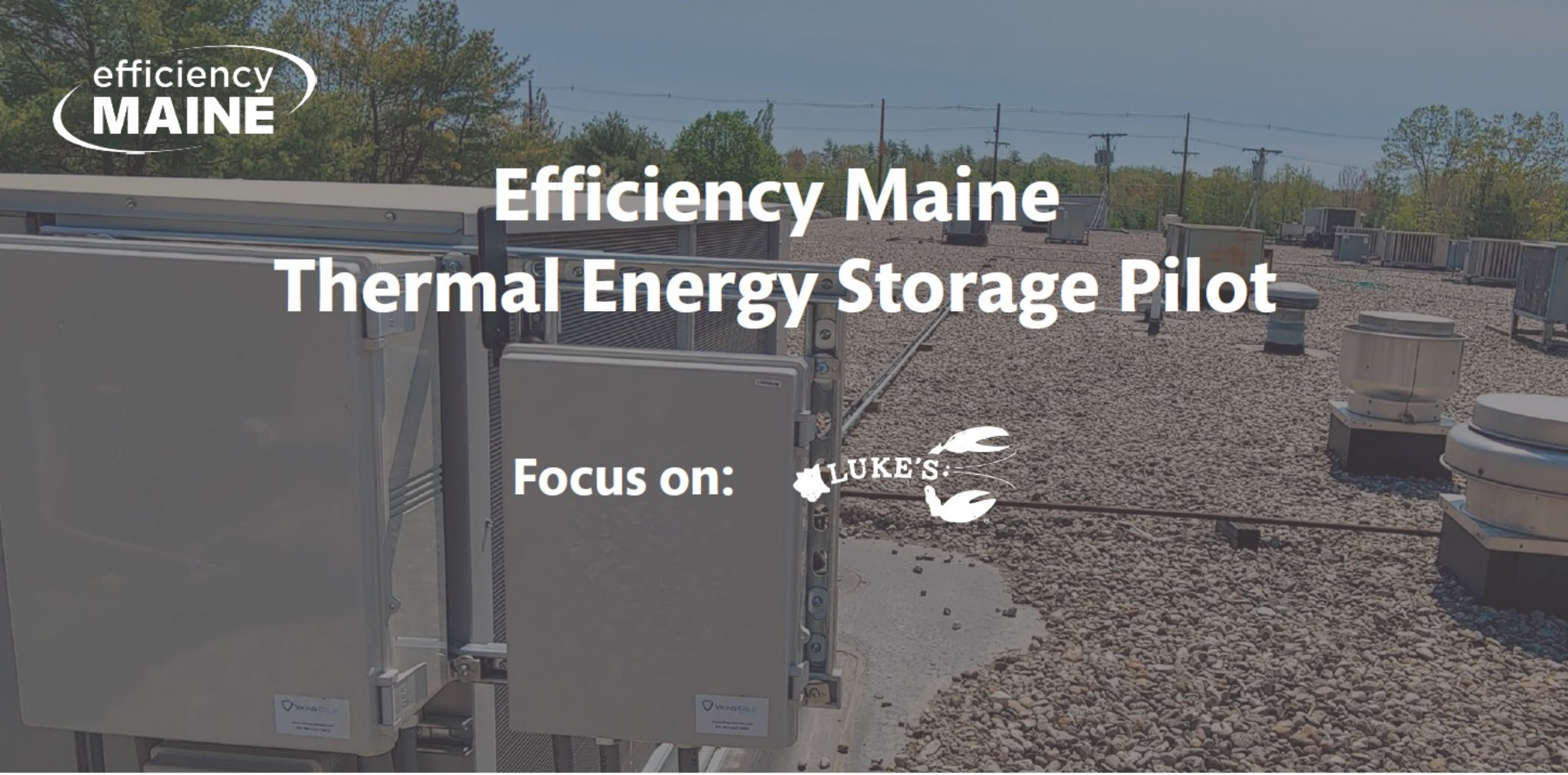

Efficiency Maine Thermal Energy Storage Pilot

Focus on: LUKE'S

Implemented by: Energy Solutions

Technology Provider: VIKING COLD SOLUTIONS™ THERMAL ENERGY STORAGE

Technology Overview:

Consists of controls and TES “cells” filled with food-safe PCM comprised of deionized water and inorganic salts

TES Cells

TES cells are passive and contain no mechanical parts

Controls modulate refrigeration system operations, not TES cells

Cells are fitted into racks or bins and installed into existing product storage infrastructure

Operational data (energy use, temperatures, etc.) are reported in near real time and accessible via API

