



San Francisco Public Utilities Commission

Services of the 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