```
tvstudy v2.2.5 (V9lR41)
Database: localhost,  Study: KTVP@1002073_ch23_15kW_DLP-8MR,  Model: Longley-Rice
Start: 2018.04.09 21:39:10

Study created: 2018.04.09 21:39:09

Study build station data: LMS TV 2018-03-19

    Proposal: KTVP-LD D23 LD LIC PHOENIX, AZ
 File number: BLDTL20140813AAG
 Facility ID: 60465
Station data: User record
   Record ID: 393
     Country: U.S.

Build options:
Protect baseline records from LPTV

Search options:
Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX   Call      Chan       Svc Status  City, State               File Number            Distance
No   K16EO-D   N16z       TX  LIC     ORO VALLEY/TUCSON, AZ     BLTT20030528AJV        158.9 km
Yes  KNAZ-TV   D22        DT  LIC     FLAGSTAFF, AZ             BLCDT20091210AAC       188.8
No   K22JD-D   N22-       TX  LIC     MADERA PEAK, AZ           BLTT20091029ABD        110.8
No   K22JD-D   D22        LD  LIC     MADERA PEAK, AZ           BLANK0000033767        110.8
No   KPSN-LD   D22        LD  LIC     PAYSON, AZ                BLDTL20120430AAZ       133.4
Yes  KPDF-CA   D22        DC  CP      PHOENIX, AZ               BLANK0000034612          0.1
No   KVYE      D22        DT  LIC     EL CENTRO, CA             BLCDT20070604ABN       259.0
No   K23FZ     N23+       TX  LIC     CAMP VERDE, AZ            BLTT20040927ABU        127.6
Yes  K23FZ     D23        LD  CP      CAMP VERDE, AZ            BDFCDTT20120524AAB     127.6
No   K23HB     N23-       TX  LIC     FLAGSTAFF, AZ             BLTTL20070209AAS       216.1
No   NEW       D23        LD  APP     FORT MOJAVE INDIAN R, AZ  BNPDTL20100216AAI      293.3
No   K23FV-D   D23        LD  LIC     KINGMAN, AZ               BLDTT20130308ABD       257.6
No   K23BJ     D23        LD  CP      LAKE HAVASU CITY, AZ      BDFCDTL20130808AAL     255.2
No   K23BJ     N23        TX  LIC     LAKE HAVASU CITY, AZ      BLTTL19891127JR        255.2
No   K23DK-D   D23        LD  LIC     MEADVIEW, AZ              BLDTT20130308ABX       337.1
Yes  K23MW-D   D23        LD  CP      PARKER, AZ                BNPDTL20100514AEE      188.6
Yes  K43LW-D   D23        LD  APP     PRESCOTT, ETC., AZ        BLANK0000035576        135.7
Yes  KVOA      D23        DT  LIC     TUCSON, AZ                BLCDT20071113AJK       162.1
No   K23MX-D   D23        LD  CP      DESERT CENTER, CA         BNPDTL20100514ACS      297.6
No   KVMD      D23        DD  APP     TWENTYNINE PALMS, CA      BPCDT20100325ACD       455.5
No   KVMD      D23        DT  LIC     TWENTYNINE PALMS, CA      BLCDT20060615AAB       446.2
No   NEW       D23        LD  APP     WINTERHAVEN, CA           BNPDTL20100510AAH      278.7
No   KLVD-LD   D23        LD  LIC     LAS VEGAS, NV             BLDTL20110728ADN       401.0
No   KTVK      D24        DT  LIC     PHOENIX, AZ               BLCDT20060630ABT         0.1

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

    Channel: D23
       Mask: Full Service
   Latitude:  33 20  0.00 N (NAD83)
  Longitude: 112  3 51.00 W
Height AMSL: 829.0 m
       HAAT: 0.0 m
   Peak ERP: 15.0 kW
    Antenna: DIE DLP-8MR 309.0 deg
Elev Pattrn: Generic

49.7 dBu contour:
Azimuth      ERP       HAAT   Distance
  0.0 deg   14.8 kW   489.6 m   65.9 km
 45.0       6.62      452.3     59.7
```

```
  90.0      0.286      445.1     40.4
 135.0      0.175      471.8     38.2
 180.0       1.41      484.2     51.4
 225.0       9.10      489.9     62.9
 270.0       15.0      435.2     64.0
 315.0       15.0      502.9     66.4

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m   Computed HAAT: 471 m

Distance to Canadian border: 1741.2 km

**Proposal is within coordination distance of Mexican border
Distance to Mexican border: 175.9 km

Conditions at FCC monitoring station: Douglas AZ
Bearing: 131.4 degrees   Distance: 304.3 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 36.8 degrees   Distance: 967.2 km


Study cell size: 0.50 km
Profile point spacing: 0.10 km

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


-------------------------------------------------------------------------------------------------------
Interference to BLCDT20091210AAC LIC scenario 1

             Call      Chan  Svc Status  City, State              File Number            Distance
Desired:     KNAZ-TV   D22   DT  LIC     FLAGSTAFF, AZ            BLCDT20091210AAC

Undesireds:  KTVP-LD   D23   LD  LIC     PHOENIX, AZ              BLDTL20140813AAG       188.8 km
             KPDF-CA   D22   DC  CP      PHOENIX, AZ              BLANK0000034612        188.8
             KSNV      D22   DT  LIC     LAS VEGAS, NV            BLCDT20090220ABX       337.0

        Service area       Terrain-limited       IX-free, before       IX-free, after    Percent New IX
 29239.7     332,183   24569.4     228,255   24402.9     228,048   24402.9     228,048     0.00     0.00

Undesired                          Total IX     Unique IX, before      Unique IX, after
KTVP-LD D23 LD LIC          0.3           0                            0.0           0
KPDF-CA D22 DC CP         106.7          39     104.3          39     104.0          39
KSNV D22 DT LIC            62.2         168      59.7         168      59.7         168

-------------------------------------------------------------------------------------------------------
Interference to BLANK0000034612 CP scenario 1

             Call      Chan  Svc Status  City, State              File Number            Distance
Desired:     KPDF-CA   D22   DC  CP      PHOENIX, AZ              BLANK0000034612

Undesireds:  KTVP-LD   D23   LD  LIC     PHOENIX, AZ              BLDTL20140813AAG         0.1 km
             KNAZ-TV   D22   DT  LIC     FLAGSTAFF, AZ            BLCDT20091210AAC       188.8
             KVYE      D22   DT  LIC     EL CENTRO, CA            BLCDT20070604ABN       259.1

        Service area       Terrain-limited       IX-free, before       IX-free, after    Percent New IX
 10944.4   4,040,021    9103.1   3,925,739    9033.8   3,914,290    9033.3   3,914,290     0.01     0.00

Undesired                          Total IX     Unique IX, before      Unique IX, after
KTVP-LD D23 LD LIC          0.5           0                            0.5           0
KNAZ-TV D22 DT LIC         68.8      11,449      68.8      11,449      68.8      11,449
KVYE D22 DT LIC             0.5           0       0.5           0       0.5           0

-------------------------------------------------------------------------------------------------------
Interference to BDFCDTT20120524AAB CP scenario 1
```

