TECHNICAL EXHIBIT
APPLICATION FOR MINOR MODIFICATION
OF CONSTRUCTION PERMIT
STATION KPPX-DT (FACILITY ID 26655)
TOLLESON, ARIZONA

SEPTEMBER 20, 2001

CH 52 200 KW 546 M

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Technical Narrative

This Technical Exhibit supports a minor modification of construction permit for digital television (DTV) station KPPX-DT on channel 32 at Tolleson, Arizona. Station KPPX-DT is authorized (CP) to operate with a directional antenna maximum effective radiated power (ERP) of 1000 kW and an antenna height above average terrain (HAAT) of 546 meters (BPCDT-19991018AAU).

Proposed Facilities

This minor modification proposes ONLY to decrease the antenna ERP and utilized a non-directional antenna. Operation at the current site (coordinates: 33-20-03 N, 112-03-38 W) with a non-directional ERP of 200 kW and antenna HAAT of 546 meters is hereby proposed. The FCC antenna structure registration number is 1204586. There is no proposed change in site coordinates, channel or antenna HAAT.

Allocation Study

Since the max to min ratio for the currently authorized directional antenna is only 0.78 dB, it could be also classified as non-directional and, therefore, the proposed KPPX-

DT non-directional antenna (in this application) is expected to radiate a very similar azimuthal pattern. In addition, the proposed non-directional ERP (200 kW) is 6.2 dB less than the minimum ERP (835 kW) for the currently authorized directional operation. Because the proposed radiation is well within the authorized dBk "envelope", it is not expected that there will be any meaningful change in the current allocation study and/or interference analysis to any NTSC full service, DTV or Class A station (i.e., all interference situations, if any, will be reduced from that currently authorized). There are no changes that would impact Mexico from the KPPX-DT authorization on file. Although no adverse electromagnetic impact is expected, the applicant recognizes its responsibility to correct problems that may result from its proposed operation.

Radiofrequency Electromagnetic Field Exposure

The proposed KPPX-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 113 meters above ground level. The DTV ERP is 200 kW. A conservative relative field of 0.08 was used for the calculation (see Figure 1). Therefore, the "worst-case" calculated power density at a point 2 meters (6.6 feet) above ground level is 0.0035 mW/cm^2. This is less than 1% of the FCC's recommended limit of 0.47 mW/cm^2 for channel 52 for an "uncontrolled" environment.

Access to the transmitting site will be restricted and appropriately marked with warning signs. As this is a multi-user site an agreement will control access. 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 KPPX-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

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201 Fletcher Avenue
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(941) 329-6000

