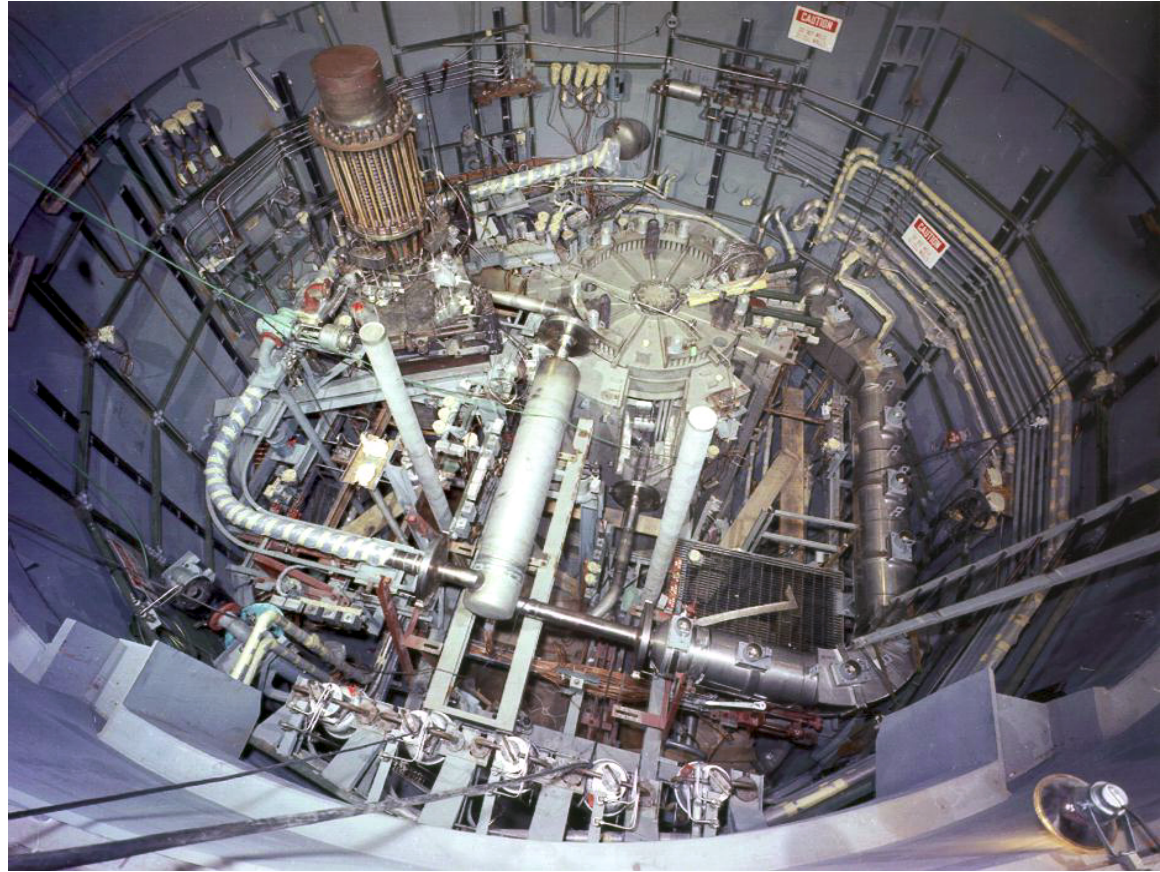
Uranium and thorium in molten salt.

