

MARIN EMERGENCY RADIO AUTHORITY

c/o Town of Corte Madera
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DRAFT 5/22/2020

**SPECIAL JOINT MEETING OF FINANCE COMMITTEE AND
NEXT GEN PROJECT OVERSIGHT COMMITTEE
MINUTES OF MAY 20, 2020**

Call to Order

The meeting was called to order by Cuismano at 3:02 p.m. on May 20, 2020 via teleconference.

Finance Committee Members

Present:

County of Marin	Matthew Hymel
Town of Ross	Tom Gaffney
Marin County Sheriff	Robert Doyle
Central Marin Police	Michael Norton
Authority	

Finance Committee Members

Absent:

Town of Tiburon	Greg Chanis
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**Next Gen Project Oversight
Committee Members Present:**

Town of Corte Madera	Todd Cuismano
County of Marin Fire	Mark Brown
Novato Police	Jim Correa
Department	
Marin County Sheriff	Robert Doyle
Novato Fire Protection	Gerald McCarthy
District	
Tiburon Fire Protection	Richard Pearce
District	
County of Marin	Matthew Hymel

Town of Ross

Tom Gaffney

**Next Gen Project Oversight
Committee Members Absent:**

None

Staff Present:

MERA Executive Officer	Maureen Cassingham
MERA Deputy Exec. Officer – Next Gen Project	Dave Jeffries
MERA Admin Assistant – Next Gen Project	Maura Griffin
MERA Operations Officer	Raul Rojas

Guests Present:

David Mortimer	DPW
Mark Hannah	AECOM
Ahmed Chohan	AECOM
Mike Soderman	AECOM
Kevin Uhl	AECOM
David Anderson	AECOM
Jennifer DiPasquale	Motorola

A. Approval of Minutes from the Meeting of the August 28th, 2019 Next Gen Project Oversight Committee

M/S/P Brown/Pearce to approve minutes of the August 28th, 2019 Next Gen Project Oversight Committee Meeting as presented.'

AYES:	All
NAYS:	None
ABSTENATIONS:	None

Motion Carried

B. Approval of Minutes from the Meeting of the March 11, 2020 Finance Committee

M/S/P Gaffney/Hymel to approve minutes of the March 11th, 2020 Finance Committee Meeting as presented.'

AYES:	All
NAYS:	None
ABSTENATIONS:	None

Motion Carried

C. Proposed Contract Change Order #12 – Early Order Radios and Assistance to Firefighters Grant

Rojas summarized that in September 2019 the Marin County Fire Department was awarded a grant of approximately 1.8 Million Dollars from Homeland Security and FEMA. The grant covers 600 portable radios and 332 upgraded mobile early order radios.

Brown continues that his strategy for using the grant was to upgrade the entire MERA Fire radio system to tri-band radios with two main goals: (1) to help with the transition to the Next Gen System by speeding up implementation and (2) to assert the VHF bandwidth into all radios as required by the statewide Fire Mutual Aid System. All Fire vehicles in California are required to have VHF capabilities, helping with interoperability. At the time that the grant was written, the total quantity of radios was best estimated at 600 portable radios and 332 mobile radios. These are the number of radios that are currently being used in the MERA system, as well as a radio cache that can be used for possible repairs, and future training purposes. This cache consists of approximately 60 portable radios and 7 mobile radios.

One of the main objectives for the use of the grant is to help offset costs for MERA with the upgrade to the Next Gen System. After allocating the grant funds towards the project, the hard costs were close to \$200,000 less than anticipated in total. There were, however, some soft costs that were harder to identify, such as the portable chargers and other radio accessories.

Additionally, there are some Fire agencies that made an early order for Next Gen Radios, and those radios will come back into MERA's Next Gen Radio System inventory and can be used for other public safety agencies in the future. One of the biggest benefits of these early order radios is that fire engines are one of the hardest types of mobile installations to process and schedule, and these will already be completed prior to the rest of the fleet.

Gaffney asks how many total radios are being purchased systemwide? Jeffries responds that the system will be about 3,000 radios in total. Gaffney continues, concerned that out of the total budget of 7.4 Million Dollars, 4.5 Million Dollars is being spent on 932 radios, only leaving 3 Million Dollars in budget for the remaining 2,000 radios. Brown comments that as they were working through the grant, they made sure not to increase the cost to MERA. He clarifies that MERA will not be fronting any money to be reimbursed from the grant, the County of Marin is fronting the value of the grant to be reimbursed to the County when the grant is funded. During the radio inventory count process, it was ensured that the number of radios, and the additional increased frequency bands did not incur any additional costs to MERA. These total costs were approximately \$200,000 less than originally anticipated.

