

MARIN EMERGENCY RADIO AUTHORITY

c/o Novato Fire Protection District
95 Rowland Way, Novato, CA
94945

PHONE: (415)878-2690 FAX: (415)878-2660

WWW.MERAONLINE.ORG

DATE: January 13, 2016

TO: MERA Executive Board

FROM: Dave Jeffries, Deputy Executive Officer for the Next Gen Project

SUBJECT: AGENDA ITEM B-3: Report No 9 on Next Gen Project Oversight Committee
(NGPOC)

Recommended Action: Receive and file Report on the Next Gen System Project Update

Background:

Since the last report to the MERA Executive Board, several items have moved forward:

- a) FE/MERA Communications Plan – The draft was updated and finalized. We have started receiving monthly reports from Federal Engineering and using them as a foundation for a MERA Newsletter to keep MERA member agencies up to date.
- b) Site Surveys - Site Surveys have been completed and we have received a final report from Federal Engineering.
- c) The Next Generation Project Oversight Committee Meeting - This committee met on 12/09/2015 and received an update on the project, discussed the upcoming Coverage Workshop on 01/26/2016 and discussed the use of alternates for NGPOC members.
- d) FCC Frequency Review - On 12/10/2015, FE, DPW and MERA staff met to discuss the FCC Frequency Review and DPW worked with FE to provide needed materials and information.
- e) Lifecycle Recommendations Report - On 12/28/2015, we received FE's Lifecycle Recommendations report, which was then reviewed by the Executive Board, NGPOC, Operations Working Group as well as by MERA and DPW staff. FE will be providing a presentation on the updated report today.

Next Steps:

- a) Coverage Analysis Workshop on 01/26/2016 – This will take most of a day and it is important that all MERA agencies attend to learn about potential coverage options and to provide their input. RSVP's were requested no later than 01/08/2016 and a verbal update will be provided at your meeting.
- b) NGPOC Meeting on 01/27/2016 – Scheduled to immediately follow the Coverage Analysis Workshop, the NGPOC will be briefed on findings from that workshop as

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well as being updated on the FCC Frequency Review and Life Cycle Recommendations.

Attachments:

Report No 8 on Next Gen Project Oversight Committee (G.B. 12/09/15)

FCC Review Meeting Outcomes (12/29/2015)

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c/o Novato Fire Protection District
95 Rowland Way, Novato, CA 94945

DATE: DECEMBER 9, 2015
TO: MERA Governing Board
FROM: Dave Jeffries, Deputy Executive Officer for the Next Gen Project
SUBJECT: AGENDA ITEM B-4: REPORT NO 8 FROM NEXT GEN PROJECT
OVERSIGHT COMMITTEE (NGPOC)

Recommended Action: Receive and file Report from the Next Gen System Project Oversight Committee.

Background:

The Federal Engineering contract was approved by the Marin Board of Supervisors on 09/15/15, with a Notice To Proceed that followed.

Federal Engineering developed a High Level System Requirements document that was reviewed by MERA and Marin DPW staff, as well as by the Next Generation Project Oversight Committee and the Operational Issues Working Group. Those comments were forwarded to Federal Engineering by Marin DPW for their review.

On 10/28/15, Marin DPW staff, MERA staff and NGPOC Chair Cusimano met with Federal Engineering for the Project Kick-Off meeting. During this 4.5-hour meeting, the High Level System Requirement document was reviewed item by item and a revised version was then prepared. In addition, we discussed a number of projected milestones, that includes a draft RFP (03/2016) and a final RFP (04/2016) along with a preliminary Project Timeline to aid with Project financing.

Later the same day, MERA, Marin DPW and Federal Engineering staff met with the Next Generation Project Oversight Committee and they were provided an update on the Project.

Federal Engineering then prepared a draft internal Communications Plan which was reviewed by the Executive Board, Next Generation Project Oversight Committee and staff, with a final version being prepared now. That Communication Plan includes a monthly status report which staff will also use as the basis for a newsletter to MERA Board members and member agencies. Marin Department of Public Works staff are also working with Federal Engineering to support site surveys of potential new tower sites as well as a FCC Frequency Review.

