

**MARIN EMERGENCY RADIO AUTHORITY**

c/o Novato Fire Protection District  
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**Executive Board**

**Minutes of January 13, 2016 Meeting**

**DRAFT: 3/2/16**

**Call to Order:**

The meeting was called to order by Chair Hymel on January 13, 2016 at 3:33 p.m. in the Heritage Conference Room, Novato Fire Protection District Administration Office, 95 Rowland Way, Novato, CA 94945.

**Board Members Present:**

County of Marin	Matthew Hymel
Marin County Sheriff	Robert Doyle
City of San Rafael	Chris Gray
Fire Services	Richard Pearce
Police Departments	Todd Cusimano
Ross Valley Cities/Towns	Debra Stutsman

**Board Members Absent:**

City of Novato	Jim Berg
Southern Marin Cities/Towns	Jim McCann
Special Districts	Bill Hogan

**Staff Present:**

MERA Executive Officer	Maureen Cassingham
MERA Deputy Executive Officer/Next Gen System	Dave Jeffries
MERA Operations Officer	Pat Echols
DPW Communications Services Manager	Shelly Nelson
County Communications Engineer	Richard Chuck
Recording Secretary	Jennifer Schwarz

**Guests:**

Federal Engineering, Inc.	John Murray
	Rajit Jhaver
	Bob Simmons
Marin County Public Works Director	Raul Rojas

CALL TO ORDER

A. Consent Calendar

All matters on the Consent Calendar are to be approved with one motion unless a Member of the Executive Board or the public requests that a separate action be taken on a specific item.

- 1) Minutes from November 18, 2015 Executive Board Special Meeting
- 2) Minutes from November 18, 2015 Executive Board Regular Meeting
- 3) Report No 34 on Strategic Plan Implementation
- 4) Report on Marin County Civil Grand Jury Report Card – RE: meraonline.org
- 5) Bi-monthly Report on MERA Reserve Funds Balances

*M/S/P Doyle/Gray to approve Consent Calendar Items 1-5 as presented.*

AYES: ALL

NAYS: NONE

ABSTENTIONS: Cusimano

Motion carried.

B. Executive Officer's Report (Cassingham)

1. Selection of Bond and Disclosure Counsels and Bond Trustee

Cassingham presented her staff report stating that a Request for Fee Proposals was developed with Finance Committee Vice Chair Gaffney, Sperry Capital, Inc.'s input and issued to Nossamin LLP and Hawkins, Delafield & Wood LLP who have provided Bond and Disclosure Counsel services to MERA in the past. Based on the amount of the fees submitted, a formal RFP was deemed unnecessary. In addition to fee quotes for bond issuance over and under \$10M, a fee quote from Bond Counsel was requested for a construction line-of-credit.

Cassingham noted an omission from her report was the fee from Hawkins for issuance under \$10M, which is \$25,000. She added that her fee negotiations with Bond Counsel for the LOC resulted in a 20% reduction to \$40,000. Likewise, the fee from Hawkins was reduced by 14% to \$30,000 for bond issuance over \$10M. Given past experience with both Counsels and based on review and negotiation of their fees, the Review Team has recommended, without reservation, the engagement of Nossaman and Hawkins as Bond and Disclosure Counsels respectively.

Hymel noted these engagements will put MERA in the position to issue bonds in this very favorable interest rate environment. Cassingham added that the fully assembled Finance

Team will be able to facilitate the timely issuance of bonds with Governing Board approval.

*M/S/P Pearce/Cusimano to approve the engagement of Nossaman LLP as Bond Counsel and Hawkins, Delafield & Wood LLP as Disclosure Counsel to prepare for the issuance of bonds for the Next Gen Project.*

AYES: ALL  
NAYS: NONE  
ABSTENTIONS: NONE  
Motion carried.

