

KVCR UHF to VHF Transition / KVCR Technology Core Modernization Project Updates

UHF-to-VHF TRANSITION

SCOPE

KVCR will be transitioning from ultra-high frequency (UHF) channel 24 to very-high frequency (VHF) channel 5. The scope includes replacing the existing transmitter and antenna solutions systems located at 10550 Box Springs Mountain Rd., Moreno Valley, CA 92324. District Facilities Planning & Construction and KVCR have formed a collaborative and expert team and are working towards the successful delivery of this project.

SCHEDULE

The project has five major milestones. The District has successfully fulfilled the first two.

1. File FCC construction permit by July 12, 2017. ✓
2. Tower permit received on October 2, 2018. ✓
3. Complete construction of new tower by January 31, 2019. ✓
4. Complete installation of both antenna and transmitter solution systems by February 28, 2019.
5. KVCR goes live with VHF transmission by April 12, 2019.

CHALLENGES

- The KVCR FM antenna at Box Springs attached to the existing tower (3-leg) would not fit into the configuration of the new 345-foot broadcasting tower (4-leg). This will require a new FM antenna. After further negotiation with Jampro Antenna, Inc., the new FM antenna will cost the District about \$148,000 for labor, materials, equipment, taxes, shipping and handling. The amendment was approved by the Board of Trustees on September 13, 2018. The new FM Antenna has been designed and is under testing and commissioning.
- It has been recently uncovered that the antenna systems at the KVCR studio tower at SBVC need to be replaced and raised higher on the tower profile in order to provide the proper transmission frequency to the new antenna systems at the new tower at Box Springs in Moreno Valley. This may require Division of the State Architect (DSA) involvement in order to justify the loading requirements and procurement and installation of these antenna systems. The analysis has been submitted to DSA for review and approval. Any delay by DSA will not impact the FCC transitioning as this pertains to the FM and not TV.
- The installation of a new TV transmitter system will require mechanical, electrical, plumbing and structural upgrades to the existing facility. The District engaged DLR Group architects under a master services agreement to provide a professional design services for this scope of work.

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PROCUREMENT

- TV Antenna: Jampro Antenna, Inc. (BOT approved on October 12, 2017 and subsequently September 13, 2018) is procuring the TV and FM antenna at the Box Springs facility.
- TV Transmitter: GatesAir (BOT approved on March 8, 2018) is procuring Transmitter equipment/system at Box Springs Facility. The District selected GatesAir and Salvador Castillo (BOT approval requested October 11, 2018) as independent contractors to provide technical services for the transmitter facility and the integration scope with the new antenna/tower systems. The District hired Allen Communications, Inc. to remove a portion of the existing transmitter equipment that is not operational.
- New Broadcasting Tower: Sabre Communications Corporation (BOT approved on March 8, 2018) is procuring the new tower.
- Studio FM Antenna: SBCCD procured the KVCR studio FM antenna system at SBVC.
- FM Antenna & TV Transmitter Install: SBCCD procured Allen Holding, Inc. for construction services to install the FM Antenna at SBVC and TV Transmitter at Box Springs.
- Transmitter Facility at Moreno Valley: SBCCD in the process of procuring the mechanical and electrical services to upgrade the system.

CONSTRUCTION PROGRESS

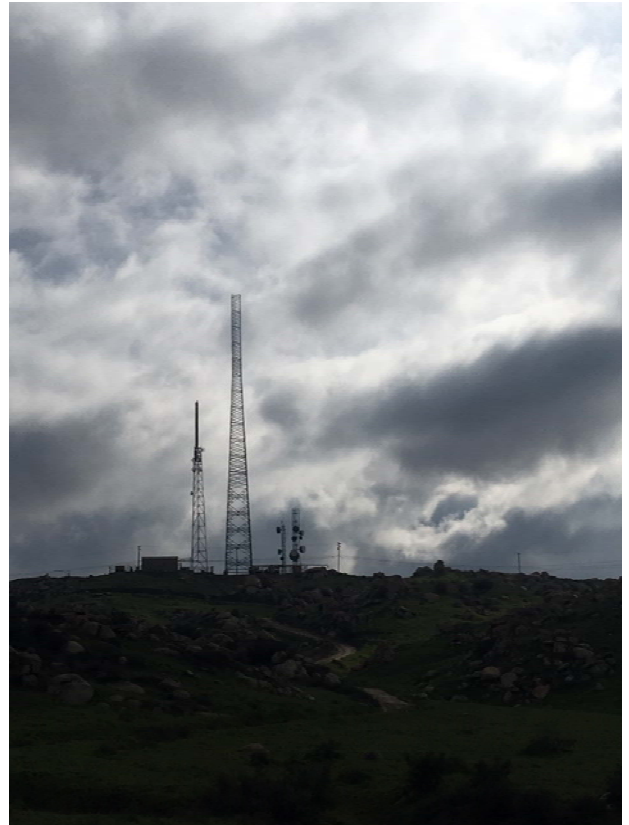
- The new tower was fully erected on January 28, 2019 and ready to receive TV and FM Antenna. ✓
- The design of the new TV antenna system by Jampro Antenna has been completed and tested, and will be installed by February, 28, 2019.
- The installation of the new TV transmitter by GatesAir Inc. is in progress at the Box Springs facility, to be finished by February 28, 2019.
- Survey of the new tower facility area per the approved design at Box Springs has been completed. The footprint required for KVCR's new tower will require expanding the overall lease with the owner, Henry Broadcasting.

