POTENTIAL PROJECTS FOR POSSIBLE BID IN FALL 2024

A portion of the following <u>nine</u> tentative research projects (TRPs) will be considered at RAC's Fall meeting for possible bid or re-bid. Bids for all projects released in fall 2024 are due Monday, December 16th:

Potential Projects to Release for Bid in fall 2024 if ready:

- 1566-TRP-R, Equations to estimate evaporation rates from heated water pools in indoor recreational aquatic facilities; Responsible Committee: TC 8.10 (Mechanical Dehumidification Equipment and Heat Pipes); Co-Sponsors: TC 9.8 (Large Building Air-Conditioning Applications); Co-funding: None; Estimated Duration: 24 months; Estimated Cost to ASHRAE: \$150,000; Status: Rebid with revised WS and expanded recommended bidders list.
- 1873-TRP-R, Upper-Air Ultraviolet Germicidal Irradiation (UVGI) for Tall Spaces (Rebid); Responsible Committee: TC 2.09 (Ultraviolet Air and Surface Treatment); Co-Sponsors: TC 9.6 (Healthcare Facilities); Co-funding: None; Estimated Duration: 30 months; Estimated Cost to ASHRAE: \$190,000; Status: Rebid with revised WS and expanded recommended bidders list.
- 1909-TRP, In-Tube Condensing Flue Gas Heat Transfer and Pressure Drop with Enhancements for Residential Furnaces; Responsible Committee: TC 1.03 (Heat Transfer and Fluid Flow); Co-Sponsors: TC 6.03 (Residential and Light Commercial Forced Air Heating and Cooling Systems); Co-funding: None; Estimated Duration: 30 months; Estimated Cost to ASHRAE: \$245,500; Status: Clear RAC Approval conditions with RL.
- 1910-TRP-C, Evaluation of Standard 103 Transient Components and Thermostat Cycle Times on the Resulting AFUE (rebid); Responsible Committee: TC 6.03, (Residential and Light Commercial Forced Air Heating and Cooling Systems); Co-Sponsors: None; Co-funding: None; Estimated Duration: 36 months; Estimated Cost to ASHRAE: \$235,000; Status: Ready.
- 1913-TRP-C, Study of the Corrosion Impact on Information Technology Equipment in Data
 Centers Located in Coastal Regions with High Sea Salt Concentration; Responsible Committee:
 TC 9.9 (Mission Critical Facilities, Data Centers, Technology Spaces and Electronic Equipment);
 Co-Sponsors: TC 2.03 (Gaseous Air Contaminants and Gas Contaminant Removal Equipment),
 TC 2.04 (Particulate Air Contaminates and Particulate Contaminant Removal Equipment);
 Estimated Duration: 24 months; Estimated Cost to ASHRAE: \$280,000; Status: Clear RAC Approval conditions with RL.
- 1915-TRP-C, Refrigerated Facilities Doorway Infiltration Air Energy Reduction; Responsible Committee: TC 10.02 (Refrigeration Applications); Co-Sponsors: None); Co-funding: None; Estimated Duration: 22 months; Estimated Cost to ASHRAE: \$300,000; Status: Clear RAC Approval conditions with RL.
- 1918-TRP-R (Re-bid), The Verification of openings, the limitations of openings, air distribution and humidity conditions in Naturally Ventilated spaces to compliment Section 6.4 of ASHRAE Standard 62.1; Responsible Committee: SSPC 62.1, (Ventilation and Acceptable Indoor Air Quality); Co-Sponsors: None; Co-funding: None; Estimated Duration: 10 months; Estimated Cost to ASHRAE: \$104,940; Status: Rebid with revised WS and expanded recommended bidders list.
- 1947-TRP, Climate change driven extreme temperature effects for efficiency and resilience map of heat pump technology; Responsible Committee: TC 2.05 (Global Climate Change); Co-Sponsors: TC 4.2 Climatic Information; TC 2.8 Building Environmental Impacts and Sustainability Co-funding: None; Estimated Duration: 36 months; Estimated Cost to ASHRAE: \$265,000; Status: Clear RAC Approval conditions with RL.

• 1964-TRP-C, Optimizing Heating System Performance in Warmup and Setback Modes; Responsible Committee: TC 1.04 (Control Theory and Application); Co-Sponsors: TC 7.05 (Smart Building Systems) None; Co-funding: None; Estimated Duration: 24 months; Estimated Cost to ASHRAE: \$280,000; Status: Clear RAC Approval conditions with RL.