2. Request for Budget Adjustment for Financial Advisory Services - Sperry Capital, Inc.

Cassingham said upon engagement, Sperry Capital, Inc., had an original budget of \$10,000 to review MERA's Project Financing Plan, phased issuance of bonds, current and future market conditions and other financing options. She said they have re-presented many iterations of options at the Finance Committee's request and an additional allocation of \$20,000 is warranted, bringing their total budget to \$30,000. She noted this entire amount may not be expended and that Sperry's performance has been outstanding to date. Sperry will present their recommendations to the Finance Committee in the coming weeks.

*M/S/P Cusimano/Pearce to approve the Request for Budget Adjustment for Financial Advisory Services for Sperry Capital, Inc., to \$30,000.*

AYES: ALL  
NAYS: NONE  
ABSTENTIONS: NONE  
Motion carried.

3. Report No 9 on Next Gen Project Oversight Committee (NGPOC) (Jeffries)

Jeffries summarized his report noting his participation in Federal Engineering's (FE) FCC Frequency Review, finalization of the FE/MERA Communications Plan and scheduling of the Coverage Workshop. 100% of MERA's members will be represented at the Workshop. Member attendance is currently at 50 plus staff.

Jhaver presented a PPT on Federal's updated System Lifecycle Report and the overall recommendations from it, along with industry standards. The slides provided a definition of System lifecycle, individual product lifecycles, proprietary vendor information on lifecycle, post-warranty aspects and more. He introduced Murray, Chief Operating Officer and Simmons from FE.

Jhaver noted availability of replacement parts for the current System is a growing concern. He said there have been significant technological advances since the current System was implemented. IP-based systems are now the norm in the industry versus current switch-based. He reviewed the vendor RFP timeline and new system implementation timeline of

2 years. Site availability will drive this. A key part of the RFP is how to extend the System with maintenance and updates. There are hardware, software and technology platform components of the System to be taken into account.

Jhaver said most of the major manufacturers provide weekly antivirus updates, monthly software patches and annual application software updates. Every 3 to 5 years, vendors provide a computing hardware version refresh and every 5 to 10 years there is a networking hardware version refresh. The backhaul, meaning the microwave, has a 15-25 year lifecycle, consoles 10 to 15 years, radios 10 to 15 years and base stations or repeaters 15 to 25 years. Mobile radios have a longer life expectancy than portables due to wear and tear. Life expectancy of towers, shelters and generators varies due to such factors as weather, preventive maintenance and increasingly wind-loading standards.

In response to Pearce, Jhaver said most tower companies are up to structural loading standards but public agency sites have leeway. He reviewed the slide on infrastructure and subscriber product lifecycles, noting design, production and support phases. Manufacturer support continues for 5-7 years to end of service. He reviewed the P25 Suite of Standards and the features not compatible among the different vendors' radio equipment, including over-the-air programming (OTAP), wireless connectivity for OTAP, ADP encryption and GPS location.

Jhaver summarized the post-warranty vendor support including security updates and software upgrades which can be purchased annually or bi-annually. Vendors will support System upgrades that may be necessitated by software upgrades at an additional cost during the post-warranty support period. Vendors do not include a complete technology update which covers site civils, consoles, base stations, radios and backhaul, which should be budgeted during the system lifecycle. Rojas asked about the cost of system software upgrades. Jhaver said for a \$10M system, the annual cost would be \$400,000 or \$2M for 5 years after system acceptance. Nelson added that upgrades every two years would be more logistically appropriate and in the range of \$800,000 for software and system routers.

Jhaver said software would still be provided annually. He said the minimum term of such an agreement would be 3 years, with 5 years being more typical. Vendors will support up to 10 years. The longer the term, the more bundling incentives would apply. He added the RFP would include an upgrade agreement as an option that will elicit quotes for various terms and bundles. Pearce said MERA may consider its own sinking fund to refresh the system. Jhaver said such a fund is ideal for items not included in an upgrade agreement like shelters or generators.

