STS will coordinate and conduct an energy overview with the following items typically in scope:

RTUs (Rooftop Units): General condition, run cycles, economizer positions, outside air situation, controls package, VFDs, evap**orative** and condenser assessment, space temps, return and supply air temps, etc.

Chiller Plant / Boiler Plant: General conditions, outside air reference, efficiencies, turn down ratios, delta Ts on chilled water, cooling tower operation, staging, pump packages, VFDs/AFDs, refrigerant type, controls sequence of operation, trends, and historical analysis **o**f controls front end present, etc.

AHUs (Air Handlers): General condition, evaporator condition**,** and delta T across coils, damper positions, outside air references, controls analysis, corrosion checkup, VFDs, motors, valves, and associated plumbing

Cooling Towers: General condition, corrosion, fill condition, heat exchange efficiency, staged or VFD fans, water loop chemical treatment, piping**,** and drainage, overflow/refill sensors, electrical disconnects and supply, tower basin conditions, structural condition, safety concerns (ladders, lines, hoses, and similar minor hazards)

Controls: Brand, age, and version. System software and hardware checkout, point-to-point analysis of critical components, sequence of operations, signals from sensors, communication speed, staff usage habits, alarm logs, trending analysis, remote or mobile access,

Water: Check mains and evaluate for turbulation and cavitation. Assess for compression valve fitment. Analyze water bills (usage and sewer).

Data Centers: General conditions, aisle arrangements, airflow management, cable management, hot spots/cold spots, server inlet temps, discharge temps, power distribution efficiency, ceiling/floor temp stratification, subfloor management, CRAC unit assessment, controls assessment, backup cooling assessment, and UPS systems.

Production/Assembly: How do these areas affect HVAC efficiency, functionality, safety, and comfort? Conversely, how does HVAC affect production efficiency and reliability? How can they be improved? Pollution control units, waste gases, by-products, power supply, voltage optimization, industrial controls, etc.