September 20, 2001

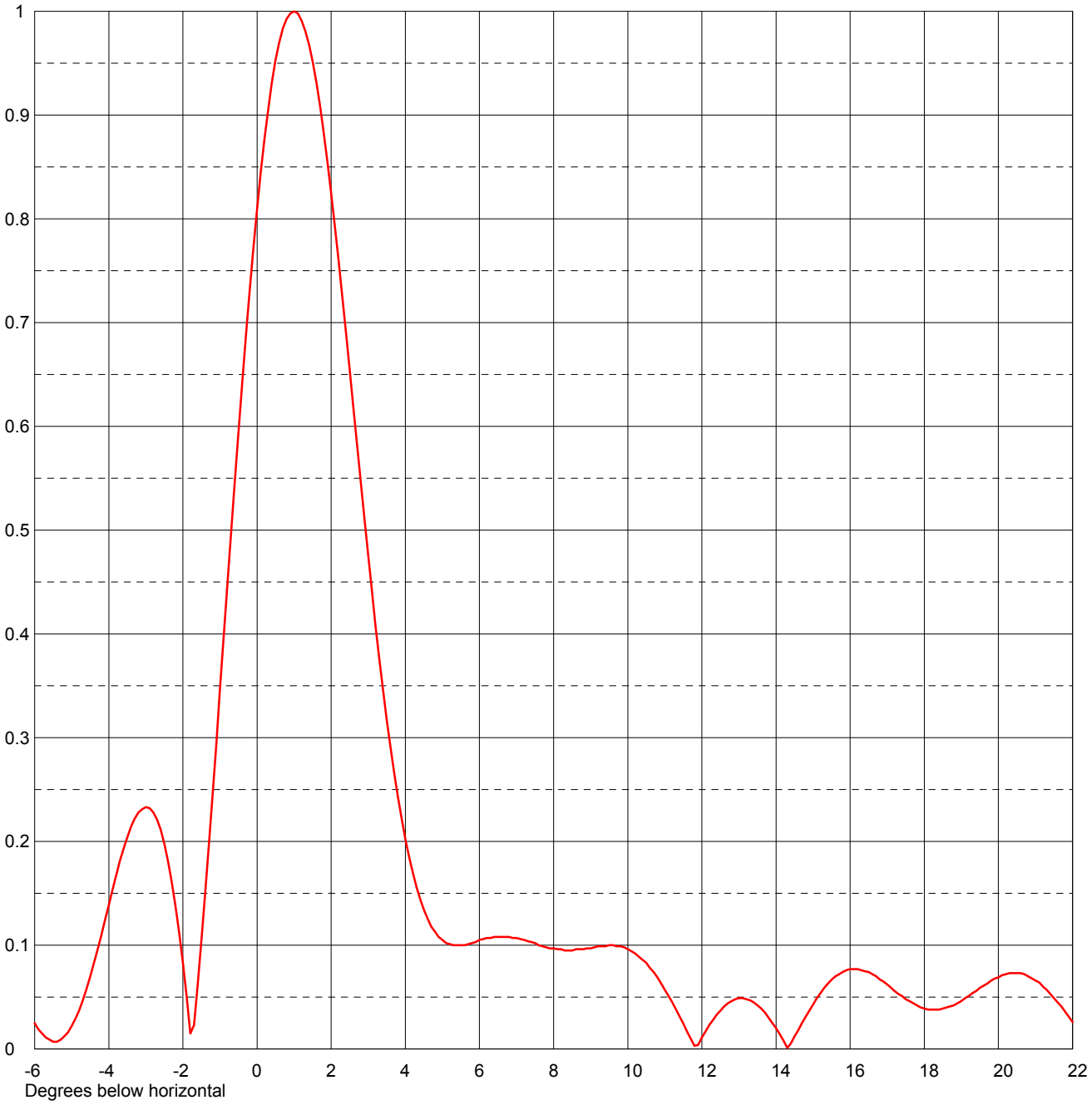
Exhibit No.
Figure 1A

Dielectric

Date	**20 Sep 2001**		
Call Letters	**KPPX-DT**	Channel	**52**
Location			
Customer			
Antenna Type	**TFU-24GTH-R O4**		

ELEVATION PATTERN

RMS Gain at Main Lobe	**21.5 (13.32 dB)**	Beam Tilt	**1.00 Degrees**
RMS Gain at Horizontal	**14.1 (11.49 dB)**	Frequency	**701.00 MHz**
Calculated / Measured	**Calculated**	Drawing #	**24G215100**



Remarks:

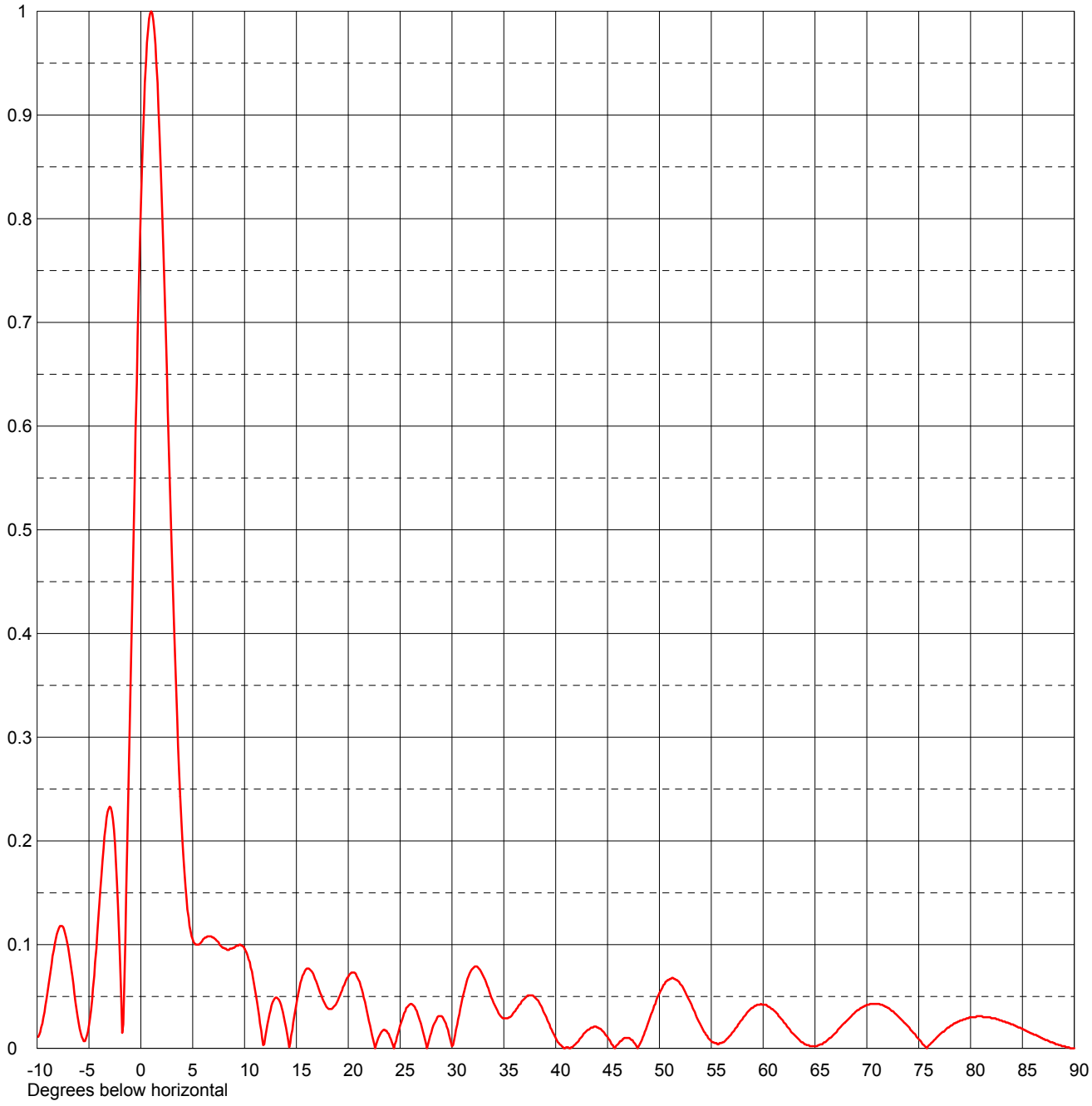
Exhibit No.
Figure 1B

Dielectric

Date	**20 Sep 2001**		
Call Letters	**KPPX-DT**	Channel	**52**
Location			
Customer			
Antenna Type	**TFU-24GTH-R O4**		