ThorCon redesign:
- modular production
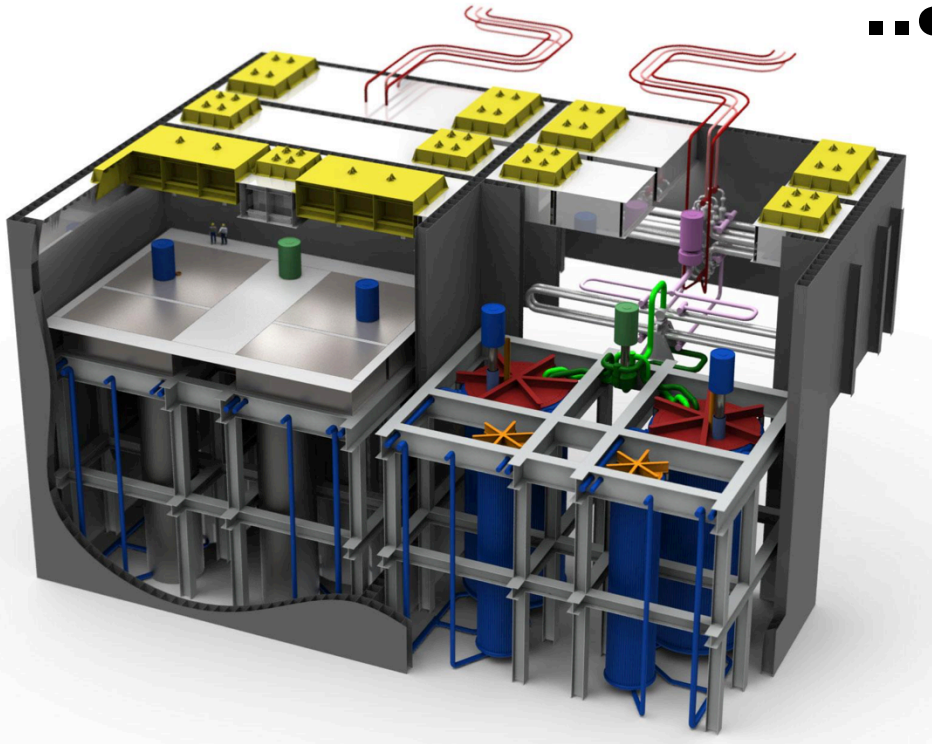- 50 years of science
- modern materials
- fast computers

Result:
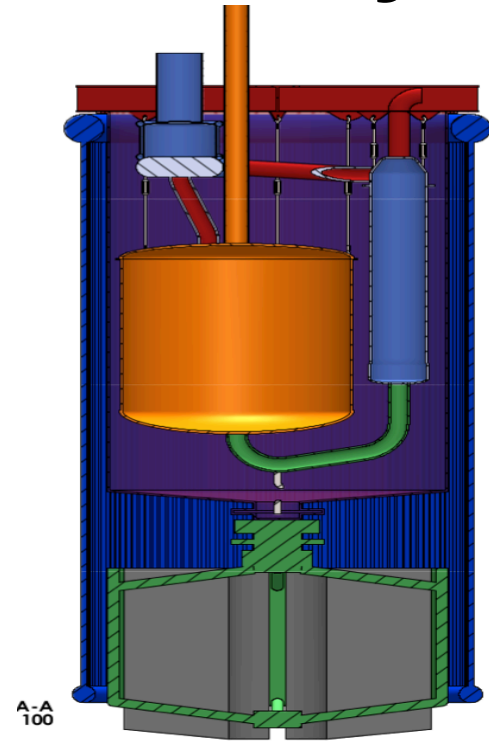- rapid production
- cheaper than coal

Oak Ridge molten salt reactor ran from 1965 to 1969.

ThorCon nuclear plant is underground.

..and walk-away safe.

- 250 MWe/557 MWt power modules.
- Modules have two Cans in silos.
- Duplexed Can operates 4 years, cools 4 years, then replaced.

- Molten salt can dump into a safe configuration.
- Four radiation barriers.
- Fluoride salt locks up radioactive fission products.

We'll build ThorCon nuclear power plants like shipyards build $89 million ULCCs.

A small shipyard can build ten 1-GW ThorCon power plants a year.

Devanney designed, built ULCC

- Yard produces 150--500 ton blocks. ~100 blocks per 1GW plant.
- Blocks are pre-coated, pre-piped, pre-wired, pre-tested.
- Blocks barged to site, dropped into place, and welded together.

ThorCon electricity: cheaper than coal.

	Coal $US $/kWh	ThorCon $US $/kWh	Coal Rupees Rs/kWh	ThorCon Rupees Rs/kWh
Capex	0.0309	0.0185	1.85	1.11
Cans		0.0034		0.02
Fuel	0.0227	0.0053	1.36	0.32
Salt		0.0002		0.10
O&M	0.0056	0.0049	0.35	0.29
Total	**0.0592**	**0.0324**	**3.55**	**1.93**

- 10% real discount rate
- 32 year analysis life
- 4 year construction period

- 90% capacity factor
- Coal $80/ton landed
- No recycling of can or fuel salt

ThorCon design philosophy provides timely investment returns.

no new technology
no unobtainable materials
shipyard production speed
replaceable irradiated materials

steam power conversion
factory quality control
fixable, replaceable parts
no scale-up delay

PROFITS (each)
Revenue $2,000M
Build cost $800M
Gross profit $1,200M

x # ThorCons produced

| Seed | Phase 1 tests | Phase 2 nuclear tests | Yard | 2 GW | +5 GW | +10 GW |

Year

1	2	3	4	5	6	7	8	9	10
$10	$85	$35	$420	$65	$65	$200	← $M investments		