

TECHNICAL STATEMENT
CONCERNING REQUEST FOR SPECIAL TEMPORARY AUTHORITY
TELEVISION STATION KVIA-DT (STA)
EL PASO, TEXAS
CHANNEL 17 263 KW (MAX-DA) 577 M HAAT

This statement was prepared on behalf of Television Station KVIA-DT, El Paso, Texas, in support of a request for Special Temporary Authority (STA). The proposed KVIA-DT facility would operate on Channel 17 with a maximum directional effective radiated power of 263 kW and an antenna height above average terrain (HAAT) of 577 m. The instant proposal is identical to the licensed pre-transition facility for KVIA-DT (See FCC File No. BLCDDT-20060207ABA).

An interference analysis was conducted on the proposed KVIA-DT (STA) facility based on the latest post-transition television database. The results are summarized in the attached interference analysis. Therein it is demonstrated that the proposed KVIA-DT STA facility will fully meet the FCC *de minimis* interference protection requirements with respect to all pertinent allotments and assignments.

The proposed operation is within the Mexican border zone. However, because there is no change from the originally licensed pre-transition facility for KVIA-DT, which has already been coordinated with Mexico, coordination with Mexico is not believed to be necessary. It is noted that the proposed Channel 17 allotment for El Paso, Texas is listed in Appendix 4 of the U.S.-Mexico Memorandum of Understanding.*

* See *Memorandum of Understanding between the United States and Mexico Concerning Digital Television* (1998).

Radio Frequency Hazard

An evaluation was conducted for the proposed facility concerning compliance with Section 1.1307(b) of the FCC Rules regarding human exposure to radio frequency (RF) energy.[†] Calculations prepared in accordance with FCC Bulletin OET-65 (Edition 97-01) indicate that the proposal will not result in human exposure to RF radiation at ground level in excess of FCC standards. Power density calculations were conducted at 2-m above ground based on the following conservative assumptions, with the following results:

Call Sign	Channel	Average ERP (kW)	Relative Field Factor [‡]	Distance (m)	FCC Limit [§] (mW/cm ²)	Percentage of Limit
KVIA-DT (STA)	17	263	0.10	109	0.329	2.3%

As indicated above, the total exposure to RF radiation at 2-m above ground level will not exceed 2.3% of the FCC limit for general population / uncontrolled exposure. Therefore, the proposal complies with the FCC limits for human exposure to RF energy and it is categorically excluded from environmental processing. The applicant, in coordination with other users of the transmission facility, shall reduce power or cease operation as necessary to protect persons having access to the KVIA-DT tower or antenna from RF energy in excess of the FCC guidelines.



du Treil, Lundin & Rackley, Inc.
201 Fletcher Ave.
Sarasota, FL 34237

July 7, 2009

[†] See FCC Office of Engineering and Technology Bulletin No. 56 for background information on non-ionizing RF energy of the type discussed here. Internet web reference:

http://www.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/oet56/oet56e4.pdf

[‡] This is a conservative estimate of the elevation pattern relative field toward ground level.

[§] for general population/uncontrolled environments

KVIA-DT (STA), El Paso, TX, OET-69 Interference Analysis

Percent allowed new interference: 0.500
Percent allowed new interference to Class A: 0.500
TW Census data selected 2000
Post Transition Data Base Selected /export/home/cdbs/pt_tvdb.sff

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 07-06-2009

Record Selected for Analysis

KVIADT USERRECORD-01 EL PASO TX US
Channel 17 ERP 263. kW HAAT 577. m RCAMSL 01819 m
Latitude 031-48-19 Longitude 0106-28-59
Status APP Zone 2 Border
Dir Antenna Make CDB Model 00000000069966 Beam tilt N Ref Azimuth 180.
Last update Cutoff date Docket
Comments
Applicant

Cell Size for Service Analysis 2.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Facility meets maximum height/power limits

Azimuth (Deg)	ERP (kW)	HAAT (m)	41.0 dBu F(50,90) (km)
0.0	132.578	276.8	77.9
45.0	101.097	620.2	101.0
90.0	114.563	621.9	102.1
135.0	215.404	693.1	110.6
180.0	263.000	643.5	110.3
225.0	215.404	551.7	103.9
270.0	114.563	632.0	102.5
315.0	101.097	580.6	99.2

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quiet zone

Proposed facility OK toward Table Mountain

Proposed facility is beyond the Canadian coordination distance

Proposed facility is within the Mexican coordination distance
Distance to border = 4.4km

