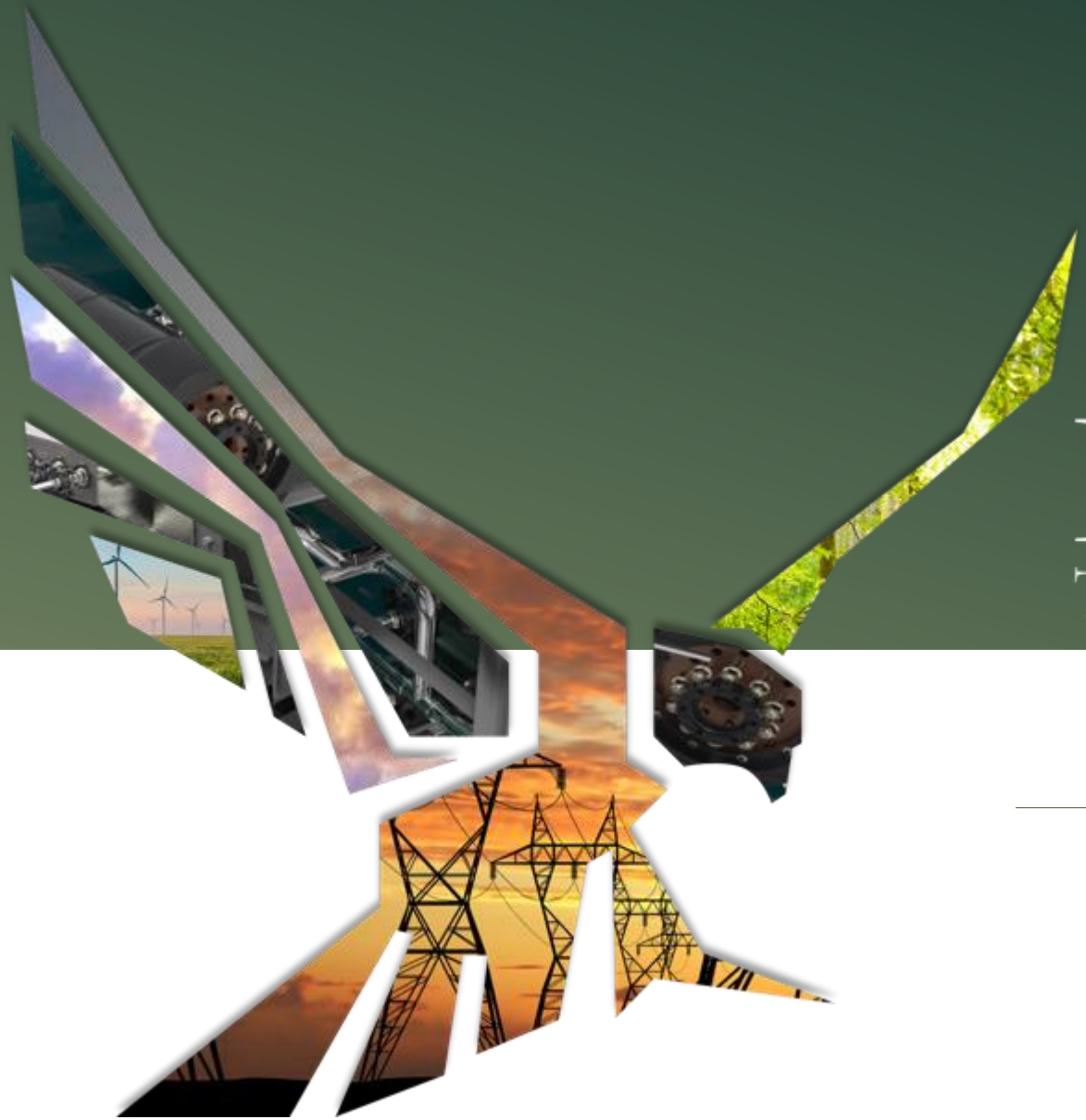


PEREGRINE
TURBINE TECHNOLOGIES

PTT LDES Solutions

LDES Consortium Briefing
September 10, 2024

CLOSING THE 24/7 CLEAN ENERGY GAP

THE PROBLEM

- Renewable penetration limited by lack of grid-scale storage
- Incumbent Li Battery solutions limited to less than 8 hours of discharge
- Steady degradation of performance
- High cost of end-of-life toxic chemistry remediation