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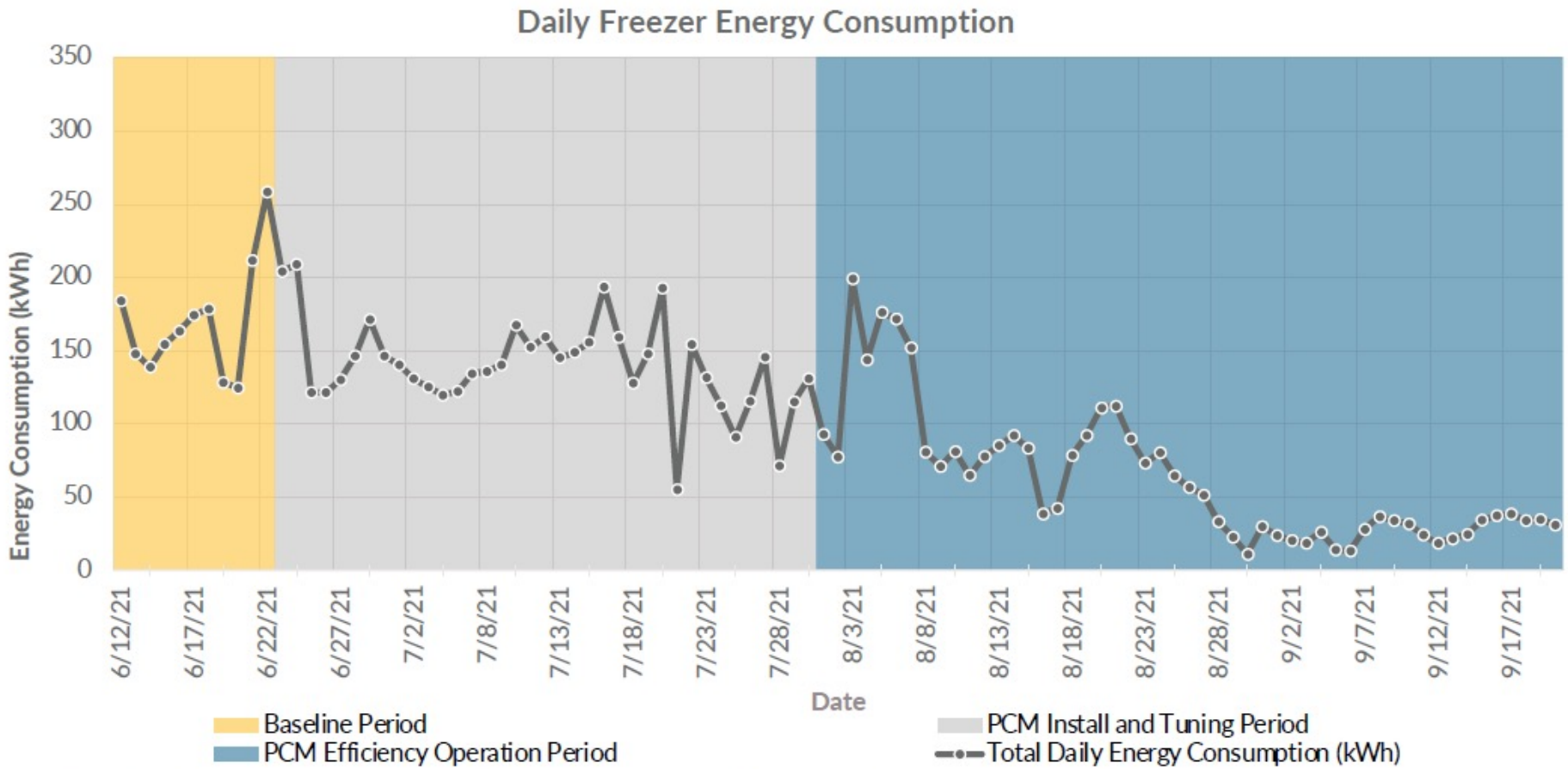
Site Data To Date: Freezer Energy Consumption