Chuck asked if upgrades cover system expansions such as adding cells or sites. Jhaver said this can be done for an added cost. Hymel asked about a 10-year service contract fully extending the useful life of the system. Jhaver said this depends on when you are hitting the production schedule. The core would, however, be in a good state with a 10-year refresh. Murray added the biggest discontinuation seen in the last few years is when digital came out. The next product line will likely be broadband. Vendors are providing better migration paths. Likely towers and transmitters would need to be changed to move to the

next product line. Hymel confirmed with Jhaver that the hardware sinking fund option would be developed by MERA but FE or the vendor could provide estimated costs; for example, for a second round of radios, Jhaver said MERA could seek discounts off list price for the life of the refresh agreement. Jeffries said the Project is buying the first round of radios, and the members would get the discount benefit when they replace in round two. Nelson said current radio life has been extended by salvaging from neighbor agencies who have moved to new systems. Jeffries noted that assignment of individual radios to officers has improved lifecycle.

Pearce confirmed with Jhaver that FE will avoid putting proprietary equipment or features in the RFP. Member equipment options will be possible. He said any option must be compatible and compliant. Hymel said we don't want proprietary in the base. Jhaver said there is much to be said about standardization which also makes replacement and swapping easier.

Jhaver recapped the 7 lifecycle recommendations. MERA will deploy a 700MHz P25 Phase 2 standards-based system which will improve coverage, interoperability, and capacity. In response to Hymel, he cited several technological advancements with the new system, including forward air correction which improves signal quality, doubles the capacity and greatly enhances interoperability with the P25 platform. Other recommendations include implementation of an anti-virus definition and security updates, bi-monthly or monthly installation of system patches, bi-annual software updates and refreshed networking hardware every 3 to 5 years. Chuck asked if any software upgrades would require new subscriber equipment or if they would always be compatible. Jhaver said they would be compatible but certain features might not be unless upgraded. Nelson said radios may be capable but features are not turned on.

Jhaver presented the final recommendations of a sinking fund for a system technology refresh and a system lifecycle maintenance agreement while planning for procurement of the next system. Hymel asked if the vendors could do the maintenance and upgrades. Jhaver said they provide these packages and perform the work. He confirmed for Pearce the projected completion for Next Gen is October 2018. This will be reconfirmed by the vendor's schedule.

Jeffries noted the Project's next steps as the January 26 Coverage Analysis Workshop followed by a Project Oversight Committee meeting and briefing on January 27 on the Workshop, Frequency Review and Lifecycle recommendations. All this is leading to the preparation of the issuance of the draft RFP on March 1. There will be a 20-day window for comments from the staff, Ops, the Oversight Committee and Executive Board. Jhaver said the document will be 80-100 pages plus appendices. Jeffries said the final RFP will be issued in April.

4. Other Information Items

Cassingham reported that MERA's website, effective today, has been updated with the FY16-17 Low-Income Senior Exemption FAQs and Application for the Measure A Parcel

Tax under Quick Links on the Homepage. She will be working with Jeffries and Anderson on additional outreach through member agencies. She gave thanks to Schwarz and Pallas for their extra efforts in handling Measure A calls and walk-ins.

C. Operations Reports (Echols)

1. Update on Completion of Bay Hill Tower Replacement Project

Echols presented his report on completion of the Tower Replacement last month, noting project costs came in at \$32,162, well under the \$75,000 budget. He conveyed his thanks to the DPW team for the savings.

2. Request for Additional Radios – Marin County Sheriff's Office and Marinwood Fire Department

Echols presented the request for one additional mobile radio per requestor. Both requests were vetted through the Ops Group and were recommended for approval.

*M/S/P Gray/Pearce to approve the requests by the Marin County Sheriff's Office and Marinwood Fire Department for one mobile radio, each with a requirement for an APX one-band operational, second upgradeable, or APX Dual-band, both bands operational radio.*

AYES: ALL  
NAYS: NONE  
ABSTENTIONS: NONE  
Motion carried.

3. Other Information Items

Echols reiterated the importance of attending the Coverage Workshop on January 26 in the Manzanita Room at the MCC Exhibition Hall.

D. Open Time for Items Not on Agenda

None.

E. Adjournment

The meeting was adjourned at 4:26 p.m.

Respectfully submitted,

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Maureen Cassingham  
Executive Officer and Secretary