

MARIN EMERGENCY RADIO AUTHORITY

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DATE: January 27, 2021
TO: MERA Governing Board
FROM: Andrew LeBlanc, Operations Officer
SUBJECT: AGENDA ITEM C-1: REPORT ON GEN 1 Initiatives (DISCUSSION)

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 Communications Division staff together with our manufacturer partners: Motorola for the trunked radio system and Aviat Systems for the microwave backhaul network.

Microwave Channel Bank Equipment: During the 09/23/20 GB meeting, approval was granted to procure new Channel Bank WAN interface cards, CPU cards, and a new CPU chassis. This equipment is used to transport voice traffic from the RF sites to the Prime site. During the 10/28 GB meeting, DPW staff revised the recommendation to proceed with a less intrusive. This option was to purchase additional Channel Bank WAN and CPU cards forgoing the new CPU chassis. DPW staff felt that the chassis replacement is too intrusive and could cause more issues than it resolves. After a second review, DPW is proceeding with Channel Bank WAN and CPU interface cards procurement for a total cost of \$110,000.

Additional RF Networking Spares: DPW staff is working with Sacramento County who recently replaced their GEN1 Network. Compatible networking spares have been identified, and the teams are working together to move the equipment from the Sacramento depot to the Marin. This is expected to happen in early 2021.

Motorola Engineering Analysis: With NextGen go-live approximately three years out, DPW staff feels it would be advantageous to engage Motorola to perform a system-level audit on the Gen1 network as the last audit was completed in 2018. This audit's goal would be to identify equipment at a high risk of failure and provide guidance on contingencies and risk mitigation. Pursuant to the Technical Services Agreement between MERA and the County, DPW staff is working with Motorola to complete a system-level audit of the GEN1 system in early 2021.