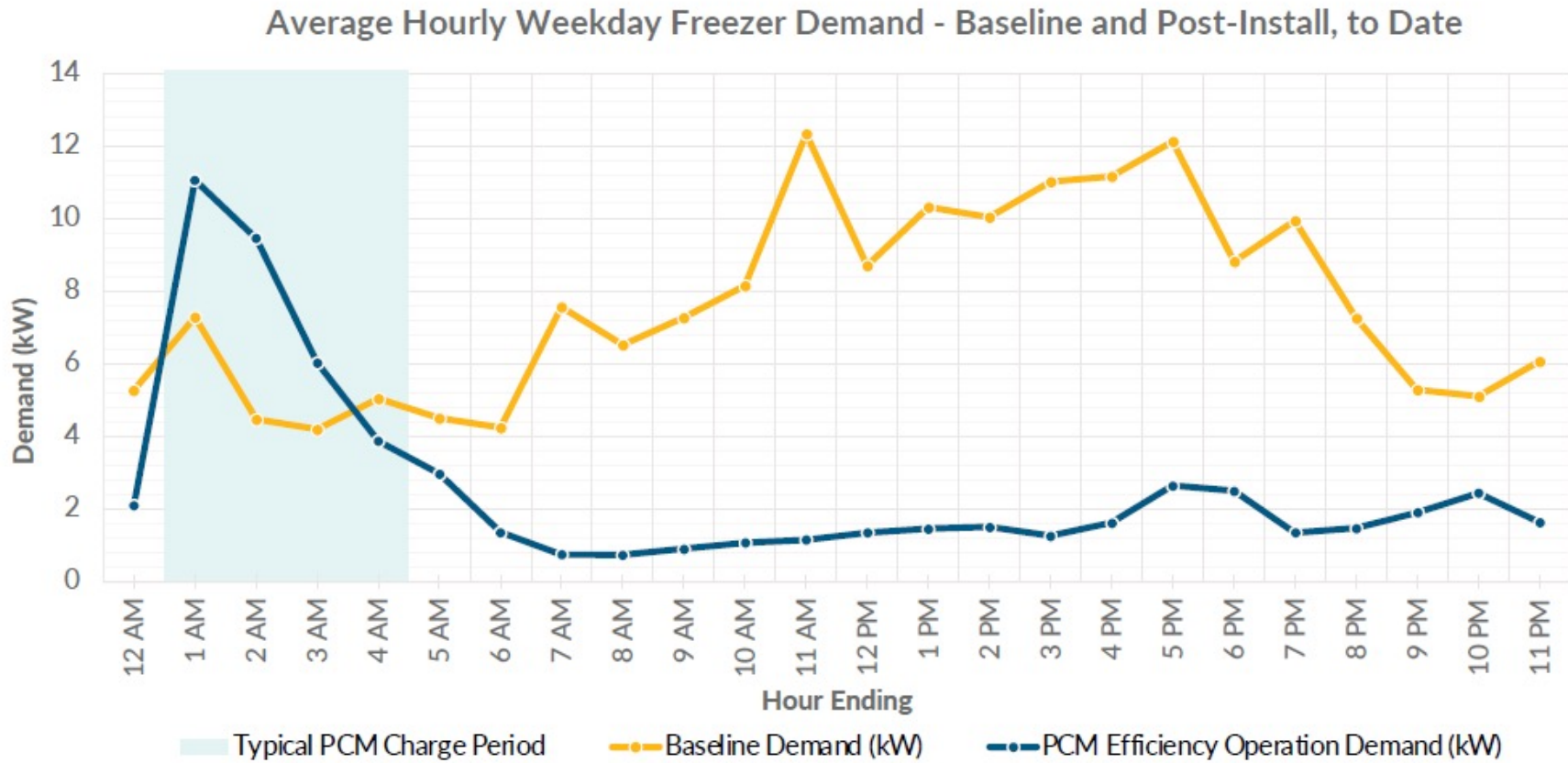
Energy consumption has decreased significantly during the intervention period as compared to the baseline period



The Baseline Period was completed in June 2021. The PCM operation began in late July 2021. Because the project is still in the data collection phase, the data presented are not yet normalized to account for changes in site demand across seasons and other factors.

Site Data To Date: Freezer Demand

PCM charges in early morning and discharges throughout the day, keeping refrigeration system demand low



The Baseline Period was completed in June 2021. The PCM operation began in late July 2021. Because the project is still in the data collection phase, the data presented are not yet normalized to account for changes in site demand across seasons and other factors.

