



Kessler and Gehman Associates
Consultants • Broadcast • Wireless

**DIGITAL TELEVISION
TRANSLATOR POST
TRANSITION CHANNEL
DISPLACEMENT
RELIEF APPLICATION
FOR KIDT-LD FACILITY
ID 58568**

Stamford, TX

Prepared For:

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Prepared By:

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1.0 MINOR MODIFICATION CHANNEL DISPLACEMENT RELIEF ELIGIBILITY

LSB Broadcasting, Inc. (“LSB”) is the licensee of a digital Low Power Television Station (“LPTV”) having call sign KIDT-LD, Facility ID 58568 which is licensed¹ to operate on channel 44 with an ERP of 10.0KW through an omni-directional antenna using a stringent emission mask.

LPTV/translator stations which currently broadcast on channels (38-51) are automatically displaced because they are in the new 600 MHz band for mobile broadband service and thus KIDT-LD is clearly eligible to file for channel displacement relief in the April 10, 2018 through June 1, 2018 post-incentive auction special displacement window and is the purpose of the instant application.

Pursuant to 47 CFR Section 74.787(b) the instant application is considered a “minor” change because:

- The change in frequency is related to displacement relief as outlined above.
- There is no change in transmitting antenna location such that the protected contour resulting from the change does not overlap some portion of the protected contour of the authorized facilities of the existing station as illustrated in Appendix C.
- There is no change in transmitting antenna location greater than 30 miles (48km) from the reference coordinates of the existing station’s antenna location.

2.0 STATION TRANSMITTER LOCATION AND ELEVATION

It is proposed to keep KIDT-LD at its licensed location on an existing tower having FCC Antenna Structure Registration (“ASR”) number 1048980. The

¹ FCC File No.: BLDTT-20110428AAL

instant application does not propose to increase or modify the existing ASR or support structure.

3.0 ALLOCATION ANALYSIS

Appendix B are the summarized results from TVStudy V2.2.5. As indicated the proposed facility is not predicted to receive or cause prohibited interference.

4.0 AM STATION PROXIMITY

No AM stations are located within 3.2 km of the proposed facility. Pursuant to 47 C.F.R. Section 1.30002(e), the construction or extension of an antenna-supporting structure shall be considered subject to the moment method analysis and prior notification requirement; however, the instant application does not propose to extend the existing structure or build a new structure. Thus, the proposed facility is exempt from further AM analysis consideration.

5.0 INTERNATIONAL COORDINATION

The KIDT-LD transmitter site is 350.0 km and 1806.1 km from the Mexican and Canadian border respectively. The proposed facility will not require international coordination.

6.0 RADIO FREQUENCY RADIATION COMPLIANCE

A theoretical analysis has been conducted of the human exposure to radio frequency radiation (“RFR”) using the calculation methodology described in OET Bulletin 65, Edition 97-01. The RFR analysis is conducted pursuant to the following methodology:

Terrain² extraction is compiled from the proposed tower site to radial lengths of 0.25 miles in 0.001 mile increments for 360 radials. The power

² Terrain extraction is based upon a 3 arc second point spacing terrain database.

density is calculated for each terrain point at 6 feet above ground level using the elevation and azimuth pattern of the proposed broadcast antenna. The power density calculations are conducted using the lower edge of the proposed channel frequency. To account for ground reflections, a coefficient of 1.6 was included in the calculation.

The resulting cylindrical polar analysis is then summarized into a coordinate plane graph using the following methodology:

Starting from the origin the maximum calculated RFR value is determined among the 360 degree radials for each 0.001 mile increment, the value is then converted into a percentage of the maximum allowable general population or uncontrolled exposure and plotted as a function of perpendicular distance from the tower.

The resulting RFR study in Appendix D demonstrates that the peak exposure is 3.0% of the most restrictive permissible exposure threshold. Pursuant to OET Bulletin 65 concerning multiple-user transmitter sites only those licensees whose transmitters produce power density levels greater than 5.0% of the exposure limit are considered significant contributors to RFR. Since the proposed operation is within 5% of the most permissible exposure at any location 2 meters above the ground, it is not considered a significant contributor to RFR exposure. Thus, contributions to exposure from other RF sources in the vicinity of the proposed facility were not taken into account. The instant application is compliant with the FCC limits for human exposure to RF radiation and is excluded from further environmental processing since no changes are proposed to the tower structure in order to accommodate the proposed antenna.

A chain link fence encloses the support structure and the applicant will cooperate with any other users of the tower by reducing the power to the antenna or if necessary completely cutting it off to protect maintenance workers on the tower.

