du Treil, Lundin & Rackley, Inc.

_Consulting Engineers

TECHNICAL EXHIBIT AMENDMENT TO THE APPLICATION FOR CONSTRUCTION PERMIT STATION KPXB-DT (FACILITY ID 58835) CONROE, TEXAS

MARCH 8, 2001

CH 5 8.00 KW (MAX-DA) 603 M

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Technical Narrative

This Technical Exhibit supports an amendment to the application for construction permit for digital television (DTV) station KPXB-DT on channel 5 at Conroe, Texas. Station KPXB-DT has an application pending to operate with a directional antenna maximum effective radiated power (ERP) of 8 kW and an antenna height above average terrain (HAAT) of 603 meters (BPCDT-19990719KF).

Proposed Facilities

This amendment proposes ONLY to rotate the currently proposed directional antenna by 5 degrees (counter-clockwise). Changes are being made to FCC form 301, Section III-D, questions 10e (relative field values) and 12 (coverage map). No other changes to the currently pending application on file are hereby proposed. A digital operation is proposed at the current site (coordinates: 29-33-44 N, 95-30-35 W, with a maximum directional ERP of 8.00 kW and antenna HAAT of 603 meters.

The proposed transmitter site is more than 1,700 kilometers from the closest point of the Canadian border. The site is approximately 432 kilometers from the closest point of the Mexican border. The closest FCC monitoring station is at Kingsville, Texas, approximately 331 kilometers to the southwest. The closest point of the National Radio Quiet Zone (VA/WV) is more than 1,600 kilometers to the northeast. The closest point of the Table Mountain Radio Quiet Zone (CO) is more than 1,400 kilometers to the northwest. The closest radio astronomy site operating on TV channel 37 is at Fort Davis, Texas, more than 800

kilometers to the west. These separations are sufficient to not be a concern for coordination purposes.

Allocation Study

Interference calculations have been made using the procedures outlined in the FCC's OET-69 bulletin, using a 2 kilometer grid spacing. The pending application appears to cause excessive interference to NTSC station KALB-TV. As shown in the table below, this proposal will reduce the interference caused to station KALB-TV to acceptable levels.

NTSC/DTV Station	Baseline	Proposed UNIQUE Interference
KALB-TV, NTSC-5, Alexandria, LA	1,004,324	10,512 (1.0%)

The proposed KPXB-DT operation does not cause prohibitive interference to any other analog or DTV assignments and therefore complies with the FCC's 2%/10% interference standard.

Class A Consideration

The FCC's CDBS and its list of low power television (LPTV) assignments eligible for Class A status has been reviewed for potential impact. Interference calculations have been made using the procedures outlined in the FCC's OET-69 Bulletin. The proposed KPXB-DT operation does not cause any new calculated interference to any current or potential Class A station over that already predicted to be caused by the current KPXB-DT application (filed prior to the FCC's May 1, 2001 DTV maximization deadline). If necessary, a waiver of the FCC rules is requested based on use of the FCC's OET-69 procedures to demonstrate no interference to LPTV assignments requesting Class A status.

Radiofrequency Electromagnetic Field Exposure

The proposed KPXB-DT facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The radiation center for the proposed DTV antenna is located 596.2 meters above ground level.

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Consulting Engineers Page 3 Conroe, Texas

The maximum DTV ERP is 8 kW. A conservative relative field of 0.4 was used for the calculation (see Exhibit 39). Therefore, the "worst-case" calculated power density at a point 2 meters (6.6 feet) above ground level is 0.0001 mW/cm^2 . This is less than 0.1% of the FCC's recommended limit of 0.2 mW/cm^2 for channel 5 for an "uncontrolled" environment.

Access to the transmitting site will be restricted and appropriately marked with warning signs. In the event that workers or other authorized personnel enter restricted areas or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the stations are at reduced power or shut down. The proposed KPXB-DT operation appears to be otherwise categorically excluded from environmental processing.

If there are questions concerning the technical portion of this application, please contact the office of the undersigned.

Jonathan N. Edwards

du Treil, Lundin & Rackley, Inc. 201 Fletcher Avenue Sarasota, Florida 34237 (941) 329-6000

March 8, 2001



ANTENNA AND SUPPORTING STRUCTURE

STATION KPXB-DT CONROE, TEXAS CH 5 8 KW (MAX-DA) 603 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida



HORIZONTAL RELATIVE FIELD PATTERN STATION KPXB-DT CONROE, TEXAS CH 5 8 KW (MAX-DA) 603 M du Treil, Lundin & Rackley, Inc. Sarasota, Florida



Proposal NumberDCA-8327Figure 2
Sheet 2 of 3Date8-Jul-99Sheet 2 of 3Call LettersKPXB-DTChannel 5LocationConroe, TXCustomerCustomerTF-2CM P200Image: Constant of the second second

ELEVATION PATTERN





DCA-8327 Proposal Number 8-Jul-99 Date **KPXB-DT** 5 Channel **Call Letters** Conroe, TX Location Customer **TF-2CM P200** Antenna Type

ELEVATION PATTERN



Figure 2 Sheet 3 of 3

Figure 3



PREDICTED F(50,90) COVERAGE CONTOURS

STATION KPXB-DT

CONROE, TEXAS

CH 5 8 KW (MAX-DA) 603 M

du Treil, Lundin & Rackley, Inc Sarasota, Florida

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Technical Specifications

Channel	5
Frequency	76-82 MHz
Proposed Site Coordinates (NAD 27)	29° 33' 44" North Latitude 95° 30' 35" West Longitude
Site Elevation above mean sea level	22.8 m
Average elevation above mean sea level of 8 equally spaced radials, 3-16 kilometers	16.5 m
Overall height of antenna structure Above ground Above mean sea level	601.7 m 624.5 m
Height of antenna radiation center Above ground Above mean sea level Above average terrain	596.2 m 619.0 m 603 m
Transmitter rated power output (average)	15 kW
Transmission line Length Efficiency (1.75 dB loss)	Dielectric 562173 (2050 ft) 625 m 66.8 %
Antenna Polarization Peak Power Gain Beam Tilt (electrical) Main Lobes	Dielectric TF-2CM P200 Horizontal 4.2 0.0± 25° & 205° T
Proposed Operation	<u>n</u>
Transmitter output power (average)	2.85 kW

2.05 K W
0.95 kW
1.90 kW
8.0 kW