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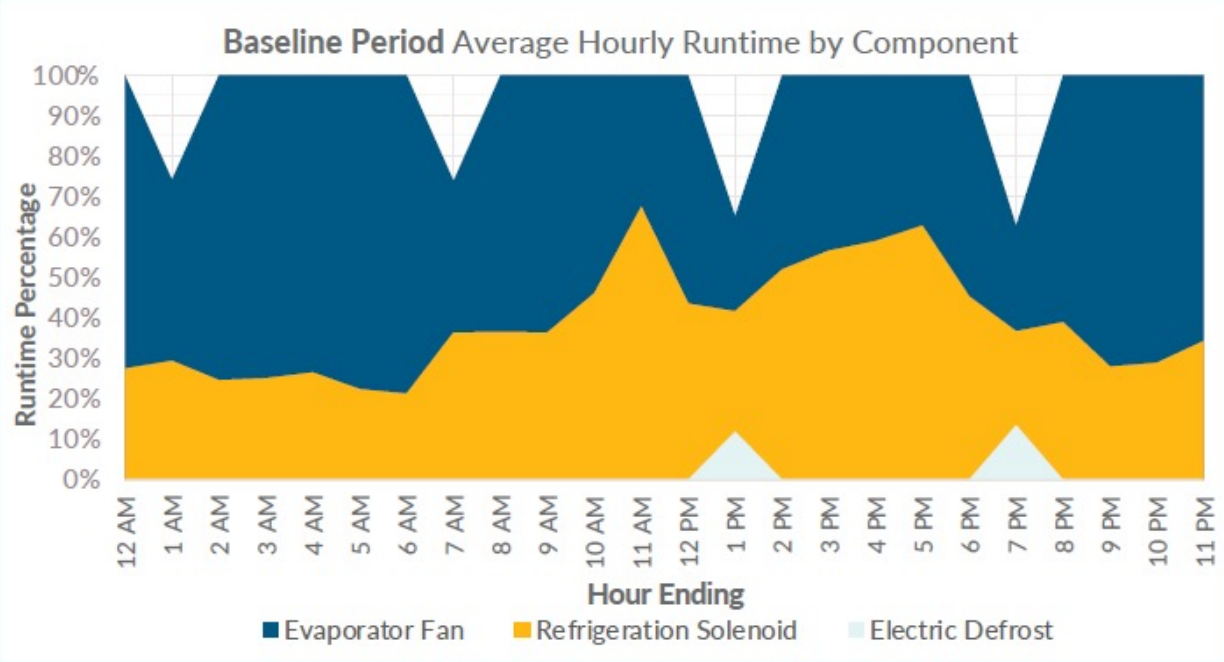
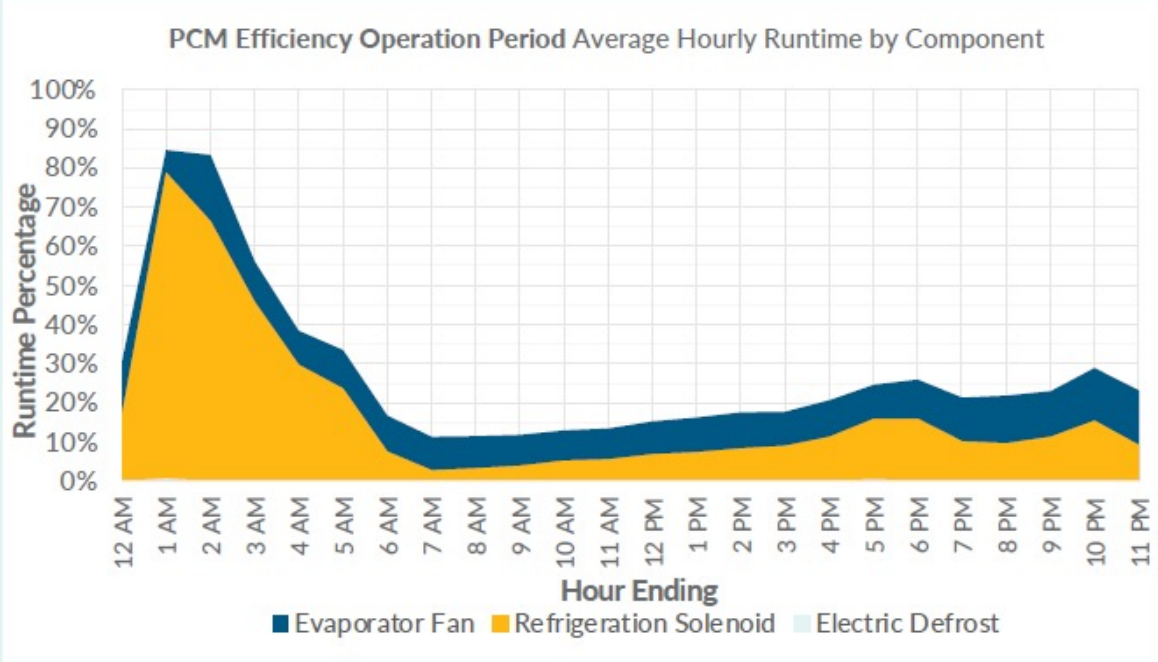
Site Data To Date: Equipment Runtime

Equipment runs far less throughout the day. During PCM charging, refrigeration system operation peaks at or near baseline levels; then, minimal refrigeration system operation is needed for the rest of the day





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