THE SOLUTION

- Peregrine's thermal energy storage combined with Peregrine's high efficiency sCO2 Power conversion
- Capable of coupling to any high-quality thermal source
- Moving particle and thermal salt options in development

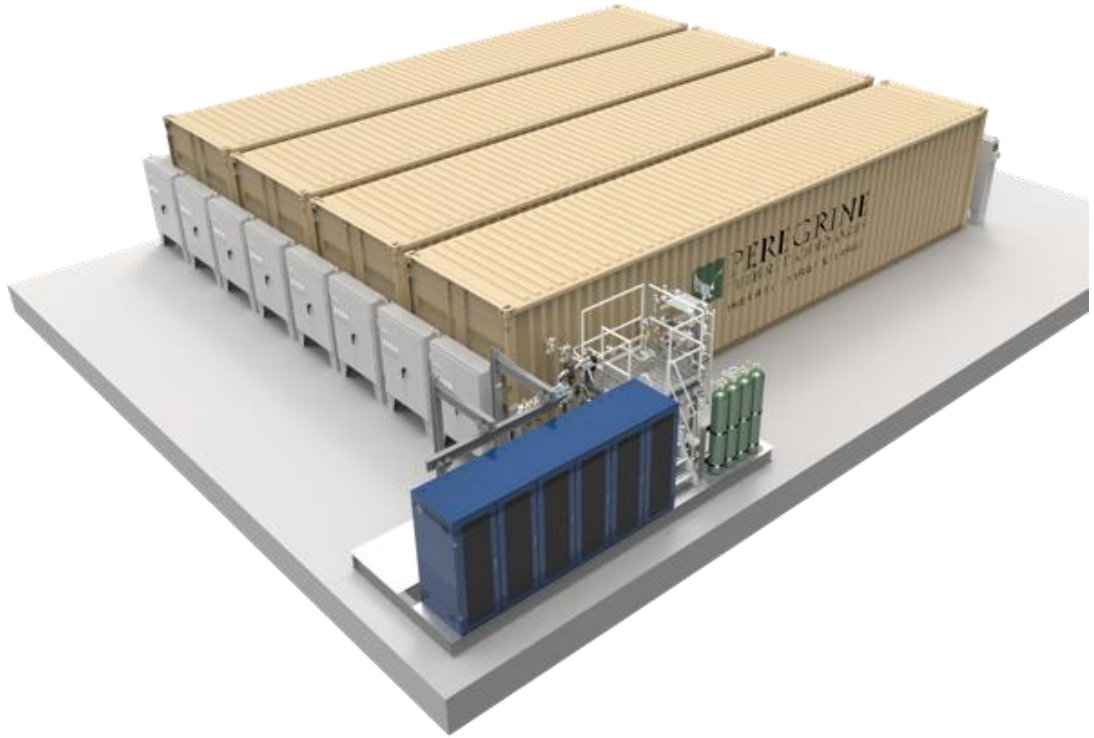
Project Summary

Molten Salt Configuration

- Road Transportable
- Best solution for shorter discharge
- Same sCO2 Power Conversion Skid
  - Will be qualified at a CA PV field
- Will De-risk investment for Near-Term deployment

Timeline:

