San Francisco Public Utilities Commission

$6.8M Water Enterprise Land Mobile Radio System Replacement Supplemental Appropriation

Capital Planning Committee
September 11, 2017
Background

• **SFPUC currently uses two radio systems:**
  
  I. Department of Emergency Management’s Motorola 700/800 MHz standard (“P -25”) radio system.
  
  II. Low-frequency legacy radio system spanning seven counties, and has reached its end-of-life.

• **Request for Proposals**
  
  • In January 2017, SFPUC issued a Request for Proposal (RFP) to find a qualified Proposer to replace Water Enterprise’s low-frequency radio system with a modern high-functioning system.
SFPUC’s System Requirements

- **Turn-Key:** Secure, reliable, cost effective, state-of-the-art radio system with trunking capability.

- **Spectrum:** Fully feasible and licensable. Encouraged use of SFPUC’s existing towers and microwave sites to the extent possible.

- **7-County Coverage:** Minimum 90% coverage in both urban and remote, rugged, rural areas and the loss of any single radio site does not result in a loss of coverage greater than 10% of the service area.

- **Interoperability:** Can communicate across SFPUC, CCSF and mutual aid partners.

- **Prioritization:** Priority given to the SFPUC for everyday communications and during major emergencies.

- **System Warranty and Post Implementation Support:** 10 years with 24/7 break/fix support for system performance, hardware, and software.
Motorola Radio Replacement System

- Turn-key, purchased standard P-25, two-way radio system with proven technology used by the Federal government, CCSF, and other parts of the SFPUC.

- Fully feasible and licensable with guaranteed coverage/voice quality that exceed SFPUC’s requirements across all seven counties.

- Natively interoperable with the CCSF and mutual aid partners’ P-25 radio systems. Inherent prioritization because the SFPUC will not share channels.

- The SFPUC will own the system’s equipment (including all radio infrastructure, towers, dispatch consoles, handheld radios, and mobile radios) and FCC licenses to operate the system beyond ten years.

- 24/7 break/fix support over life of the contract.
Funding

• Land Mobile Radio System Replacement cost: $9,121,131
  • Current funding available: $2,306,281
  • Additional funding needed and requested: $6,814,850
  • Source-Water Revenues