

**ENGINEERING EXHIBIT  
AMENDMENT TO APPLICATION FOR  
MODIFICATION OF CONSTRUCTION PERMIT  
(FCC FILE NUMBER BMPCDT-20020516AAP)  
KTVU PARTNERSHIP  
STATION KFOX-DT  
EL PASO, TEXAS  
CH 15                      1000 KW (MAX-DA, BT)                      604 METERS**

**ENGINEERING STATEMENT**

This engineering exhibit was prepared on behalf of KTVU Partnership, licensee of commercial analog television (TV) station KFOX-TV, El Paso, Texas,<sup>1</sup> in further support of a pending application to modify the construction permit for KFOX-DT,<sup>2</sup> the digital television (DTV) station associated with KFOX-TV. The outstanding construction permit for KFOX-DT<sup>3</sup> authorizes operation on channel 15 with maximum average effective radiated power (ERP) of 1000 kilowatts (kW) and antenna radiation center height above average terrain (HAAT) of 601 meters. The pending application for modification of construction permit specifies operation on

---

<sup>1</sup> FCC Facility ID 33716.

<sup>2</sup> See FCC File Number BMPCDT-20020516AAP, Application ID Number 581427.

<sup>3</sup> See FCC File Number BPCDT-19991101AID, Application ID Number 423567.

**DENNY & ASSOCIATES, P.C.**  
**CONSULTING ENGINEERS**  
**OXON HILL, MARYLAND**

---

Engineering Statement  
KFOX-DT, El Paso, Texas

Page 2

channel 15 with maximum average ERP of 1000 kW and antenna radiation center HAAT of 604 meters. No change in the authorized KFOX-DT site is proposed.<sup>4</sup> The purpose of the pending application is to change the directional antenna type to be used by KFOX-DT from an Andrew model to a Dielectric Communications model. This change is necessary because a single Dielectric Communications antenna will be used to transmit both the analog KFOX-TV signal and the digital KFOX-DT signal. The FCC granted the KFOX-TV application for construction permit<sup>5</sup> authorizing the directional antenna change on October 29, 2002.

In response to a recent inquiry regarding the status of the pending KFOX-DT application, the FCC informed counsel that it appears that the application cannot be granted because the proposal exceeds ERP and HAAT limits. The FCC's concern on this point appears to be unfounded for three reasons. First, the FCC has already issued KFOX-DT a construction permit for virtually identical facilities. Aside from minor differences in the authorized and proposed tri-lobe directional antenna patterns and in the

---

<sup>4</sup> The authorized KFOX-DT transmitter site is located at 31° 48' 55" North Latitude, 106° 29' 20" West Longitude referenced to the 1927 North American Datum (NAD27).

<sup>5</sup> See FCC File Number BPCT-20020516AAO, Application ID Number 602018.

mechanical lengths of the authorized and proposed antennas, there is no difference between the authorized and proposed facilities for KFOX-DT. Figure 1 of this exhibit is a comparison of the authorized and proposed KFOX-DT noise limited (41 dB $\mu$  F(50,90)) coverage contours. Second, with respect to the proposed KFOX-DT facilities, the proposed maximum average ERP does not exceed 1000 kW, and the proposed antenna radiation center HAAT is less than 610 meters. Finally, the authorized KFOX-DT facilities notwithstanding, there remains a larger station in the market, KDBC-TV, and, under Section 73.622(f)(5), KFOX-DT is permitted to operate with the facilities needed to provide the same geographic coverage area as the largest station within their market.

KDBC-TV is licensed to operate on channel 4 with peak visual ERP of 100 kW and antenna radiation center HAAT of 475 meters.<sup>6</sup> The KDBC-TV transmitter site is located 2.2 kilometers southeast of the KFOX-DT site. Figure 2 of this exhibit is a map showing the locations of the licensed KDBC-TV Grade B (47 dB $\mu$  F(50,50)) contour and the proposed KFOX-DT noise limited (41 dB $\mu$  F(50,90)) contour computed using the

**DENNY & ASSOCIATES, P.C.**  
**CONSULTING ENGINEERS**  
**OXON HILL, MARYLAND**

---

Engineering Statement  
KFOX-DT, El Paso, Texas

Page 4

conventional contour prediction methodology. The licensed KDBC-TV Grade B contour encloses U.S. land area of 26,588 square kilometers. The proposed KFOX-DT service contour encloses U.S. land area of 26,096 square kilometers. The proposed KFOX-DT geographic coverage area is 98.1 percent of the KDBC-TV geographic coverage area, so the proposed KFOX-DT facilities do not result in coverage exceeding that of the largest station in the market in compliance with the pertinent rule.