THINGS TO FOLLOW

- Amend the lease agreement with the property owner at Box Springs, Moreno Valley.
- TV and FM antenna installation by February 28, 2019; Transmitter installation by February 28, 2019.
- Installing new KVCR FM studio antenna system at SBVC by March 31, 2019.
- Declare a successful transitioning with FCC by March 31, 2019 (FCC due date is April 12, 2019).

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Photos of New Tower Installation Progress:



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TECHNOLOGY CORE MODERNIZATION

SCOPE

KVCR will be transitioning from ultra-high frequency (UHF) channel 24 to very-high frequency (VHF) channel 5 and will need to upgrade its existing technology and equipment to accommodate the transition. The project scope includes modernizing and updating the TV and radio studio to better serve the station and community.

The overall scope of this initiative includes two major components:

1. Technology & Equipment Upgrades to TV and Radio Station at KVCR facility.
2. Space Repurposing, Reutilization, and Maximization.

SCHEDULE

- Hire a professional consultant (program manager) to oversee the project from programming development to closeout under the supervision of District staff. ✓
- Scope development, perform needs assessment, and develop an overall budget. ✓
- Solicit a design professional team to design the system upgrade by February 8, 2018. ✓
- Procure TV and Radio station equipment separately by August 2018. Recommendation has been submitted to the BOT in August 9, 2018. ✓
- Solicit an integrator (contractor) to procure, install the technology upgrade by February 21, 2019 board date. ✓
- Received DSA permit for the building repurposing on January 2, 2019. Construction services procurement is in the process and will be submitted to for approval on February 21, 2019. ✓
- Complete the building repurposing, procure furniture, and staff move by August 30, 2019.

CHALLENGES

- It is imperative that the “portion of” technology core equipment and system upgrades are complete and the transition is complete to maintain FCC deadline in order to mitigate any potential penalties and loss of license.
- System design implementations:
 - Introduce and implement advanced television system committee (ATSC 3.0) for KVCR. ✓
 - Introduce and implement offsite master control, which could potentially save in the technology core upgrade project budget and will lower KVCR annual operating cost. ✓
- Due to the technology rapid evolving and new ATSC 3.0 generation, many new high tech companies are warping up their design packages to launch the new system generation. Therefore, the District, KVCR alongside with the system engineer teams have decided to re-strategize integration procurement package.

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- Since KVCR is looking at repurposing more of the broadcast areas to maximize their efficiency and accommodate the new technology, some of the large pieces of the integration equipment will move after the repurposing is complete. ✓
- The District is working with CHC to move KVCR staff temporarily to Crafton Hall (Building 3) during the construction of the tech core and building repurpose.

PROCUREMENT

- Procure a professional design team through an RFQ/RFP. ✓
- Engage the District with Public Media Management (PMM) for the master joint control. Some of the benefits to the District/KVCR for the master control system are: no up-front investment is required, cloud -based sourcing, reduced cost of station operation, significant reduction of capital investment at the station level, retention of control over KVCR local schedule deadlines, no need for expensive dedicated high-capacity fiber connectivity, general reduction in KVCR's need for storage, built-in disaster recovery, etc. BOT approved this contract on July 12, 2018. ✓
- Procure the radio and TV production systems and equipment. To be installed by the integrator. Pending BOT approval August 9, 2018. ✓
- For the technology core modernization scope, the District staff issued a request for qualification (RFQ) and secured (3) prequalified vendors. Viper Cabling, Inc. is being recommended to BOT on February 21, 2019. ✓
- Procure a general contractor for building repurpose through competitive bidding process. Monet Construction, Inc. is being recommended to BOT on February 21, 2019. ✓

CONSTRUCTION PROGRESS

- Upon BOT approval on for Viper Cabling and Monet Construction, Inc., notice to proceed will be issued on March 1, 2019.
- The district has engaged DLR Group for architectural services under a district master services agreement to start the space design and repurposing for phase 1 (broadcast space associated with technology upgrade) and phase 2 (open offices and FF&E upgrades and space maximization). KVCR received DSA approval for the building repurpose and it is in bidding phase.

THINGS TO FOLLOW

- Construction to start on March 1, 2019 through September 1, 2019.
- Relocate at least 20 staff members from KVCR building to CHC Crafton Hall and M&O temporarily during construction project.



KVCR UHF to VHF Transition / KVCR Technology Core Modernization \$16,000,000 Budget Update