Jeffries asks Gaffney if his question is referring to the cost for a portion of the radios, in relation to the total budget cost, and is there a mismatch of cost there? Gaffney clarifies that his worry is that about 900 radios are costing approximately 60% of the total MERA radio budget, which should cover 3,000 radios. Rojas responds in agreement that Gaffney is indeed correct, the value

of these 900 radios seems to be almost double the original quoted cost. Rojas continues that because these radios have more capabilities, they are priced higher by proportion than what the other radios will cost the project, but it is a net decrease in total cost by \$100,000 - \$200,000 to the project because of the grant funds.

Gaffney explains that these radios, prior to the enhancement, cost over \$4,000 each, but the budget covers a little over \$1,000 per radio. Cusimano questions Rojas “is this going to be the cost going forward for the rest of the radios for the project?” Rojas responds “no, Motorola will honor the original quote per radio, and the costs for the remaining radios will remain the same.”

Jeffries replies that the budget amount is roughly 7.5 Million Dollars for vendor radios. If the early order radios cover one third of budget amount, the MERA cost should be approximately 2.5 Million Dollars, not 4 Million Dollars. So, at this price point, this budget line item of 7.5 Million Dollars is half of what it should be to cover the 3,000 radios.

Hymel responds that between Rojas, Jeffries and MERA Staff, they can work on spreading out the numbers because there are also non-public safety radios that still need to be reconciled, as well as some credits that can be applied to ensure that MERA is not any worse off by taking this action of early order radios. Hymel concludes that there should be a follow up to look at and reconcile the vendor radio budget. Rojas and Gaffney agree that a meeting should follow to discuss reconciliation of the per radio costs. Cusimano suggests they should proceed by approving this item with the amendment that they will continue to work on this budget reconciliation together. Hymel recommends approval of this item pending the confirmation that it does not make MERA any worse off.

M/S/P Hymel/Pearce to approve Proposed Contract Change Order #12 – Early Order Radios and Assistance to Firefighters Grant as presented to the Finance Committee.’

AYES: All

NAYS: None

ABSTENATIONS: None

Motion Carried

D. AECOM Next Gen Radio System Customer Design Review Submittal Analysis – Third Party Review

Cassingham summarizes that AECOM was engaged by the MERA Governing Board in February of 2020 to deliver a third-party review of Motorola’s Customer Design Review Documents to best as possible inform the construction of the Next Gen System Project. Since then, AECOM has been working, via conference call and document sharing, to create their analysis of the document submitted thus far by Motorola. The latest iteration, as Cusimano mentioned, was provided for the Boards’ review and comment. The team who put the document together, Kevin Uhl, Mike Soderman, David Anderson,

Ahmed Chohan are on the meeting call today and will be presenting their report.

Mike Soderman begins by summarizing the key points and concerns of the AECOM Next Gen Radio System Customer Design Review Analysis for review. Overall AECOM believes, in general, that the architecture of the proposed System from Motorola is a feasible solution for a 750MHz P-25 Radio System that will work and meet the intent of MERA's functional requirements. In AECOM's Review of the design documentation, AECOM notes issues that they recommend should be resolved to minimize risks that can cause increased costs and/or delays in schedule. While the comments are provided in further detail in each of the CDR documents in section 5 of the Report, Soderman would like to share the key points of concern. Soderman introduces his team to share further.

Mark Hannah continues by voicing his challenges in reviewing the Motorola Customer Design Review documents due to inconsistencies and discrepancies in documents. Hannah believes having a clear design within the documents will minimize future change orders and create smooth budget implementation moving forward, in the best interests of the vendor and MERA. There were four key areas that had the biggest issues when reviewing the CDR documents. Beginning with the microwave system, this is the communications network that links all the sites and subsystems together. It is a critical point for the radio system and must be reliable. The approach presented by Motorola was good according to Hannah, but the documents seemed to contain multiple designs and needed clarification to find the final design. Ultimately there needs to be one design agreed upon, and the documentation needs to be consistent with that design. This is required to finalize the frequency coordination and complete FCC licensing for the microwave network.

The next discrepancy noted was there seems to be obstructions from trees from some of the paths as documented in the in the Path Engineering Profile. Hannah says they were assured that a Path Survey had been performed in 2017, however there is no documentation to support this. Normally when a physical Path Survey is performed, any potential obstructions noted in the modelling software are physically measured to confirm if they are an issue or not. AECOM recommends that these paths are reverified to confirm there are no issues and will not expose the Project to further risks and delay in budget. If this is not done, there is a possibility that a site can be determined to be unreachable and another site will have to be found.

