

Title: SOFC Systems Overview
Entity: UTC Power
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Summary:

The UTC Power-Delphi team is making significant progress towards completing phase I objectives for the SECA SOFC program. From a system perspective, the team has down-selected three Power Module concepts that were designed for 400 kW net AC and achieve efficiency in excess of 60% based on the fuel Lower Heating Value (LHV). Heat-up and power ramp studies were performed on all systems to define internal and external characteristics.

The team has also developed three IGFC designs that produce greater than 100 MW net AC power at efficiency greater than 50% Higher Heating Value (HHV) and capture greater than 90% carbon. Sensitivity analyses were carried out demonstrating that the designs maintained their key performance requirements over a wide range of key operating variables.