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K23FZ	D23	LD	CP	CAMP VERDE, AZ	BDFCDTT20120524AAB	
Undesireds:	KTVP-LD	D23	LD	LIC	PHOENIX, AZ	BLDTL20140813AAG	127.6 km
	KNAZ-TV	D22	DT	LIC	FLAGSTAFF, AZ	BLCDT20091210AAC	64.6
	K23HB	N23-	TX	LIC	FLAGSTAFF, AZ	BLTTL20070209AAS	89.0
	K23BJ	D23	LD	CP	LAKE HAVASU CITY, AZ	BDFCDTL20130808AAL	229.2
	K43LW-D	D23	LD	APP	PRESCOTT, ETC., AZ	BLANK0000035576	60.6
	KVOA	D23	DT	LIC	TUCSON, AZ	BLCDT20071113AJK	252.4
	K24KS-D	D24	LD	LIC	FLAGSTAFF, AZ	BLDTT20111201MML	89.2

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
3550.7	67,509	3334.9	62,112	3224.5	62,081	3212.7	62,081	0.37	0.00

Undesired	Total IX	Unique IX, before		Unique IX, after	
KTVP-LD D23 LD LIC	17.6	0		11.8	0
KNAZ-TV D22 DT LIC	11.1	0	8.8	0	8.8	0
K23HB N23- TX LIC	0.3	0	0.0	0	0.0	0
K43LW-D D23 LD APP	98.9	31	96.1	31	92.8	31
KVOA D23 DT LIC	3.0	0	2.3	0	0.3	0
K24KS-D D24 LD LIC	0.5	0	0.0	0	0.0	0

