Briefing on Energy Savings Performance Contract

Administration Committee
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Agenda

- Follow-up to August 2020 Briefing
- Procurement’s RFP Recap
- Update on the Outcome of the Phase-1 effort
- Next Steps
Briefing Summary

Alternative Delivery Method

- Energy Savings Performance Contract (ESPC)
- Address Deferred Maintenance Issues
- Reduce Energy Consumption
- Reduce Ongoing Operational Cost
- Replace Equipment Past its Life Expectancy
- Select Energy Conservation Measures (ECM) to Create Greatest Value for DART
DART Operating & Maintenance Facilities

- Interior LED Lighting
- Parking / Pole LED Lighting
- Energy Management System
- Split System HVAC Replacements
- HVAC Retro-Commissioning
- On-Site Renewables [Solar]
DART Light Rail Stations

- LED Canopy Lighting
- On-Site Renewables [Solar]
- HVAC Retrofit Commissioning
- Energy Management System
- Parking/ Pole LED Lighting
Best in Class Solar-powered Applications

HVAC Upgrades/Retrofits

Typical Hi Bay Lighting
Reduce Energy Consumption / LED Lighting Retrofits

State of Good Repair
ENABLING LAW

Energy Savings Performance Contracts For Local Governments

- Competitive Bidding through RFQ
- Comprehensive Scope (HVAC, controls, lighting, renewables)
- Financed up to 20 years
- Guaranteed Savings are mandatory & must exceed costs
- 3rd Party Engineering Review
RFP Process

- Four responses received on April 7, 2020
- Technical evaluation committee completed initial evaluation of responses on May 8, 2020
- Oral Presentations conducted May 13- May 14, 2020
- Selection of highest qualified firm on May 22, 2020
- Negotiations completed on June 8, 2020
- Contract award to Ameresco, Inc. for a Not to Exceed amount of $132,000 on July 9, 2020
Completed RFP Process

– Scope of work includes comprehensive survey of 19 facilities and delivery of a complete Investment Grade Audit (IGA) report.

– Upon Phase II recommendation, EO to set M/WBE goals for Ameresco.

– Survey and IGA was delivered in February 2021

– Third party engineer review in March 2021.

– DART Engineering Department review and recommendation against Phase II (to ELT) in April 2021
DART ESPC Procurement Steps and Timeline

- **Completed** Step 1: Form an Internal Selection Process.
- **Completed** Step 2: Conduct a Preliminary Utility Audit (PUA)
- **Completed** Step 3: Issue Request for Qualifications – 3/10/2020
  - Four proposals received on 4/7/2020
- **Completed** Step 4: Select a Performance Contractor – 5/2020
- **Completed** Step 5: Negotiate Contract – 6/2020 and Award 7/2020
- **Completed** Step 6: Energy savings report (Phase I) – received 2/2021
- **Completed** Step 7: Third Party Engineering Review – Completed: 3/2021
- **Completed** Step 8: Engineering review and recommendation Go/No Go Phase II (to ELT) – Completed: 4/2021
- **Canceled** Step 9: Board Approval, for Phase II Implementation
- **Canceled** Step 10: Project Implementation & Execution, under PH-II.
PH-I: Investment Grade Audit (IGA)

- Overall representation of the potential for energy savings.
  - Based on the data collected from site surveys, facility interviews, and other means were utilized.
  - ECMs identified that helped DART determine overall operational costs reductions through a combination of retrofits and equipment replacements & validated by a 3rd Party engineer.
Rationale for not moving forward under PH-II with PH-I Contractor

- Total Implementation cost of all ECMs identified: $21,223,322
  - Projected Annual Cost Savings of $568,156 per year.
  - Calculated simple payback equates to 37 years, which is longer than desired by DART.
- 37 yr. fee commitment with Contractor for annual cost savings guarantee verification would be required.
  - Loss of operational flexibility by contractually binding the Agency to specific technologies and a single company over the 37-year period.
- Recurring fee avoidance if DART could self-perform any identified cost saving measures via competitive bidding process.
- Ongoing Capital and Maintenance projects addresses some ECMs are currently funded in the 20-year financial plan.
  - 3rd Party Financing not required.
HVAC Units

Bus Canopy Solar Photovoltaic Systems

IT Server Room Split System
Trane Packaged Unit
Wall Mounted PTAC

Figure D.1: PV Arrays Located at MWRDS

Typical Hi Bay Lighting
Typical T8 Lighting

Lighting Upgrades

LED Lighting
DART will reduce energy and water consumption, address existing O&M issues, and upgrade aging infrastructure. Phase-II project will deliver additional strategic benefits to DART:

- Provide sustainable energy savings.
- Enhance reliability and quality of the facility operations.
- Upgrade lighting with modern, efficient, long-lasting LED equipment.
- Install new energy management and control systems where none exist and enhance energy savings through improvements to existing energy management and control systems.
- Replace aged HVAC equipment.
- Upgrade plumbing fixtures.
- Install solar PV systems on existing bus parking canopies at bus operating facilities.
Next Steps

 DART will proceed in a Phased approach:
  ✓ Phase-1 (Group 1): LED Lights Retrofits* (Internal & External) and Bus Parking Canopy Solar Panels
  ✓ Phase-2 (Group 2): HVAC Upgrades*, Programmable TSATS, and Ventilation Controls
  ✓ Phase-3 (Group 3): Water Conservation Measures [Mechanical Faucet Aerators, Hi-efficiency Toilets & Urinals]

 Total Implementation Cost: $8.1M*
  o *One-time Utility Incentive allowable deductions are included.
  o Annual Savings: $521,984

 Financial Plan Budget: $9.5M