As we move forward, some of the near term steps include:

- a. 01/05-13/2016: Life Cycle Recommendations
- b. 01/26/2016: Coverage Analysis Workshop (one-day)

ATTACHMENTS: (not included with EB 1/13/16 Report—reference original GB 12/9/15 report)

B-4a Marin County High-Level Requirements, dated 11/06/15

B-4b Report No 6 from NGPOC (E.B. 9/9/15)

B-4c Report No 7 from NGPOC (E.B. 11/18/15)



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MEMORANDUM

To: Pat Echols
Marin County DPW
From: Federal Engineering, Inc.
Subject: FCC Review Meeting Outcomes
Date: December 29, 2015

Marin County (County) on behalf of Marin Emergency Radio Authority (MERA) wishes to develop an RFP to design and deploy a 700 MHz Phase II Project 25 system to replace their current system which has reached End-of-Life status with the vendor. To assist them with this project, Marin County retained Federal Engineering (**FE**) to develop the RFP.

One of the tasks required by the project is a review of the issues and requirements for licensing the desired 700 MHz system. A meeting between Marin County personnel and **FE** to review salient points of the Region 6 700 MHz plan and their relevance to the project was conducted December 10, 2015. The following summarizes the discussion.

Topic 1: Current FCC licensing and spectrum assets	
Goal	<ul style="list-style-type: none">Review current FCC licenses and understand overall usage
Discussion Points	<ul style="list-style-type: none">How are current T-band licenses restricted with regards to coverage (e.g. ERP, geographic limitations, etc.)?How many are used for conventional purposes (e.g. talk-around, special-purpose, mutual-aid, etc.)?What other bands are used and what are they used for (e.g. low-band paging, VHF overlay, etc.)?Existing Jail and Tunnel bi-directional amplifiers (BDAs) to be taken into consideration for the new system
Outcomes from meeting	<ul style="list-style-type: none">Marin County has already provided shapefiles of current system coverage.Marin County has already provided information on antenna configurations. Specifically, any anecdotal information on any coverage areas that required special consideration for coverage through the use of directional antennas, downtilt, etc.FE team to use current FCC licenses and 601 forms as a guide for maximum ERP in new system.FE team to use Marin County provided shapefiles during coverage workshop to depict current system coverage.

Attachment to EB Agenda Item B3, 01/13/2016

Topic 2: Review of Region 6 700 MHz Plan	
Goal	<ul style="list-style-type: none"> Review current 700 MHz plan and the Marin County OA allotment
Discussion Points	<ul style="list-style-type: none"> Discuss 40, 60, and 5 dBμ contours and what they are used for What are potential problematic sites in terms of licensing under the current plan Review plan's Adjacent and Co-Channel users Discuss proposed changes to the plan and their impact to the Marin County OA Discuss requirements for licensing and getting the Marin County OA plan approved by the Region 6 committee
Outcomes from meeting	<ul style="list-style-type: none"> The entire project team gained familiarity with the 27 700 MHz frequencies allocated to Marin County in the Region 6 plan and the overall licensing process Project team reviewed co- and adjacent channel users and did not find a source of significant concern Project team understands that the Region 6 planning committee has been made aware of the use of Sonoma Mountain and Bay Hill in the new system and the fact that these sites are outside the boundaries of the MERA operations area.

Topic 3: 700 MHz Reserved Channels	
Goal	<ul style="list-style-type: none"> Develop strategy for understanding the potential use of 700 MHz reserved channels
Discussion Points	<ul style="list-style-type: none"> How will channels be requested? Developing a strategy for potential use Is there a potential for giveback of current plan channel allotment to gain access to reserved channel allotment?
Outcomes from meeting	<ul style="list-style-type: none"> The project team understands that the request for use of 700 MHz reserved channels will come after the submittal of the request of the main system's 27 channels. By having separate submittals, the main system license will not be impacted by any potential delays in the reserved channel submittal. The project team understands that these channels will likely be used for special purpose channels (e.g. knoxbox, volunteer paging, gates) as outlined in the RFP.



Attachment to EB Agenda Item B3, 01/13/2016

Topic 4: 700 MHz Itinerant and Talk-around Channels	
Goal	<ul style="list-style-type: none">• Develop strategy for understanding the potential use of 700 MHz Itinerant and Talk-around Channels
Discussion Points	<ul style="list-style-type: none">• Licensing requirements• Contra Costa county is currently licensed for the low-power channels• How many, if any, low power channels will be needed?
Outcomes from meeting	<ul style="list-style-type: none">• The project team understands that some coordination with Contra Costa County will be required regarding NAC and PL codes.• The project team understands that it will need to get feedback from MERA operational users on how many itinerant and talk-around channels will be required prior to any licensing requests.

Regards,

Rajit Jhaver
Project Manager
Federal Engineering, Inc.