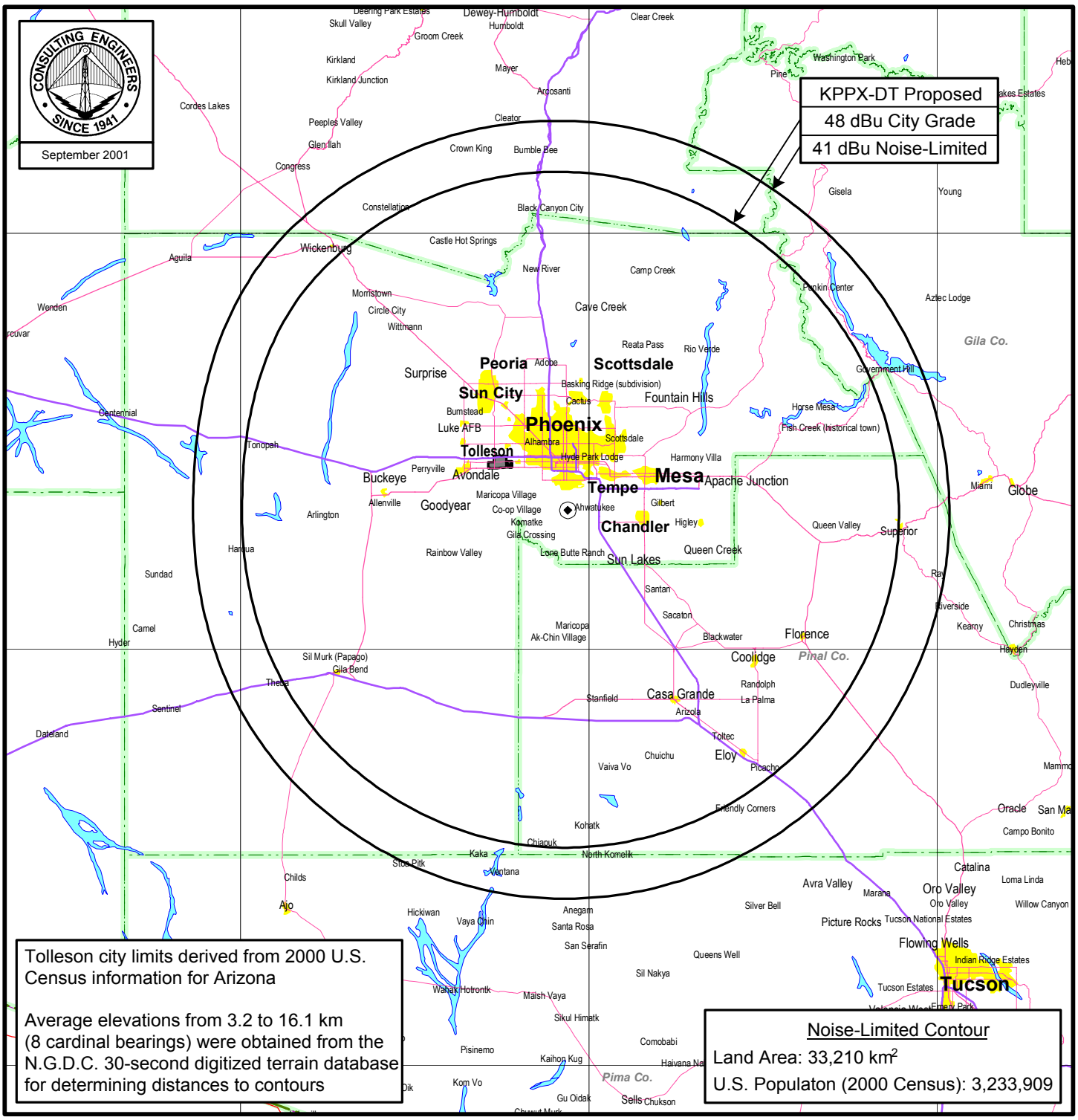
ELEVATION PATTERN

RMS Gain at Main Lobe	**21.5 (13.32 dB)**	Beam Tilt	**1.00 Degrees**
RMS Gain at Horizontal	**14.1 (11.49 dB)**	Frequency	**701.00 MHz**
Calculated / Measured	**Calculated**	Drawing #	**24G215100-90**



Remarks:

Figure 2



PREDICTED F(50,90) COVERAGE CONTOURS

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Technical Specifications

Channel	52
Frequency	698-704 MHz
Proposed Site Coordinates (NAD 27)	33° 20’ 03” North Latitude 112° 03’ 38” West ongitude
Site Elevation above mean sea level	801 m
Average elevation above mean sea level of 8 equally spaced radials, 3-16 kilometers	367.8 m
Overall height of antenna structure	
Above ground	120.7 m
Above mean sea level	921.7 m
Height of antenna radiation center	
Above ground	113 m
Above mean sea level	914 m
Above average terrain	546 m
Transmission line	Dielectric 6-1/8”/75 Ξ
Length	(425 ft) 130 m
Efficiency (0.56 dB loss)	88%
Antenna	Dielectric TFU-24GTH-R O4
Polarization	Horizontal
RMS Power Gain	21.5
Beam Tilt (electrical)	1.0±

Proposed Operation

Transmitter output power required (average)	10.6 kW
Transmission line loss	1.3 kW
Antenna input power	9.3 kW
Maximum Effective Radiated Power	200 kW