- 1 year project
- Completion December 2025



PEREGRINE
TURBINE TECHNOLOGIES

Peregrine Turbine Technologies

Peregrine's 1MWe Merlin Engine Power Conversion Skid

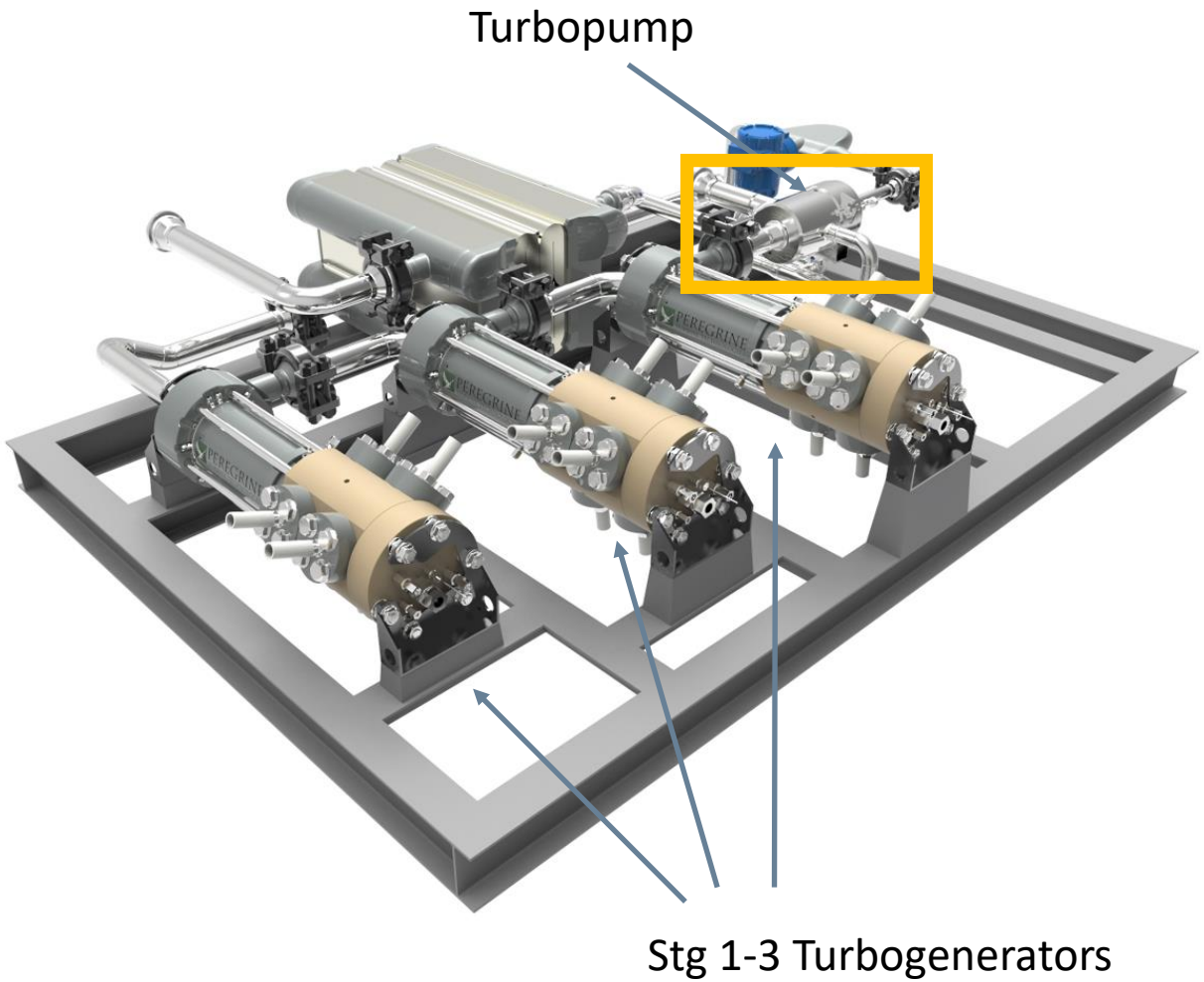
- Turbopump
- Stage 1-3 Turbogenerator
- Independent Radial Inflow Turboexpanders
- Oil-Free Machine
- Black Start Capability
- Stackable for Multiple MWe Applications

Merlin System Thermal Efficiency is 45% at Design point 750°C Turbine Inlet Temp.