7.0 CERTIFICATION

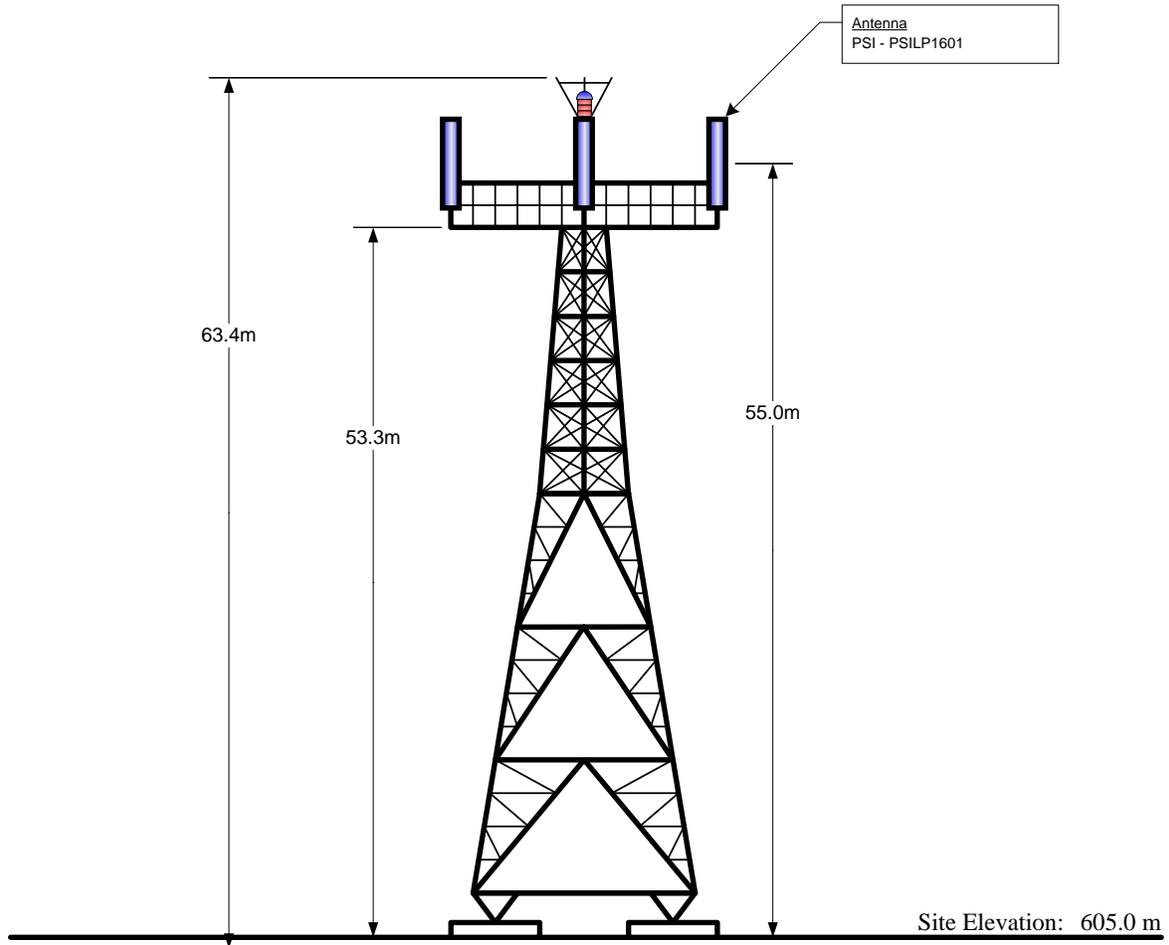
The foregoing statement and the report regarding the engineering work are true and correct to the best of my knowledge. Executed May 20, 2018.

Kessler and Gehman Associates, Inc.



Ryan Wilhour
Consulting Engineer

APPENDIX A – Tower Elevation Diagram



Antenna CRAGL:	55.0 m
Antenna CRAMSL:	660.0 m
Antenna HAAT:	91.3 m

NAD 83 Coordinates:	
N. Latitude:	32° 45' 00.0"
W. Longitude:	100° 12' 13.0"

FCC Tower Registration Number: 1048980

FAA Study Number 87-ASW-0409-OE

NOTE: NOT TO SCALE

KIDT-LD – Post Transition Channel Displacement Relief

Stamford, TX

APPENDIX B – TVStudy V2.2.5 Allocation Analysis

Study created: 2018.05.20 12:06:09

Study build station data: LMS TV 2018-05-18

Proposal: KIDT-LD D23 LD LIC STAMFORD, TX
File number: KIDT-LD Channel 23
Facility ID: 58568
Station data: User record
Record ID: 3108
Country: U.S.

