KMSX-LD FI 130178

Minor Modification: Change rotation of antenna to match existing licensed facility.

No new construction, existing site.

Slight reduction in ERP to avoid interference to KKPX-TV, San Jose.

This station is part of the 2018 LPTV / TV Translator Displacement filing.

This change in rotation will eliminate the need to expend funds to hire a tower crew to rotate the antenna to a new orientation, thus reducing the overall cost of displacement for this station.

Study should be run with 1 km cell size and 0.5 km profile point spacing.

Study created: 2021.10.27 09:58:16

Study build station data: LMS TV 2021-10-25

 Proposal: KMSX-LD D33 LD CP SACRAMENTO, CA

 File number: 12 CP @ 125 deg

 Facility ID: 130178

Station data: User record

 Record ID: 253

 Country: U.S.

Build options:

Protect pre-transition records not on baseline channel

Stations potentially affected by proposal:

IX Call Chan Svc Status City, State File Number Distance

No K19FY-D N19+ TX LIC CHICO, CA BLTT20060109ABD 140.9 km

No NEW D32 LD CP CHICO, CA BNPDTL20090825BPI 139.2

No KION-TV D32 DT CP MONTEREY, CA BLANK0000035685 241.9

No KION-TV D32 DT LIC MONTEREY, CA BLCDT20030604ACO 241.9

Yes KSTV-LD D32- LD LIC SACRAMENTO, CA BLANK0000071667 33.5

No KCNS D32 DT LIC SAN FRANCISCO, CA BLANK0000108769 135.9

No KFKK-LD D32 LD LIC STOCKTON, CA BLANK0000068461 124.1

No K32GW-D D32 LD LIC CARSON CITY, NV BLDTT20070529ADO 164.9

No KCCF-LD D33 LD LIC ATASCADERO, CA BLANK0000158082 385.3

No KBAK-TV D33 DT LIC BAKERSFIELD, CA BLCDT20060628ABK 443.1

No KQSX-LP D33+ LD CP CAL - OREGON, CA BLANK0000031876 287.5

No KEMY-LD D33 LD LIC EUREKA, CA BLANK0000142981 309.8

No KEMY-LD N33+ TX LIC EUREKA, CA BLTTL20050729AMZ 309.8

No KGOF-LD D33- LD LIC FRESNO, CA BLANK0000093725 255.2

No K33HH D33 LD CP REDDING, CA BLANK0000152137 234.0

No K33HH N33 TX LIC REDDING, CA BLTTL20030507AAC 234.0

No K33QN-D D33 LD CP SALINAS, CA BLANK0000140585 241.9

Yes KKPX-TV D33 DT LIC SAN JOSE, CA BLANK0000108766 141.0

No K33GZ-D D33 LD LIC HAWTHORNE, NV BLDTT20110630AAM 237.5

No KNPB D33 LD LIC RENO, NV BLEDT20111026AAC 143.0

No K33IB-D D33 LD LIC SILVER SPRINGS, NV BLDTT20100803ABT 206.4

No K33ER-D D33 LD LIC VERDI/MOGUL, NV BLDTT20140618ABM 164.0

No K33ER-D D33 LD CP VERDI/MOGUL, NV BDFCDTT20080922AEY 164.0

No KFTS D33 DT LIC KLAMATH FALLS, OR BLEDT20060202AHF 377.0

No DK48KB D34z LD APP CHICO, CA BLANK0000054000 125.6

No KGPE D34 DT LIC FRESNO, CA BLCDT20030702ABJ 255.9

No KACA-LD D34 LD LIC MODESTO, CA BLDTL20140602AAB 111.5

No KEZT-CD D34 DC LIC SACRAMENTO, CA BLANK0000115780 15.7

No K23DT-D D34 LD CP TAHOE CITY, CA BLANK0000092818 152.9

No KFSF-DT D34 DT LIC VALLEJO, CA BLCDT20100513ABB 135.9

No KFSF-DT D34 DT CP VALLEJO, CA BLANK0000035847 135.9

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

 Channel: D33

 Mask: Full Service

 Latitude: 38 42 28.10 N (NAD83)

 Longitude: 121 28 36.30 W

Height AMSL: 152.4 m

 HAAT: 0.0 m

 Peak ERP: 12.0 kW

 Antenna: MCI-955514 (ID 20068) 125.0 deg

Elev Pattrn: Generic

50.6 dBu contour:

Azimuth ERP HAAT Distance

 0.0 deg 0.001 kW 138.0 m 6.9 km

 45.0 0.005 124.9 9.5

 90.0 4.95 117.3 39.4

135.0 11.2 131.7 44.5

180.0 1.07 144.6 33.3

225.0 0.001 146.3 7.1

270.0 0.001 145.5 7.1

315.0 0.001 145.8 7.1

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 137 m

Distance to Canadian border: 1070.7 km

Distance to Mexican border: 770.4 km

Conditions at FCC monitoring station: Livermore CA

Bearing: 192.6 degrees Distance: 111.9 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 78.5 degrees Distance: 1399.9 km

Study cell size: 1.00 km

Profile point spacing: 0.50 km

Maximum new IX to full-service and Class A: 0.50%

Maximum new IX to LPTV: 2.00%

---- Below is IX received by proposal 12 CP @ 125 deg ----

Proposal receives 29.94% interference from scenario 1

No IX check failures found.