Interference to BNPDTL20100514AEE CP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K23MW-D	D23	LD	CP	PARKER, AZ	BNPDTL20100514AEE	
Undesireds:	KTVP-LD	D23	LD	LIC	PHOENIX, AZ	BLDTL20140813AAG	188.6 km
	K23FZ	N23+	TX	LIC	CAMP VERDE, AZ	BLTT20040927ABU	220.2
	K23FV-D	D23	LD	LIC	KINGMAN, AZ	BLDTT20130308ABD	157.8
	K23BJ	D23	LD	CP	LAKE HAVASU CITY, AZ	BDFCDTL20130808AAL	107.8
	KVMD	D23	DD	APP	TWENTYNINE PALMS, CA	BPCDT20100325ACD	267.0

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
2056.3	6,114	1802.6	5,083	1551.7	2,176	1548.5	2,176	0.20	0.00

Undesired	Total IX	Unique IX, before		Unique IX, after	
KTVP-LD D23 LD LIC	4.8	0		3.1	0
K23FV-D D23 LD LIC	250.0	2,907	248.8	2,907	247.4	2,907
KVMD D23 DD APP	2.2	0	1.0	0	1.0	0

Interference to BNPDTL20100514AEE CP scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K23MW-D	D23	LD	CP	PARKER, AZ	BNPDTL20100514AEE	
Undesireds:	KTVP-LD	D23	LD	LIC	PHOENIX, AZ	BLDTL20140813AAG	188.6 km
	K23FZ	N23+	TX	LIC	CAMP VERDE, AZ	BLTT20040927ABU	220.2
	K23FV-D	D23	LD	LIC	KINGMAN, AZ	BLDTT20130308ABD	157.8
	K23BJ	D23	LD	CP	LAKE HAVASU CITY, AZ	BDFCDTL20130808AAL	107.8
	KVMD	D23	DT	LIC	TWENTYNINE PALMS, CA	BLCDT20060615AAB	257.6

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
2056.3	6,114	1802.6	5,083	1550.7	2,176	1547.6	2,176	0.20	0.00

Undesired	Total IX	Unique IX, before		Unique IX, after	
KTVP-LD D23 LD LIC	4.8	0		3.1	0
K23FV-D D23 LD LIC	250.0	2,907	248.8	2,907	247.4	2,907
KVMD D23 DT LIC	3.1	0	1.9	0	1.9	0

Interference to BLANK0000035576 APP scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K43LW-D	D23	LD	APP	PRESCOTT, ETC., AZ	BLANK0000035576	
Undesireds:	KTVP-LD	D23	LD	LIC	PHOENIX, AZ	BLDTL20140813AAG	135.7 km
	KNAZ-TV	D22	DT	LIC	FLAGSTAFF, AZ	BLCDT20091210AAC	107.7

	K23FZ	N23+	TX	LIC	CAMP VERDE, AZ	BLTT20040927ABU	60.6
	K23FV-D	D23	LD	LIC	KINGMAN, AZ	BLDTT20130308ABD	141.3
	K23BJ	D23	LD	CP	LAKE HAVASU CITY, AZ	BDFCDTL20130808AAL	168.7
	KVOA	D23	DT	LIC	TUCSON, AZ	BLCDT20071113AJK	285.7

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
2972.4	125,682	2268.9	93,259	2258.8	93,161	2250.5	93,133	0.37	0.03

Undesired	Total IX	Unique IX, before		Unique IX, after	
KTVP-LD D23 LD LIC	8.3	28		8.3	28
KNAZ-TV D22 DT LIC	1.0	24	1.0	24	1.0	24
K23FZ N23+ TX LIC	0.8	51	0.8	51	0.8	51
K23FV-D D23 LD LIC	7.6	23	7.3	23	7.3	23
KVOA D23 DT LIC	1.0	0	0.8	0	0.8	0