Total Nameplate Capacity is 1MWe.

Identical Power Skid for Nuclear, Biomass, NG-Fired Applications

Peregrine-Provided Components from the Merlin 1MWe Power Skid



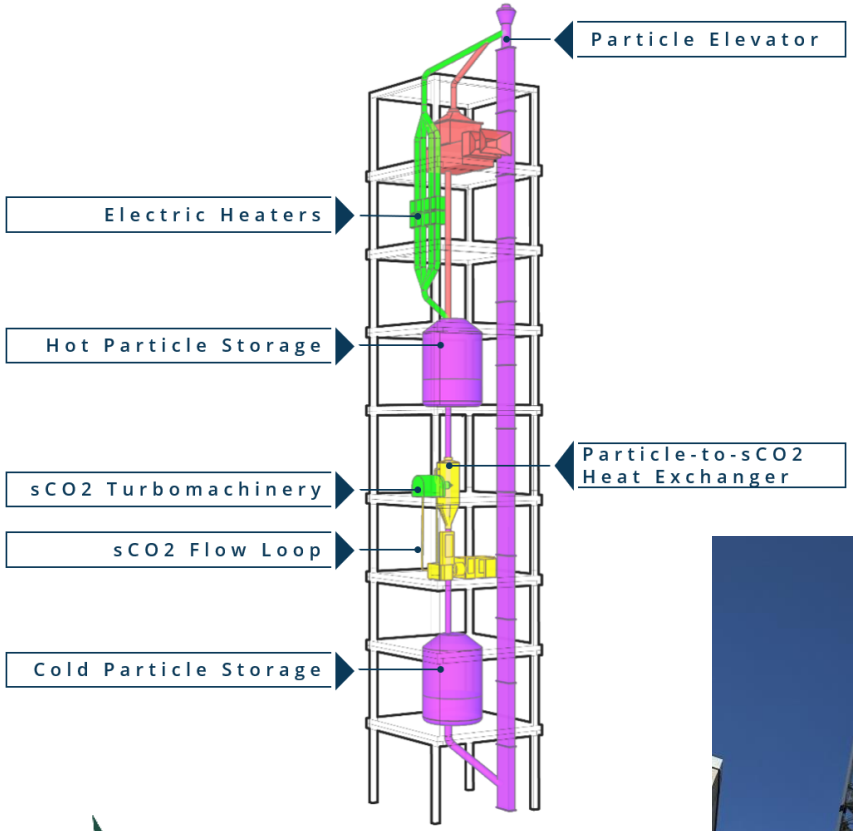
Project Summary

Sandia's G3P3 Moving Particle TES

- Finalist Selected from Three Candidate Systems
- Will Scale to 20+ hour discharge
- Will Demonstrate 100 kW_e x 10+ hr MPTES
  - sCO2 Power Cycle
  - Gen3 Particle Pilot Plant Test Facility
- Will De-risk investment for Near-Term deployment

Timeline:

