



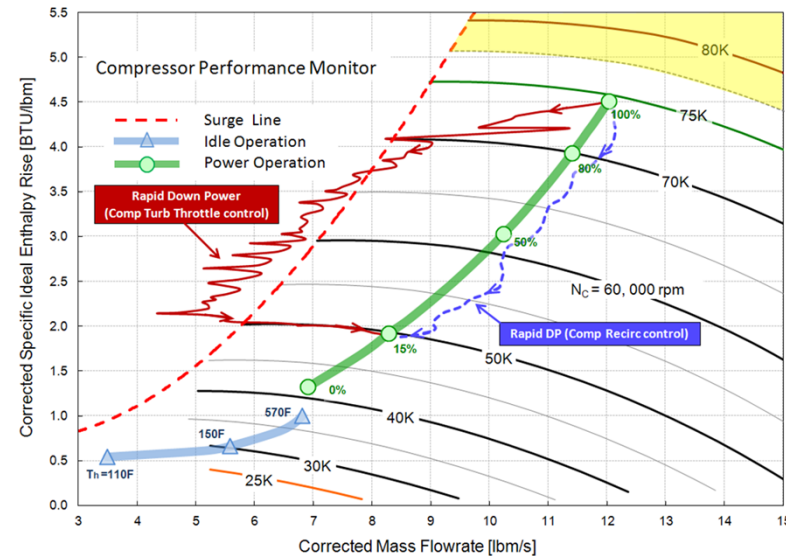
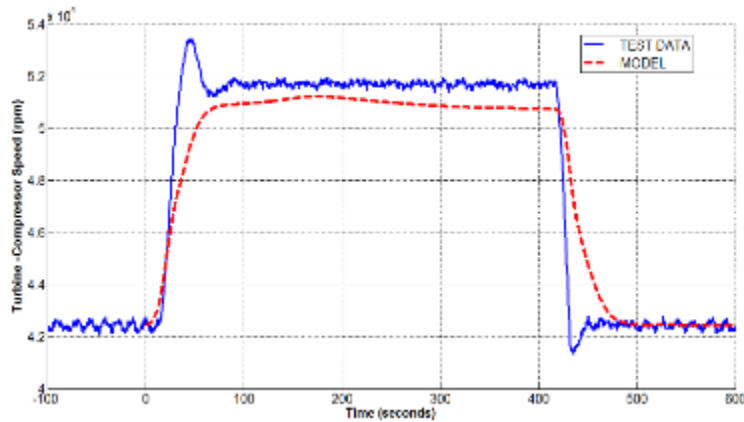
National Laboratories R&D Panel:
**Research Activities at
Naval Nuclear Laboratory**

Eric Clementoni
Advisor Engineer

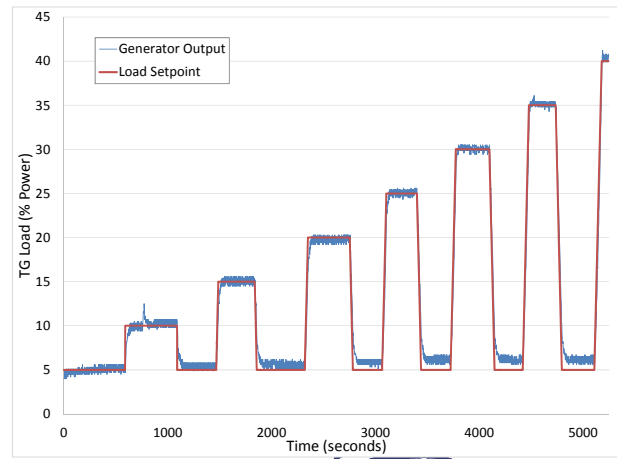
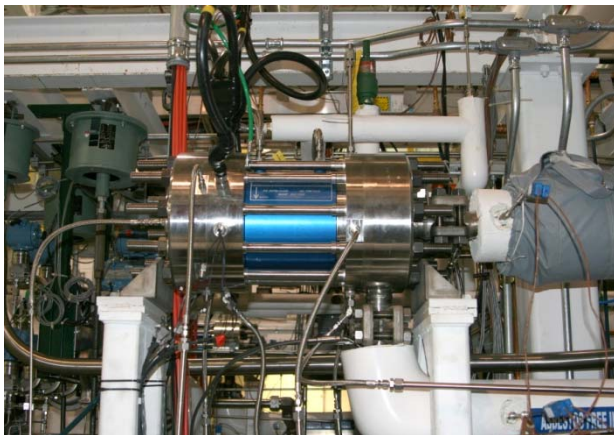
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Development Focus

- sCO₂ Brayton system development efforts focused on:
 - System thermodynamics
 - System control modeling
 - IST operation to confirm system control and validate transient modeling
 - Component development

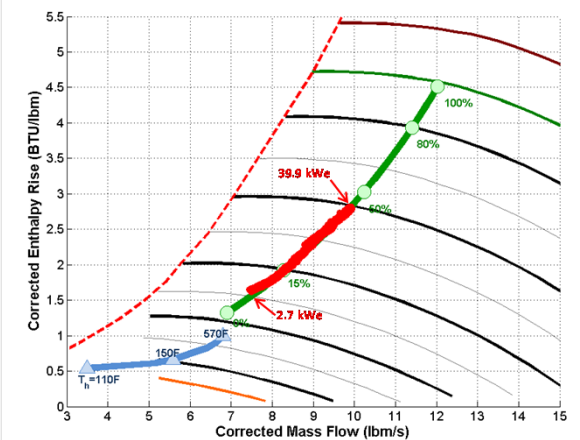


100 kWe Integrated System Test



Primary Objectives

- ✓ Demonstrate system controllability and feasibility
- ✓ Provide test data to verify the ability to model sCO₂ Brayton system
- ✓ Provide sCO₂ loop operating experience and design feedback



Comparison of Compressor Performance to Map Predictions