Proposed station is OK toward AM broadcast stations

KVIA-DT (STA), El Paso, TX, OET-69 Interference Analysis

Start of Interference Analysis

Channel	Call	City/State	ARN
17	KVIADT	EL PASO TX	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
17	KAZQ	ALBUQUERQUE NM	378.9	PLN	DTVPLN	-DTVP0607
17	KAZQ	ALBUQUERQUE NM	378.9	LIC	BLEDT	-20051012ACK
18	KDBC-TV	EL PASO TX	1.0	CP MOD	BMPCDT	-20090121ABN
18	KDBC-TV	EL PASO TX	1.0	PLN	DTVPLN	-DTVP0650
18	KDBC-TV	EL PASO TX	1.0	LIC	BLCDT	-20050707ACZ

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Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
17	KAZQ	ALBUQUERQUE NM	DTVPLN	-DTVP0607

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
17	KVIADT	EL PASO TX	378.9	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
17	KAZQ	ALBUQUERQUE NM	BLEDT	-20051012ACK

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
17	KVIADT	EL PASO TX	378.9	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 3

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
18	KDBC-TV	EL PASO TX	BMPCDT	-20090121ABN

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
18	KPTF	FARWELL TX	423.4	PLN	DTVPLN	-DTVP0651
18	KPTF	FARWELL TX	423.4	CP	BPCDT	-20080310ADJ
18	KUPB	MIDLAND TX	373.0	CP	BPCDT	-19991230AAK

KVIA-DT (STA), El Paso, TX, OET-69 Interference Analysis

18	KUPB	MIDLAND TX	373.0	PLN	DTVPLN	-DTVP0652
17	KVIADT	EL PASO TX	1.0	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
18	KDBC-TV	EL PASO TX	DTVPLN	-DTVP0650

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
18	KPTF	FARWELL TX	423.4	PLN	DTVPLN	-DTVP0651
18	KPTF	FARWELL TX	423.4	CP	BPCDT	-20080310ADJ
18	KUPB	MIDLAND TX	373.0	CP	BPCDT	-19991230AAK
18	KUPB	MIDLAND TX	373.0	PLN	DTVPLN	-DTVP0652
17	KVIADT	EL PASO TX	1.0	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 5

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
18	KDBC-TV	EL PASO TX	BLCDDT	-20050707ACZ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
18	KPTF	FARWELL TX	423.4	PLN	DTVPLN	-DTVP0651
18	KPTF	FARWELL TX	423.4	CP	BPCDT	-20080310ADJ
18	KUPB	MIDLAND TX	373.0	CP	BPCDT	-19991230AAK
18	KUPB	MIDLAND TX	373.0	PLN	DTVPLN	-DTVP0652
17	KVIADT	EL PASO TX	1.0	APP	USERRECORD-01	

Total scenarios = 2

Result key:

1

Scenario 1 Affected station 5

Before Analysis

Results for: 18A TX EL PASO BLCDDT 20050707ACZ LIC

HAAT 396.0 m, ATV ERP 363.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	854382	26918.2
not affected by terrain losses	849561	25489.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	0	0.0
lost to ATV IX only	0	0.0
lost to all IX	0	0.0

Potential Interfering Stations Included in above Scenario 1

After Analysis

Results for: 18A TX EL PASO BLCDDT 20050707ACZ LIC

KVIA-DT (STA), El Paso, TX, OET-69 Interference Analysis

HAAT 396.0 m, ATV ERP 363.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	854382	26918.2
not affected by terrain losses	849561	25489.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	75	868.6
lost to ATV IX only	75	868.6
lost to all IX	75	868.6

Potential Interfering Stations Included in above Scenario 1

17A TX EL PASO USERRECORD01 APP

Percent new IX = 0.0088%

Worst case new IX 0.0088% Scenario 1

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Analysis of Interference to Affected Station 6

Analysis of current record

Channel	Call	City/State	Application Ref. No.
17	KVIADT	EL PASO TX	USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
17	KAZQ	ALBUQUERQUE NM	378.9	PLN	DTVPLN -DTVP0607
17	KAZQ	ALBUQUERQUE NM	378.9	LIC	BLEDT -20051012ACK
18	KDBC-TV	EL PASO TX	1.0	CP MOD	BMPCDT -20090121ABN
18	KDBC-TV	EL PASO TX	1.0	PLN	DTVPLN -DTVP0650
18	KDBC-TV	EL PASO TX	1.0	LIC	BLCDT -20050707ACZ

Total scenarios = 1

Result key: 3

Scenario 1 Affected station 6

Before Analysis

Results for: 17A TX EL PASO USERRECORD01 APP

HAAT 577.0 m, ATV ERP 263.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	855158	34941.3
not affected by terrain losses	851149	33270.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	164	60.1
lost to ATV IX only	164	60.1
lost to all IX	164	60.1

Potential Interfering Stations Included in above Scenario 1

18A TX EL PASO DTVPLN DTVP0650 PLN

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