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tvstudy v2.2.2
Database: localhost,  Study: KCNS 960 adjusted lat lon HAAT,  Model: Longley-Rice
Start: 2017.06.22 14:09:36

Study created: 2017.06.22 13:53:16

Study build station data: LMS TV 2017-05-25 (7)

    Proposal: KCNS D32 DT BL SAN FRANCISCO, CA
 File number: DTVBL71586
 Facility ID: 71586
Station data: User record
   Record ID: 172
     Country: U.S.

Stations potentially affected:

Call      Chan  Svc Status  City, State               File Number             Distance
KTVU      D31   DT  BL      OAKLAND, CA               DTVBL35703                0.0 km
KVPT      D32   DT  BL      FRESNO, CA                DTVBL69733              302.1
KION-TV   D32   DT  LIC     MONTEREY, CA              BLCDT20030604ACO        154.4
K50LZ-D   D32   DC  BL      SAN LUIS OBISPO, CA       DTVBL29885              310.8
KTXL      D33   DT  BL      SACRAMENTO, CA            DTVBL10205              100.8
KDJT-CD   D33   DC  LIC     SALINAS/MONTEREY,ETC, CA  BLANK0000001623         139.3

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

    Channel: D32
   Latitude:  37 45 19.00 N (NAD83)
  Longitude: 122 27 10.00 W
Height AMSL: 542.6 m
       HAAT: 518.0 m
   Peak ERP: 960 kW
    Antenna: DIE-TUM20-C5SP-14/60H-2-R-T (ID 101051) 0.0 deg

40.5 dBu contour:
Azimuth      ERP       HAAT   Distance
  0.0 deg    409 kW   516.4 m  108.3 km
 45.0        765      535.7    115.4
 90.0        738      536.4    115.1
135.0        665      525.4    113.4
180.0        399      425.1    100.5
225.0        396      535.6    109.3
270.0       65.4      536.5     93.6
315.0        448      535.0    110.4

ERP exceeds maximum
ERP: 960 kW   ERP maximum: 465 kW

Proposal service area is within baseline plus 1.0%
Proposal service area population is more than 95.0% of baseline

Distance to Canadian border: 1167.0 km

Distance to Mexican border: 731.2 km

**Proposal is within coordination distance of FCC monitoring station
Conditions at FCC monitoring station: Livermore CA
Bearing: 92.9 degrees   Distance: 61.5 km
ERP: 678 kW   Field strength: 53.4 dBu, 0.5 mV/m

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 74.6 degrees   Distance: 1507.5 km


Study cell size: 2.00 km
Profile point spacing: 1.00 km

Maximum new IX to full-service and Class A: 0.50%
Maximum new IX to LPTV: 2.00%


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Interference to DTVBL35703 BL, scenario 1

             Call      Chan  Svc Status  City, State               File Number             Distance
Desired:     KTVU      D31   DT  BL      OAKLAND, CA               DTVBL35703

Undesireds:  KCNS      D32   DT  BL      SAN FRANCISCO, CA         DTVBL71586                0.0 km
             KCNS      D32   DT  BL      SAN FRANCISCO, CA         DTVBL71586                0.0
             KQED      D30   DT  LIC     SAN FRANCISCO, CA         BLEDT20130104ACT          0.0
             KION-TV   D32   DT  LIC     MONTEREY, CA              BLCDT20030604ACO        154.4

        Service area       Terrain-limited       IX-free, before        IX-free, after    Percent New IX
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 35306.4   7,913,996   29781.4   7,002,714   29593.1   6,999,673   29589.1   6,999,673     0.01     0.00

Undesired                        Total IX     Unique IX, before      Unique IX, after
KCNS D32 DT BL             0.0           0       0.0           0
KCNS D32 DT BL             4.0           0                     4.0           0
KION-TV D32 DT LIC       188.3       3,041     188.3       3,041     188.3       3,041

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Interference to DTVBL69733 BL, scenario 1

             Call      Chan  Svc Status  City, State               File Number            Distance
Desired:     KVPT      D32   DT  BL      FRESNO, CA                DTVBL69733

Undesireds:  KCNS      D32   DT  BL      SAN FRANCISCO, CA         DTVBL71586             302.1 km
             KCNS      D32   DT  BL      SAN FRANCISCO, CA         DTVBL71586             302.1
             KBTF-CD   D31   DC  LIC     BAKERSFIELD, CA           BLDTA20100921ABW       156.3
             KNLA-CD   D32   DC  BL      LOS ANGELES, CA           DTVBL167309            300.1
             KION-TV   D32   DT  LIC     MONTEREY, CA              BLCDT20030604ACO       210.0
             K50LZ-D   D32   DC  BL      SAN LUIS OBISPO, CA       DTVBL29885             197.4
             KBAK-TV   D33   DT  LIC     BAKERSFIELD, CA           BLCDT20060628ABK       156.5
             KDJT-CD   D33   DC  LIC     SALINAS/MONTEREY,ETC, CA  BLANK0000001623        197.8