Build options:
Protect pre-transition records not on baseline channel

Search options:
Non-U.S. records included
Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
Yes	KZAB-LP	D22-	LD	APP	ABILENE, TX	BLANK0000054253	55.5 km
No	KMYL-LD	D22	LD	LIC	LUBBOCK, TX	BLDTL20100519ADK	176.4
No	KMDF-LD	D22	LD	LIC	MIDLAND, TX	BLANK0000004506	211.3
No	KTXE-LD	D22	LD	APP	SAN ANGELO, TX	BLANK0000030095	142.6
No	K22KL-D	D22	LD	CP	WESTBROOK, TX	BNPDTL20100323AIX	85.0
No	KAUZ-TV	D22	DT	LIC	WICHITA FALLS, TX	BLCDT20090724ACR	200.6
No	K23MV-D	D23	LD	LIC	CARLSBAD, NM	BLDTT20131203AAL	383.0
No	K23MG-D	D23	LD	CP	CLOVIS, NM	BNPDTL20101012AEV	335.5
No	KSBI	D23	DT	LIC	OKLAHOMA CITY, OK	BLCDT20140530AFS	403.0
No	K40JP-D	D23	LD	APP	SAYRE, OK	BLANK0000029937	270.7
No	K23IZ-D	D23	LD	LIC	STRONG CITY, OK	BLDTT20100521AEH	341.8
No	KXAD-LD	D23	LD	CP	AMARILLO, TX	BDISDTL20110902AAO	319.1
No	KNVA	D23	DT	CP	AUSTIN, TX	BLANK0000034842	352.7
No	KXLK-CD	D23	DC	LIC	AUSTIN, TX	BLDTA20150108AAG	353.0
No	K23EC-D	D23	LD	LIC	CANADIAN, TX	BLDTT20141211ACE	368.9
No	K23DE-D	D23	LD	LIC	CHILDRESS, TX	BLDTT20110510AAA	188.0
Yes	K23LC-D	D23	LD	CP	CISCO, TX	BNPDTL20100304AAT	119.6
No	NEW	D23	LD	APP	DEL RIO, TX	BNPDTL20100622AFI	380.1
No	KQDA-LD	D23	LD	CP	DENISON, TX	BLANK0000001210	358.5
No	KQDA-LD	D23	LD	LIC	DENISON, TX	BLDTL20150106ABO	379.3
No	KUVN-DT	D23	DT	LIC	GARLAND, TX	BLCDT20110919ACP	303.0
No	KTXD-TV	D23	DT	CP	GREENVILLE, TX	BLANK0000034280	303.0
No	K23MP-D	D23	LD	CP	JUNCTION, TX	BNPDTL20100406ABQ	258.0
No	K23LV-D	D23	LD	CP	LUBBOCK, TX	BNPDTL20100728ACK	181.3
Yes	KPEJ-TV	D23	DT	LIC	ODESSA, TX	BLCDT20060629AGO	208.7
No	K23MI-D	D23	LD	CP	PLAINVIEW, TX	BNPDTL20100324ADL	214.8
No	K23LG-D	D23	LD	CP	TAHOKA, TX	BNPDTL20100323AIS	160.0
No	K40HZ	D23-	LD	APP	WICHITA FALLS, TX	BLANK0000052116	200.2
Yes	KLCW-TV	D23	DT	CP	WOLFFORTH, TX	BLANK0000034587	176.4
Yes	KTAB-TV	D24	DT	LIC	ABILENE, TX	BLCDT20070831AAJ	77.4
No	K24JX-D	D24	LD	CP	ACKERLY, TX	BNPDTL20100323AIK	149.3
No	K24GP	N24+	TX	LIC	LUBBOCK, TX	BLTTL20050926ADH	175.2
No	KXTQ-CD	D24	DC	CP	LUBBOCK, TX	BLANK0000033798	176.4
No	K24GP	D24	LD	CP	LUBBOCK, TX	BDFCDTL20100726AKC	175.2
No	NEW	D24	LD	APP	ODESSA, TX	BNPDTL20090825BPL	211.3
No	K41HQ-D	D24	LD	APP	QUANAH, TX	BLANK0000053929	168.1
No	LICITACIOND23		DT	LIC	PIEDRAS NEGRAS, CI	BLANKBPFSXXXX0014XXX	452.8

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

KIDT-LD – Post Transition Channel Displacement Relief

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Latitude: 32 45 0.00 N (NAD83)
Longitude: 100 12 13.00 W
Height AMSL: 660.0 m
HAAT: 91.3 m
Peak ERP: 10.0 kW
Antenna: Omnidirectional
Elev Pattn: Generic