- 3.5 year project
- Completion December 2027



PEREGRINE TURBINE TECHNOLOGIES

ECHOGEN power systems

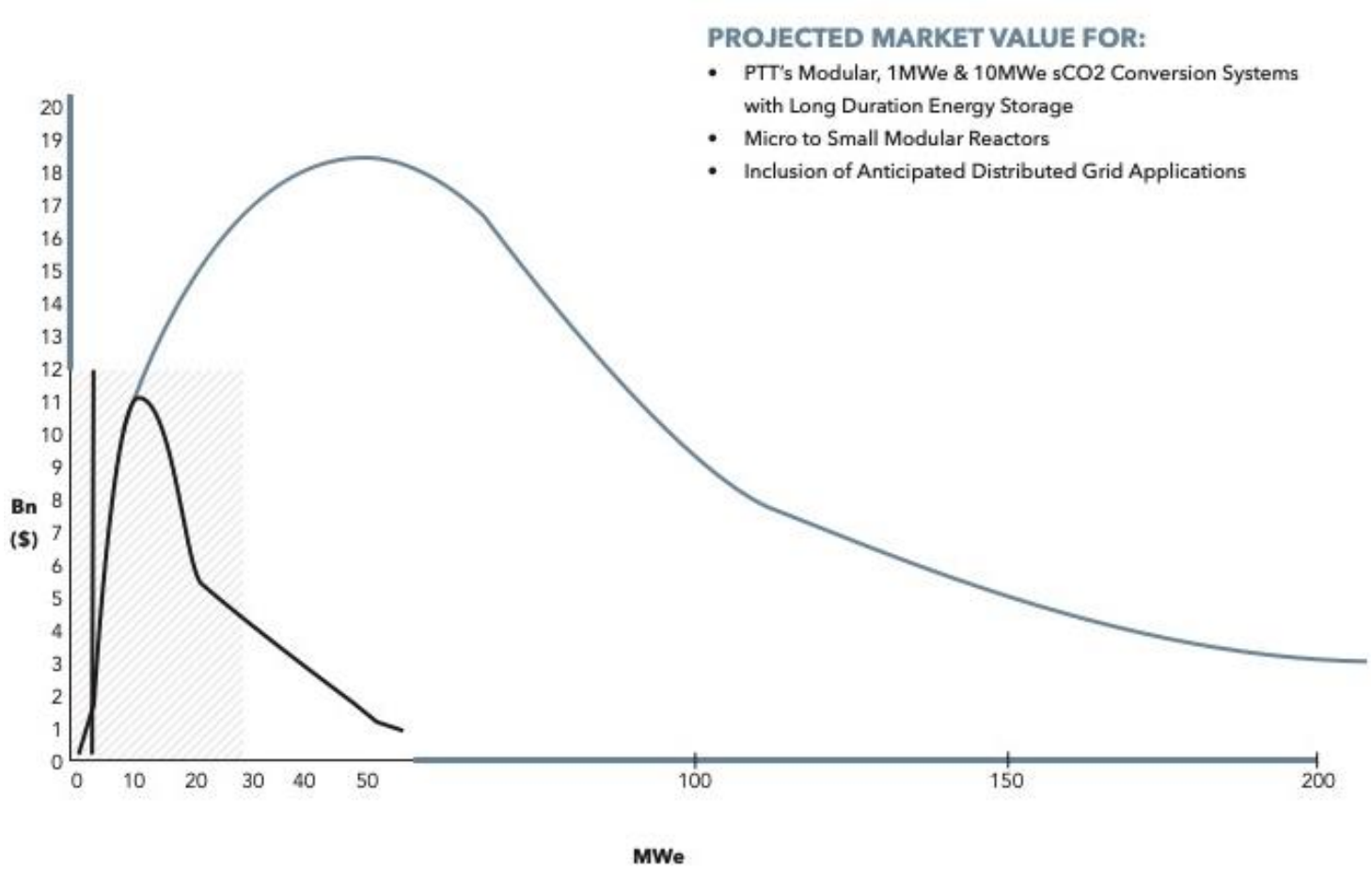
CHUGACH

TARGETING HIGH VALUE in a Dynamic DE MARKET SEGMENT

(2024 Projection - Includes Long Duration Energy Storage and Advanced Nuclear)

- RTE 45% - Lowest Cost Option for Low-Cost Charging
- LCOS Meets DOE Target of 5 cents/kW-hr Not Including Charging Costs

Looking for Cost Match Partners for OCED Funding Opportunity



PTT's 1 MWe and 10 MWe Modular sCO2 Power Islands and Modular Long Duration Thermal Energy Systems are Strong Match for 1 MWe – 200 MWe Applications