

MARIN EMERGENCY RADIO AUTHORITY

c/o Town of Corte Madera
300 Tamalpais Drive, Corte Madera, CA 94925
PHONE: (415) 927-5050
WWW.MERAONLINE.ORG

DATE: February 24, 2021
TO: MERA Governing Board
FROM: Andrew LeBlanc, Operations Officer
SUBJECT: AGENDA ITEM C-2: Update – Report on Gen 1 initiatives

Discussion: The MERA Executive Board requested that DPW Communications Staff prepare a staff report on the Gen1 MERA System Major Maintenance and Repair Evaluation.

Background: The operation and maintenance of the Gen1 System are performed by the DPW Communications Division staff together with our manufacturer partners: Motorola for the trunked radio system and Aviat Systems for the microwave backhaul network. Due to the age of the Gen 1 system, the Communications team is sourcing additional spares to extend the Network's life expectancy

Microwave Channel Bank Equipment:

DPW has sourced additional Channel Bank spares. The Channel Banks are a critical piece of hardware used by the Mountain top RF sites to communicate with the Core as they carry voice traffic. The channel bank spares have been ordered, and we anticipate having them in the market before the end of March. The total spare cost is \$95,000.

Sacramento Spares

DPW staff has worked with Sacramento County who recently replaced their GEN1 Network. Compatible networking spares were identified, and the teams are worked together in mid-February to have the spares relocated from the Sacramento depot to Marin. Sacramento County donated these spares to the County and MERA.

Prime Site - Motorola Engineering Analysis:

With NextGen go-live approximately three years out, DPW staff felt it would be advantageous to engage Motorola to perform a system-level audit on the Gen1 core network as the last audit was completed in 2018. The audit is scheduled to take place in early March 2021. This audit's goal would be to identify equipment at a high risk of failure and provide guidance on contingencies and risk mitigation. The total estimated cost is expected to be less than \$15,000