49.7 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	10.0 kW	109.2 m	43.2 km
45.0	10.0	112.2	43.5
90.0	10.0	85.0	40.3
135.0	10.0	97.8	42.0
180.0	10.0	99.0	42.2
225.0	10.0	77.0	39.2
270.0	10.0	84.1	40.2
315.0	10.0	66.3	37.5

Distance to Canadian border: 1806.1 km

Distance to Mexican border: 350.0 km

Conditions at FCC monitoring station: Kingsville TX
Bearing: 158.7 degrees Distance: 630.7 km

Proposal is not within the West Virginia quiet zone area

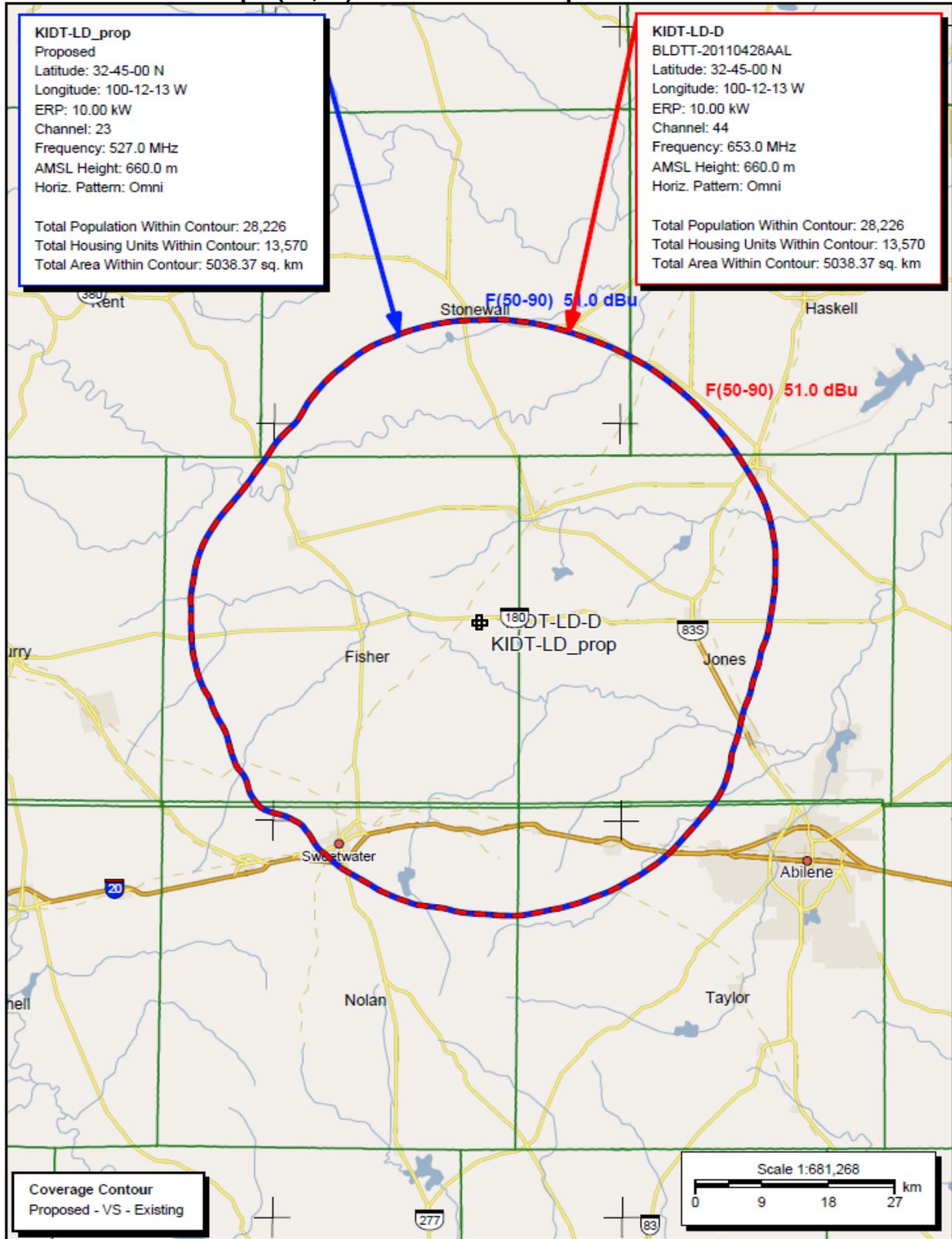
Conditions at Table Mountain receiving zone:
Bearing: 332.7 degrees Distance: 933.6 km

Study cell size: 1.00 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%

No IX check failures found.

APPENDIX C – 51dBμ F(50,90) Licensed and Proposed Contour



APPENDIX D – Far Field Exposure to RF Emissions