In reviewing the map of Figure 2 of this exhibit, it is important to note that the decreased distances to both stations' contours to the north result from local terrain affects and not from antenna radiation characteristics. Due to the frequency difference and site location difference involved between KFOX-DT and KDBC-TV, KFOX-DT would have to reduce power substantially in order for the resulting KFOX-DT noise limited contour to be completely enclosed by the KDBC-TV Grade B contour in the area to the north of the stations' transmitter sites.

---

<sup>6</sup> The KDBC-TV transmitter site is located at 31° 47' 46" North Latitude, 106° 28' 57" West Longitude (NAD27).

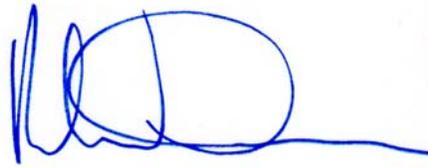
**DENNY & ASSOCIATES, P.C.**  
**CONSULTING ENGINEERS**  
**OXON HILL, MARYLAND**

---

Engineering Statement  
KFOX-DT, El Paso, Texas

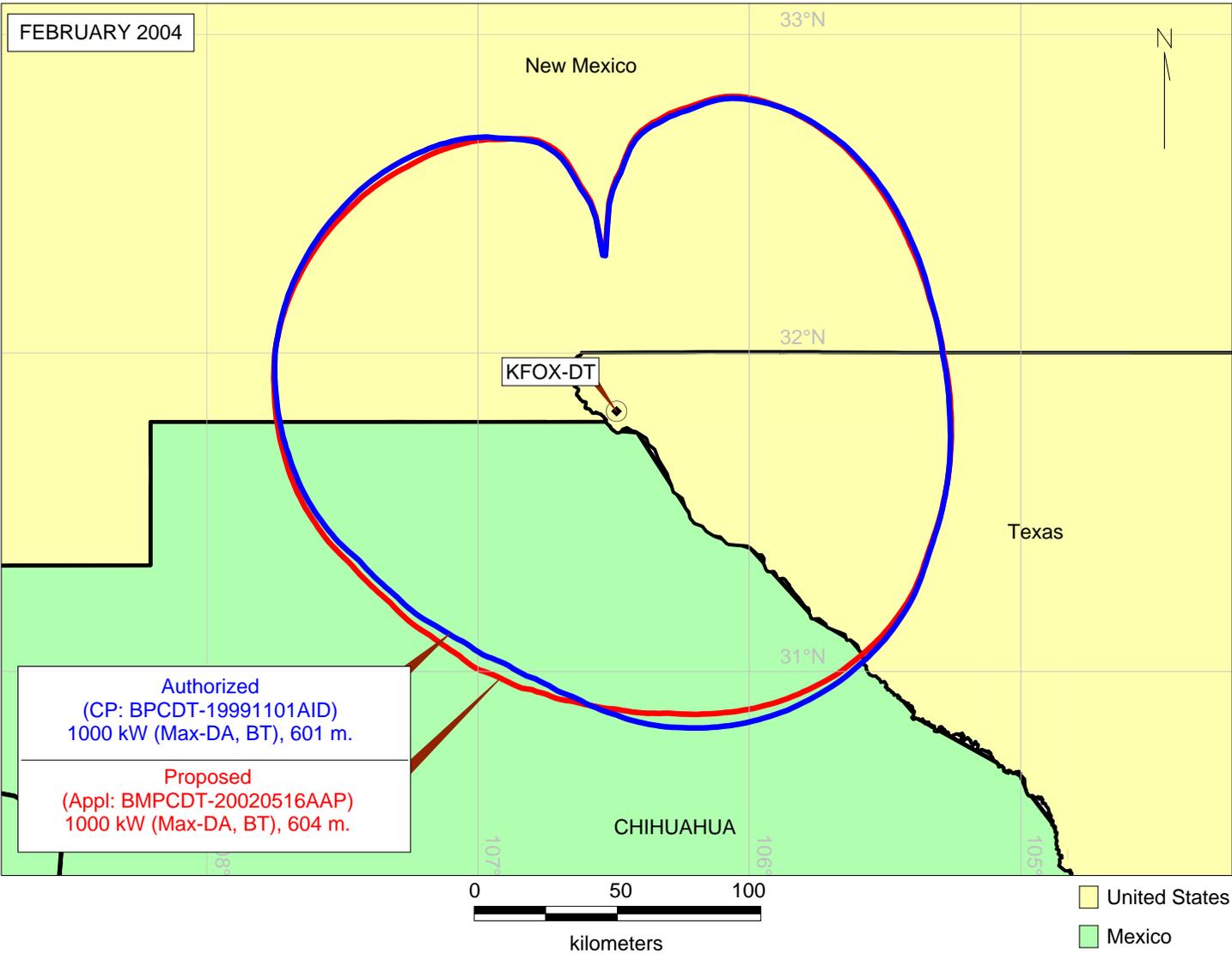
Page 5

I certify that under penalty of perjury that the foregoing is true and correct. Executed on February 11, 2004.