Interference to BLANK0000035576 APP scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K43LW-D	D23	LD	APP	PRESCOTT, ETC., AZ	BLANK0000035576	
Undesireds:	KTVP-LD	D23	LD	LIC	PHOENIX, AZ	BLDTL20140813AAG	135.7 km
	KNAZ-TV	D22	DT	LIC	FLAGSTAFF, AZ	BLCDT20091210AAC	107.7
	K23FZ	D23	LD	CP	CAMP VERDE, AZ	BDFCDTT20120524AAB	60.6
	K23FV-D	D23	LD	LIC	KINGMAN, AZ	BLDTT20130308ABD	141.3
	K23BJ	D23	LD	CP	LAKE HAVASU CITY, AZ	BDFCDTL20130808AAL	168.7
	KVOA	D23	DT	LIC	TUCSON, AZ	BLCDT20071113AJK	285.7

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
2972.4	125,682	2268.9	93,259	2246.8	88,456	2239.0	88,428	0.35	0.03

Undesired	Total IX	Unique IX, before		Unique IX, after	
KTVP-LD D23 LD LIC	8.3	28		7.8	28
KNAZ-TV D22 DT LIC	1.0	24	1.0	24	1.0	24
K23FZ D23 LD CP	13.8	4,756	12.8	4,756	12.3	4,756
K23FV-D D23 LD LIC	7.6	23	7.3	23	7.3	23
KVOA D23 DT LIC	1.0	0	0.0	0	0.0	0

Interference to BLCDT20071113AJK LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KVOA	D23	DT	LIC	TUCSON, AZ	BLCDT20071113AJK	
Undesireds:	KTVP-LD	D23	LD	LIC	PHOENIX, AZ	BLDTL20140813AAG	162.1 km
	KPDF-CA	D22	DC	CP	PHOENIX, AZ	BLANK0000034612	162.0
	KRWG-TV	D23	DT	LIC	LAS CRUCES, NM	BLEDT20071119AFE	377.3
	KTVK	D24	DT	LIC	PHOENIX, AZ	BLCDT20060630ABT	162.1

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
46946.5	1,317,804	34388.0	972,257	34278.0	972,255	34069.8	971,065	0.61	0.12
1851.1	218,216	1157.7	88,089	1157.7	88,089	1157.7	88,089	0.00	0.00 (in Mexico)

Undesired	Total IX	Unique IX, before		Unique IX, after	
KTVP-LD D23 LD LIC	297.9	1,192		208.2	1,190
KPDF-CA D22 DC CP	64.2	0	1.0	0	0.5	0
KRWG-TV D23 DT LIC	11.5	0	11.5	0	11.5	0
KTVK D24 DT LIC	97.5	2	34.3	2	6.8	0

Interference to proposal scenario 1
36.22% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KTVP-LD	D23	LD	LIC	PHOENIX, AZ	BLDTL20140813AAG	
Undesireds:	K22JD-D	N22-	TX	LIC	MADERA PEAK, AZ	BLTT20091029ABD	110.8 km
	KPDF-CA	D22	DC	CP	PHOENIX, AZ	BLANK0000034612	0.1
	K23FZ	N23+	TX	LIC	CAMP VERDE, AZ	BLTT20040927ABU	127.6

K23BJ	D23	LD	CP	LAKE HAVASU CITY, AZ	BDFCDTL20130808AAL	255.2
K23MW-D	D23	LD	CP	PARKER, AZ	BNPDTL20100514AEE	188.6
K43LW-D	D23	LD	APP	PRESCOTT, ETC., AZ	BLANK0000035576	135.7
KVOA	D23	DT	LIC	TUCSON, AZ	BLCDT20071113AJK	162.1
KTVK	D24	DT	LIC	PHOENIX, AZ	BLCDT20060630ABT	0.1

Service area		Terrain-limited		IX-free		Percent IX	
10137.2	3,797,982	7909.3	3,709,543	5546.7	2,365,988	29.87	36.22

Undesired		Total IX		Unique IX		Prcnt Unique IX	
KPDF-CA D22 DC CP	993.2	563,223	5.6	2,819	0.07	0.08
K23MW-D D23 LD CP	0.5	0	0.5	0	0.01	0.00
K43LW-D D23 LD APP	1.2	0	1.2	0	0.02	0.00
KVOA D23 DT LIC	1548.9	1,008,069	828.8	455,539	10.48	12.28
KTVK D24 DT LIC	1523.0	881,512	316.0	61,724	3.99	1.66