        Service area       Terrain-limited       IX-free, before       IX-free, after    Percent New IX
 34259.2   1,743,815   29886.0   1,718,633   29358.7   1,711,631   29342.8   1,710,959     0.05     0.04

Undesired                        Total IX     Unique IX, before      Unique IX, after
KCNS D32 DT BL           159.5       1,123      87.8         682
KCNS D32 DT BL           175.5       1,795                           103.8       1,354
KBTF-CD D31 DC LIC        32.1       3,090      12.1           0      12.1           0
KION-TV D32 DT LIC       195.5         828      83.8         244      83.8         244
K50LZ-D D32 DC BL        291.7       2,723     183.9       2,402     183.9       2,402
KBAK-TV D33 DT LIC        32.0       3,090       8.0           0       8.0           0

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Interference to DTVBL69733 BL, scenario 2

             Call      Chan  Svc Status  City, State               File Number            Distance
Desired:     KVPT      D32   DT  BL      FRESNO, CA                DTVBL69733

Undesireds:  KCNS      D32   DT  BL      SAN FRANCISCO, CA         DTVBL71586             302.1 km
             KCNS      D32   DT  BL      SAN FRANCISCO, CA         DTVBL71586             302.1
             KBTF-CD   D31   DC  LIC     BAKERSFIELD, CA           BLDTA20100921ABW       156.3
             KNLA-CD   D32   DC  BL      LOS ANGELES, CA           DTVBL167309            300.1
             KION-TV   D32   DT  LIC     MONTEREY, CA              BLCDT20030604ACO       210.0
             K50LZ-D   D32   DC  BL      SAN LUIS OBISPO, CA       DTVBL29885             197.4
             KBAK-TV   D33   DT  LIC     BAKERSFIELD, CA           BLCDT20060628ABK       156.5
             KDJT-CD   D33   DC  LIC     SALINAS/MONTEREY,ETC, CA  BLANK0000001623        197.8

        Service area       Terrain-limited       IX-free, before       IX-free, after    Percent New IX
 34259.2   1,743,815   29886.0   1,718,633   29358.7   1,711,631   29342.8   1,710,959     0.05     0.04

Undesired                        Total IX     Unique IX, before      Unique IX, after
KCNS D32 DT BL           159.5       1,123      87.8         682
KCNS D32 DT BL           175.5       1,795                           103.8       1,354
KBTF-CD D31 DC LIC        32.1       3,090      12.1           0      12.1           0
KION-TV D32 DT LIC       195.5         828      83.8         244      83.8         244
K50LZ-D D32 DC BL        291.7       2,723     183.9       2,402     183.9       2,402
KBAK-TV D33 DT LIC        32.0       3,090       8.0           0       8.0           0

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Interference to DTVBL69733 BL, scenario 3

             Call      Chan  Svc Status  City, State               File Number            Distance
Desired:     KVPT      D32   DT  BL      FRESNO, CA                DTVBL69733

Undesireds:  KCNS      D32   DT  BL      SAN FRANCISCO, CA         DTVBL71586             302.1 km
             KCNS      D32   DT  BL      SAN FRANCISCO, CA         DTVBL71586             302.1
             KBTF-CD   D31   DC  LIC     BAKERSFIELD, CA           BLDTA20100921ABW       156.3
             KNLA-CD   D32   DC  BL      LOS ANGELES, CA           DTVBL167309            300.1
             KION-TV   D32   DT  LIC     MONTEREY, CA              BLCDT20030604ACO       210.0
             K50LZ-D   D32   DC  BL      SAN LUIS OBISPO, CA       DTVBL29885             197.4
             KBAK-TV   D33   DT  LIC     BAKERSFIELD, CA           BLCDT20060628ABK       156.5
             KDJT-CD   D33   DC  LIC     SALINAS/MONTEREY,ETC, CA  BLANK0000001623        197.8

        Service area       Terrain-limited       IX-free, before       IX-free, after    Percent New IX
 34259.2   1,743,815   29886.0   1,718,633   29358.7   1,711,631   29342.8   1,710,959     0.05     0.04

Undesired                        Total IX     Unique IX, before      Unique IX, after
KCNS D32 DT BL           159.5       1,123      87.8         682
KCNS D32 DT BL           175.5       1,795                           103.8       1,354
KBTF-CD D31 DC LIC        32.1       3,090      12.1           0      12.1           0
KION-TV D32 DT LIC       195.5         828      83.8         244      83.8         244
K50LZ-D D32 DC BL        291.7       2,723     183.9       2,402     183.9       2,402
KBAK-TV D33 DT LIC        32.0       3,090       8.0           0       8.0           0

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Interference to BLCDT20030604ACO LIC, scenario 1