Robert W. Denny, Jr., P.E.

Figure 1



**NOISE LIMITED (41 DBU F(50,90))  
CONTOUR COMPARISON**

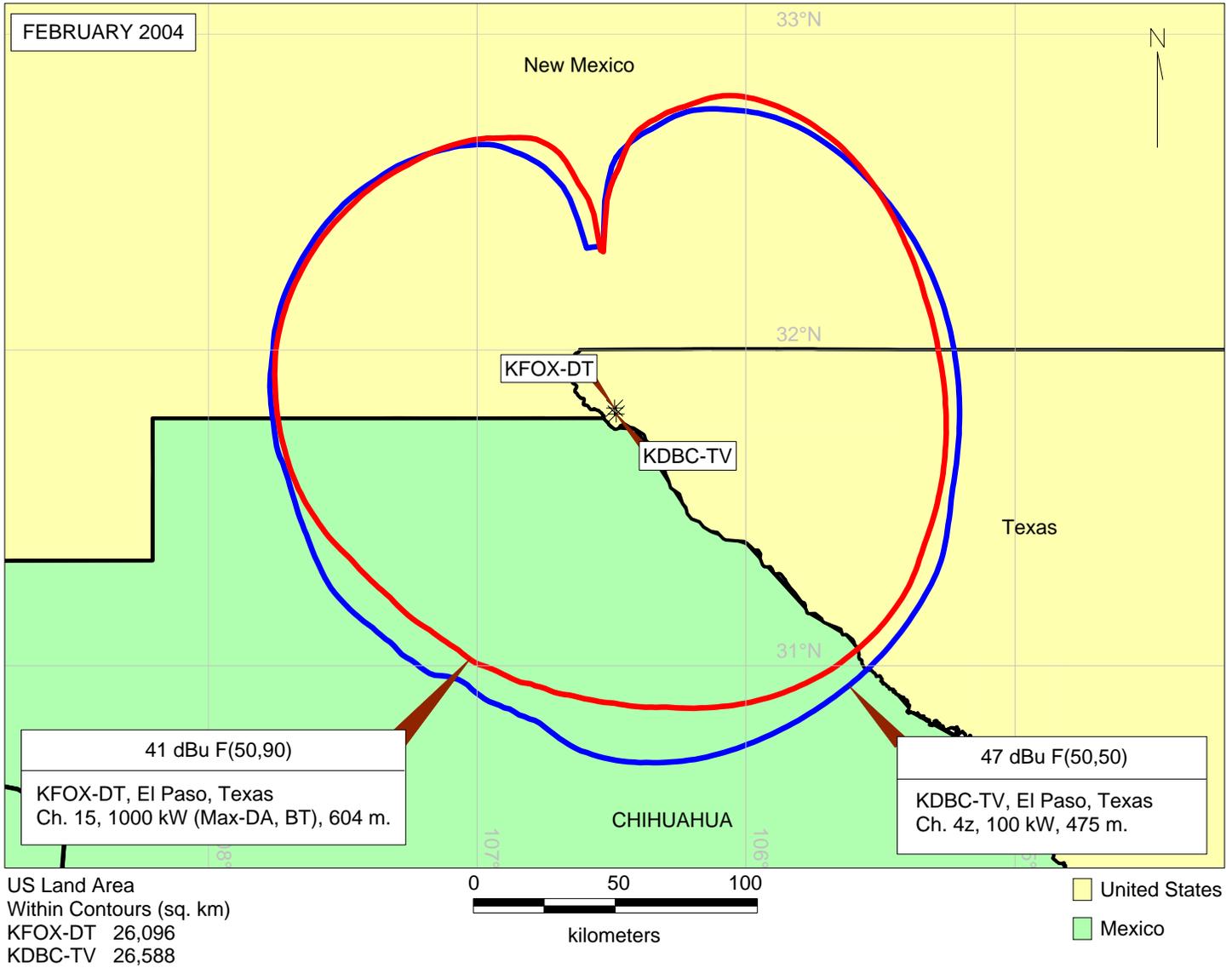
---

**KTVU PARTNERSHIP  
STATION KFOX-DT EL PASO, TEXAS  
CH 15 1000 KW (MAX-DA, BT) 604 METERS**

---

Denny & Associates, P.C. Consulting Engineers

Figure 2



**SECTION 73.622(f)(5) STUDY**

---

**KTVU PARTNERSHIP  
STATION KFOX-DT EL PASO, TEXAS  
CH 15 1000 KW (MAX-DA, BT) 604 METERS**

---

Denny & Associates, P.C. Consulting Engineers