Anderson, Radio Design Engineer, introduces himself and stresses the importance of the reliability of this new radio System. Modern 750MHz systems are typically designed for balanced talk-in and talk-out two-way operations. Although MERA's Next Gen System is designed with the equipment typically used for these two-way operations, the area throughout the County guaranteed for talk-out is lower than that of talk-in, creating an imbalance in the radio system. AECOM recommends that the talk-in guarantee be increased to meet the talk-out guarantee in all parts of the county.

Anderson continues, the MERA RFP clearly shows the intention of providing users with clear voice quality; however, the Coverage Acceptance Test Plan which is to proof performance of radio coverage, is unclear on the methods and procedures used. AECOM has provided an edited version of the Coverage Acceptance Test Plan that, if completed with the suggested alterations, will serve as a good mechanism to test the installed and delivered radio system according to real human voice quality. Radio coverage is crucially important for the MERA Next Gen Project; therefore, AECOM provides guidance on how to strengthen the coverage agreement, and how to test the coverage of the delivered system to ensuring voice quality.

Uhl continues to review the project schedule as another key point, stating that the schedule is an area of risk, and is important to examine. Vital points for the Project Schedule are to make sure all the basic tasks are covered, they are in the right sequence, with a good understanding when key steps will occur, and when the project will be completed. The preliminary schedule that AECOM reviewed was reasonable in tasks, sequence, and level of detail. The overall schedule of 3 years seems like a reasonable time period for completion of the MERA Project says Uhl. As predicted, it is unlikely there will be any issues with Motorola ordering the equipment, or staging it, or shipping it to a facility located within the County. However, from past experiences with similar type projects, Uhl suggests the biggest risks keeping the project on schedule will be the development of the radio sites.

There are 2 years allotted in the Project Schedule for site development towards 10 existing sites, and much of site acquisition and the permitting process has already been completed. AECOM feels 2 years is reasonable, but this area of the project should receive focus to be completed on time.

Another key area affecting the Project Schedule, that was discussed previously, is the installment of mobile radios for fire services. Not completing mobile radio installations prior to cutover has risk. With the plan to go with dual band radios, fleet mapping code plug development and installations can begin much earlier, and the schedule needs to be updated to reflect that says Uhl. After reviewing the mobile implementation plan in the CDR package, it is noted that the deployment schedule for the mobiles, including the number of mobile installations required per week, has not yet been included in the CDR. Uhl concludes that he has summarized the key points of concern in AECOM's Review of Motorola's Customer Design Review Documents.

Cusimano thanks AECOM for the detailed analysis and opens the floor for questions. Jeffries summarizes that the next steps for this process are developing a task list of items that need to be corrected and/or followed up with Motorola. A caveat being many of the recommendations by AECOM include additional work which may be subject to a change order being proposed by Motorola. Jeffries expects to connect with Motorola the following week.

Pearce asks Jeffries how he will move forward with prioritizing this task list? Jeffries suggests spending some time to digest the findings in the AECOM Review documents, noting that there are some factual mistakes, documentation that does not match up, updates that have not been completed and other style related differences of opinion. There seem to be minor errors and the potential for more significant findings in the CDR documents, and these are the types of questions to bring forward. Jeffries proposes after review to then bring the vetted list to Motorola to discuss moving forward next week.

The CDR Schedule and the CDR Training Plan are incomplete at this point in large extent from waiting for the Construction Schedule yet to be provided by MERA, he continues. MERA is currently facing transitions with the County, stalling any progress on the Construction Schedule at this point. Once this schedule is complete, it can be plugged in by Motorola, helping them outline a completed schedule. Pearce thanks AECOM for the detailed and timely presentation. Cusimano recommends accepting the report, and to move forward with next steps outlined by Jeffries. Cassingham suggests a presentation of the recommended CDR document to the Governing Board no later than the June 24, 2020 meeting.

M/S/P Pearce/Gaffney to accept the AECOM Next Gen Radio System Customer Design Review Submittal Analysis – Third Party Review with the outlined next steps to submit to the Governing Board no later than the June 24, 2020 Governing Board Meeting as presented to the Next Gen Project Oversight Committee.'

AYES:	All
NAYS:	None
ABSTENATIONS:	None
Motion Carried	

E. Other Information Items

None.

F. Open Time for Items Not on the Agenda

None.

G. Adjournment

The meeting was adjourned at 3:50 p.m.

Meeting Minutes Prepared By:

X Maura Griffin

Maura Griffin, Next Gen Project Administrative Assistant