             Call      Chan  Svc Status  City, State               File Number            Distance
Desired:     KION-TV   D32   DT  LIC     MONTEREY, CA              BLCDT20030604ACO
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Undesireds:  KCNS      D32   DT  BL      SAN FRANCISCO, CA         DTVBL71586              154.4 km
             KCNS      D32   DT  BL      SAN FRANCISCO, CA         DTVBL71586              154.4
             KTVU      D31   DT  BL      OAKLAND, CA               DTVBL35703              154.4
             KVPT      D32   DT  BL      FRESNO, CA                DTVBL69733              210.0
             K50LZ-D   D32   DC  BL      SAN LUIS OBISPO, CA       DTVBL29885              156.8
             KTXL      D33   DT  BL      SACRAMENTO, CA            DTVBL10205              193.3
             KDJT-CD   D33   DC  LIC     SALINAS/MONTEREY,ETC, CA  BLANK0000001623          26.8

        Service area       Terrain-limited       IX-free, before        IX-free, after    Percent New IX
 24798.8   2,400,317   16670.9     855,808   15451.8     783,750   15447.8     783,750     0.03     0.00

Undesired                         Total IX     Unique IX, before      Unique IX, after
KCNS D32 DT BL              711.4      35,607     419.6       6,503
KCNS D32 DT BL              723.4      36,864                           423.6       6,503
KTVU D31 DT BL               43.9      15,153       0.0           0       0.0           0
KVPT D32 DT BL              251.5         218     155.8         141     155.8         141
K50LZ-D D32 DC BL           151.7         351      79.9          31      79.9          31
KDJT-CD D33 DC LIC          460.2      59,868     232.2      36,264     224.2      35,007

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Interference to DTVBL29885 BL, scenario 1
Proposal causes no interference.

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Interference to DTVBL10205 BL, scenario 1

             Call      Chan  Svc Status  City, State               File Number            Distance
Desired:     KTXL      D33   DT  BL      SACRAMENTO, CA            DTVBL10205

Undesireds:  KCNS      D32   DT  BL      SAN FRANCISCO, CA         DTVBL71586              100.8 km
             KCNS      D32   DT  BL      SAN FRANCISCO, CA         DTVBL71586              100.8
             KION-TV   D32   DT  LIC     MONTEREY, CA              BLCDT20030604ACO        193.3
             KBAK-TV   D33   DT  LIC     BAKERSFIELD, CA           BLCDT20060628ABK        406.6
             KDJT-CD   D33   DC  LIC     SALINAS/MONTEREY,ETC, CA  BLANK0000001623         168.4
             KFSF-DT   D34   DT  LIC     VALLEJO, CA               BLCDT20100513ABB        100.8

        Service area       Terrain-limited       IX-free, before        IX-free, after    Percent New IX
 36508.3   7,354,618   32472.6   5,440,038   31443.1   5,310,673   31435.2   5,310,651     0.03     0.00

Undesired                         Total IX     Unique IX, before      Unique IX, after
KCNS D32 DT BL              739.8     122,144      47.6         381
KCNS D32 DT BL              747.7     122,166                           55.5         403
KDJT-CD D33 DC LIC          333.3      13,587     289.7       7,221     289.7       7,221
KFSF-DT D34 DT LIC          692.2     121,763       0.0           0       0.0           0

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Interference to BLANK0000001623 LIC, scenario 1
Proposal causes no interference.

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Interference to proposal, scenario 1
5.29% interference

             Call      Chan  Svc Status  City, State               File Number            Distance
Desired:     KCNS      D32   DT  BL      SAN FRANCISCO, CA         DTVBL71586

Undesireds:  KTVU      D31   DT  BL      OAKLAND, CA               DTVBL35703                0.0 km
             KVPT      D32   DT  BL      FRESNO, CA                DTVBL69733              302.1
             KION-TV   D32   DT  LIC     MONTEREY, CA              BLCDT20030604ACO        154.4
             K50LZ-D   D32   DC  BL      SAN LUIS OBISPO, CA       DTVBL29885              310.8
             KTXL      D33   DT  BL      SACRAMENTO, CA            DTVBL10205              100.8
             KDJT-CD   D33   DC  LIC     SALINAS/MONTEREY,ETC, CA  BLANK0000001623         139.3

        Service area       Terrain-limited              IX-free        Percent IX
 37253.6   8,117,709   31455.0   7,158,123   27167.6   6,779,122    13.63     5.29

Undesired                         Total IX            Unique IX   Prcnt Unique IX
KTVU D31 DT BL                 4.0          44       0.0           0    0.00     0.00
KVPT D32 DT BL               856.2     204,303      31.9          37    0.10     0.00
KION-TV D32 DT LIC          2435.5      30,042    2343.4      28,505    7.45     0.40
K50LZ-D D32 DC BL              4.0           0       0.0           0    0.00     0.00
KTXL D33 DT BL              1852.1     349,409    1043.7     144,741    3.32     2.02
KDJT-CD D33 DC LIC            12.0         921       0.0           0    0.00     0.00
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