



DEPARTMENT OF PUBLIC WORKS

Quality, Excellence, Innovation

**DATE:** May 13, 2020

**TO:** MERA Governing Board Raul

**FROM:** Rojas, Acting Operations Officer

**SUBJECT:** AGENDA ITEM E-2: PROPOSED SONOMA-BAY HILL MICROWAVE LINK RELINQUISHMENT

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**Recommended Action:** Direct Operations Officer to work with Sonoma County to transfer ownership and operation of the Sonoma-Bay Hill microwave link.

**Background:** The Sonoma-Bay Hill microwave link is currently part of the MERA system. As part of a 2003 license agreement between MERA and Sonoma County (Sonoma), MERA allows Sonoma to utilize the link. Sonoma currently uses the majority of bandwidth on the link, while the equipment and FCC licensed frequencies for this link belong to MERA.

Sonoma is in the process of upgrading their entire microwave system to include more capacity and the existing equipment in the Sonoma-Bay Hill link will become a 'bottleneck', limiting their network bandwidth. As outlined in the attached request, Sonoma County would like to upgrade this link (at their cost) and acquire the FCC licensed frequencies. MERA would be provided its required T1 circuits to ensure continued operation of the existing T-band system. MERA will realize an immediate benefit of improved microwave loop redundancy. Sonoma will provide on-going maintenance (at no cost to MERA) until MERA vacates the Bay Hill site after cutover to the MERA NextGen system, at which time Sonoma would take over the site. Sonoma maintains on-hand spare equipment and has committed to providing 2 hour (or less) response time for urgent repairs/troubleshooting.

This request was vetted at several MERA Operational Issues Working Group meetings in late 2019. Technical & operational questions were raised and addressed during this time and at their December 4 meeting, the Group recommended forward to you Board for approval.

**Attachment:** Sonoma County request letter



# Sonoma County Sheriff's Office

*MARK ESSICK*  
Sheriff-Coroner

*JAMES NAUGLE*  
Assistant Sheriff  
Law Enforcement Division

*ALAN VERNON*  
Assistant Sheriff  
Detention Division

## Telecommunications Bureau

Marin Emergency Radio Authority  
C/O Ethan Simpson, Manager  
Marin County Public Works  
Communications Division  
4 Peter Behr Dr  
San Rafael, CA 94903

The Sonoma Mountain (Sonoma) to Bayhill Road (Bayhill) microwave link operated by Marin County includes bandwidth for Sonoma County network traffic. Marin Emergency Radio Authority (MERA) purchased and installed a microwave link from Sonoma to Bayhill, as part of the July 22, 2003 County of Sonoma and MERA License Agreement at the Sonoma Mountain communications site. The agreement included the provision for the microwave link to carry MERA and Sonoma County network traffic.

Sonoma County wishes to expand the bandwidth capacity of the Sonoma to Bayhill link to accommodate data requirements of expanding technologies. This requires replacement of the existing 17 year old MERA microwave radio equipment, or, installing a separate microwave link for Sonoma County.

Sonoma County acknowledges MERA's future plan to decommission the Bayhill communications site, which includes the existing MERA owned, Sonoma to Bayhill, microwave link. Sonoma County proposes to replace the existing equipment and utilize the current FCC licensed frequencies held by Marin County.

It is therefore proposed.

- Marin County transfers FCC licensed frequencies 6197.24 MHz (FCC Call Sign WBM363) and 5945.2 MHz (FCC Call Sign WPRV998) to County of Sonoma.
- Sonoma County will purchase and install a new higher bandwidth microwave radio to replace the existing microwave radios. The new microwave radios will reside in the Sonoma County building at Sonoma Mountain and co-located with the Sonoma County equipment at Bayhill.

- The new microwave link will carry MERA network traffic, as per the 2003 lease agreement for at least (4) T1 capacity, at no cost to MERA.
- All existing microwave equipment supporting this link shall remain in sole possession of Marin County/MERA. When the Sonoma County installs the new microwave system, the existing equipment shall be turned off and remain in place until such time that Marin County/MERA elects to remove it at their own expense.

If you have any questions or concerns, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script, appearing to read "Russel Holmes".

Russel Holmes  
Telecommunications Manager  
(707) 565-6727