

Skywave Study
 In Support of an Application to
 Amend a Modification of
 Construction Permit to
 Change Antenna Location
 KLDC, Denver, Colorado
 Facility ID 12364
 1220 kHz, 1 kW-D/0.012 kW-N, ND

KLZ proposes non-directional secondary nighttime coverage for KLDC at a power of 12 watts. This proposed operation will not enter into the 25% RSS calculation of any facility. XEB is the only Class A protection of concern, and there are three XEB night records in the database, all of which are U.S. objected:

XEB	Hours:U	Status:O (O)	19-19-45N	99-09-38W					
1220 kHz	100.000 kW	Class:A	SAN LORENZO TEZO, DF, MX	-					
	Q:.0000		Std. RMS:3990.000 mV/m/km						
Facility No.: 102710		Change List: 980003							
Twr.	Field	Phase	Spacing	Orient	Height	A	B	C	D
1	1.000	0.0	0.0	0.0	193.3	0.0	0.0	0.0	0.0

XEB	Hours:N	Status:O (O)	19-18-31N	99-03-32W					
1220 kHz	100.000 kW	Class:A	SAN LORENZO TEZO, DF, MX	-					
	Q:.0000		Std. RMS:4216.300 mV/m/km						
Facility No.: 102710		Change List: 980003							
Twr.	Field	Phase	Spacing	Orient	Height	A	B	C	D
1	1.000	0.0	0.0	0.0	180.2	0.0	0.0	0.0	0.0

XEB1	Hours:N	Status:P (O)	19-18-29N	99-03-32W					
1220 kHz	100.000 kW	Class:A	SAN LORENZO TEZO, DF, MX	-					
	Q:.0000		Std. RMS:4442.400 mV/m/km						
Facility No.: 114266		Change List: 980003							
Twr.	Field	Phase	Spacing	Orient	Height	A	B	C	D
1	1.000	0.0	0.0	0.0	197.7	0.0	0.0	0.0	0.0

The proposed KLDC secondary night operation fully protects XEB as follows:

Proposed Night Limits

KLDC-P 1220 kHz to Co-Channel Stations: XEB-U .5 mV/m 50% SKYWAVE

*** Facilities/Points with Proposed Limits less than .45 mV/m are NOT printed

Facility or Contour	Location	Dist km	Azim deg	Theta deg	Max IDF mV/m/km	Skywave uV/m	Limit mV/m	Required Protect
XEB--345	31-26-27N 102-57-00W	932.4	167.8	9.5	9.5	32.6	70.9	0.463 0.500
XEB--350	31-42-06N 101-42-33W	933.4	160.3	9.5	9.5	32.6	70.8	0.462 0.500

Proposed Night Limits

KLDC-P 1220 kHz to Co-Channel Stations: XEB .5 mV/m 50% SKYWAVE

*** Facilities/Points with Proposed Limits less than .4 mV/m are NOT printed

Facility or Contour	Location	Dist km	Azim deg	Theta deg	Max IDF mV/m/km	Skywave uV/m	Limit mV/m	Required Protect
XEB-335	30-50-48N 105-20-57W	980.1	181.9	8.8	8.8	32.7	66.2	0.433 0.500

Proposed Night Limits

KLDC-P 1220 kHz to Co-Channel Stations: XEB1 .5 mV/m 50% SKYWAVE

*** Facilities/Points with Proposed Limits less than .45 mV/m are NOT printed

Facility or Contour	Location	Dist km	Azim deg	Theta deg	Max IDF mV/m/km	Skywave uV/m	Limit mV/m	Required Protect
XEB1-340	31-31-59N 104-16-32W	905.8	175.5	9.9	9.9	32.6	73.3	0.478 0.500
XEB1-345	31-54-39N 103-01-13W	879.8	167.6	10.3	10.3	32.5	76.7	0.499 0.500
XEB1-350	32-11-01N 101-43-24W	882.0	159.3	10.3	10.3	32.5	76.4	0.497 0.500
XEB1-355	32-20-55N 100-23-54W	912.2	151.5	9.8	9.8	32.6	72.7	0.474 0.500

Class B protections are as follows:

Proposed Night Limits

KLDC-P **1220 kHz** to Adjacent Channel Stations: 1210 kHz

*** Facilities/Points with Proposed Limits less than .1 mV/m are NOT printed

Facility or Contour	Location	Dist km	Azim deg	Theta deg	Max IDF mV/m/km	Skywave uV/m	Limit mV/m	Required Protect
KHAT-L	41-15-19N 105-33-01W	183.3	345.8	37.7	52.1	24.1	313.8	0.152 6.397

Proposed Night Limits

KLDC-P 1220 kHz to Co-Channel Stations: 1220 kHz

*** Facilities/Points with Proposed Limits less than .1 mV/m are NOT printed

Facility or Contour	Location	Dist km	Azim deg	Theta deg	Max IDF mV/m/km	Skywave uV/m	Limit mV/m	Required Protect
XENVA2-P	31-03-48N 114-50-10W	1304.6	226.1	5.4	5.4	33.1	38.2	0.252 7.826
XENVA2-P	28-41-50N 100-30-40W	1286.6	159.8	5.6	5.6	33.1	39.4	0.261 45.060
KTMZ-L	34-01-11N 117-43-03W	1290.8	245.0	3.5	7.6	33.2	29.3	0.195 2.579
WLPO-L	41-18-14N 89-05-44W	1356.6	77.2	3.0	6.9	33.2	22.2	0.148 2.901
KLBB-L	45-03-15N 92-49-42W	1165.3	55.2	4.4	9.0	33.2	27.4	0.181 3.250
KDDR-L	46-07-23N 98-05-21W	912.9	35.9	6.9	12.6	32.9	42.1	0.278 2.617
KHTS-L	34-27-55N 118-24-07W	1318.8	248.3	3.3	7.3	33.2	28.1	0.187 2.737
CJOC-P	49-42-40N 112-43-20W	1271.4	334.0	5.7	5.7	33.1	40.5	0.268 1.680
CJRB-O	49-15-26N 100-03-24W	1136.8	18.6	7.0	7.0	32.9	51.2	0.338 7.029
CJRL-P	49-45-53N 94-26-40W	1397.1	33.1	4.7	4.7	33.1	32.1	0.213 4.288

Proposed Night Limits

KLDC-P 1220 kHz to Adjacent Channel Stations: 1230 kHz

*** Facilities/Points with Proposed Limits less than .1 mV/m are NOT printed

Facility or Contour	Location	Dist km	Azim deg	Theta deg	Max IDF mV/m/km	Skywave uV/m	Limit mV/m	Required Protect
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** No 1230 kHz stations with Proposed Limits in excess of .1 mV/m **

The proposed KLDC secondary night facility will not enter the limit of any class B station