

## **EXHIBIT 12**

### **APPLICATION FOR A CONSTRUCTION PERMIT TO MODIFY A LICENSED FACILITY**

**FM TRANSLATOR STATION**

**K278CK**

**BMPFT - 20161121AAA**

**Facility ID - 148519**

**AF GROUP LLC**

**11 MAY 2017**

## EXHIBIT 12

This technical statement and attached exhibits have been prepared for AF GROUP LLC to support their application for a construction permit to modify a licensed facility.

The new transmitter site will be located on tower ASRN 1220255. At this site the 60 dbu contours of the current licensed facility and proposed facility do overlap as shown in Exhibit 13.

### Antenna Location

NAD27  
29 – 28 – 36 N  
98 – 48 – 33 W

The transmission parameters are:

Antenna RCAGL – 85 meters  
ERP – 0.25 kW (H) and (V)  
Channel 278 (103.5 MHz).

SWR FMEC PLUS – custom directional antenna will be utilized.

### Mexico:

This site is 188 km from the US/Mexico border. This exceeds the 125 km distance specified in 74.1235(d) (2) towards the common border between Mexico and US. The 60 db contour of this proposal does not lie within 116.3 km of the common border and thus complies with 74.1235(d)(2). This application will not impact any existing licensed Mexican or US station, application, construction permit, or allotment.

### Exhibits:

**Exhibit 12** – This narrative, antenna pattern, and 60 dbu contour overlap of current licensed facility and proposed facility.

**Exhibit 13** – Overlap Protection consists of a channel study and maps.

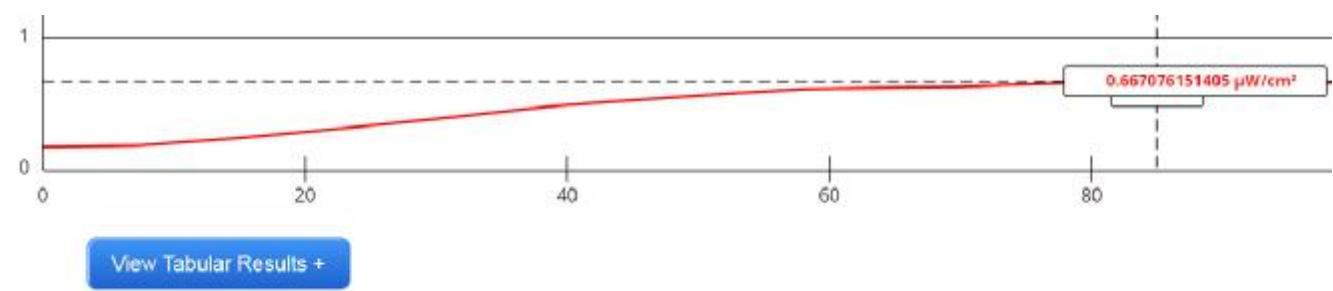
### K278CK EXHIBIT 13 CHANNEL OVERLAP STUDY

Callsign	State	City	Freq	Channel	ERP_w	Class	Status	Distance_km	Sep	Clr
K279AB	TX	SAN ANTONIO	103.7	279	220	D	LIC	26.81	0	0.20 dB
KBPA	TX	SAN MARCOS	103.5	278	100000	C0	LIC	105.19	0	0.34 dB
K277CX	TX	TERRELL WELLS	103.3	277	185	D	LIC	26.81	0	0.88 dB
KSAH-FM	TX	PEARSALL	104.1	281	100000	C1	LIC	83.77	0	4.71 dB
KSAG	TX	PEARSALL	103.3	277	6000	A	LIC	64.35	0	8.35 dB
KEEP	TX	BANDERA	103.1	276	3500	A	LIC	53.3	0	9.15 dB
KEWP	TX	UVALDE ESTATES	103.5	278	6000	A	LIC	105.45	0	13.21 dB
KEWP	TX	UVALDE ESTATES	103.5	278	6000	A	CP MOD	106.19	0	13.83 dB
KPER	TX	PEARSALL	103.3	277	6000	A	CP	78.36	0	14.93 dB
KHHL	TX	KARNES CITY	103.1	276	34000	C2	LIC	117.3	0	25.97 dB
KAXA	TX	MOUNTAIN HOME	103.7	279	6000	A	LIC	98.7	0	26.66 dB
KROM	TX	SAN ANTONIO	92.9	225	45000	C1	LIC	52.34	22	30.3
KXAI	TX	REFUGIO	103.7	279	100000	C1	LIC	205.01	0	33.44 dB
	CI	CIUDAD ACUNA	103.9	280	100000	C		212.17	0	33.29 dB
KMSN	TX	MASON	104.1	281	50000	C2	CP	154.54	0	33.06 dB
KBQQ	TX	SMILEY	103.9	280	25000	C3	CP	131.91	0	34.07 dB

Exhibit 17 – Environmental Protection Act.

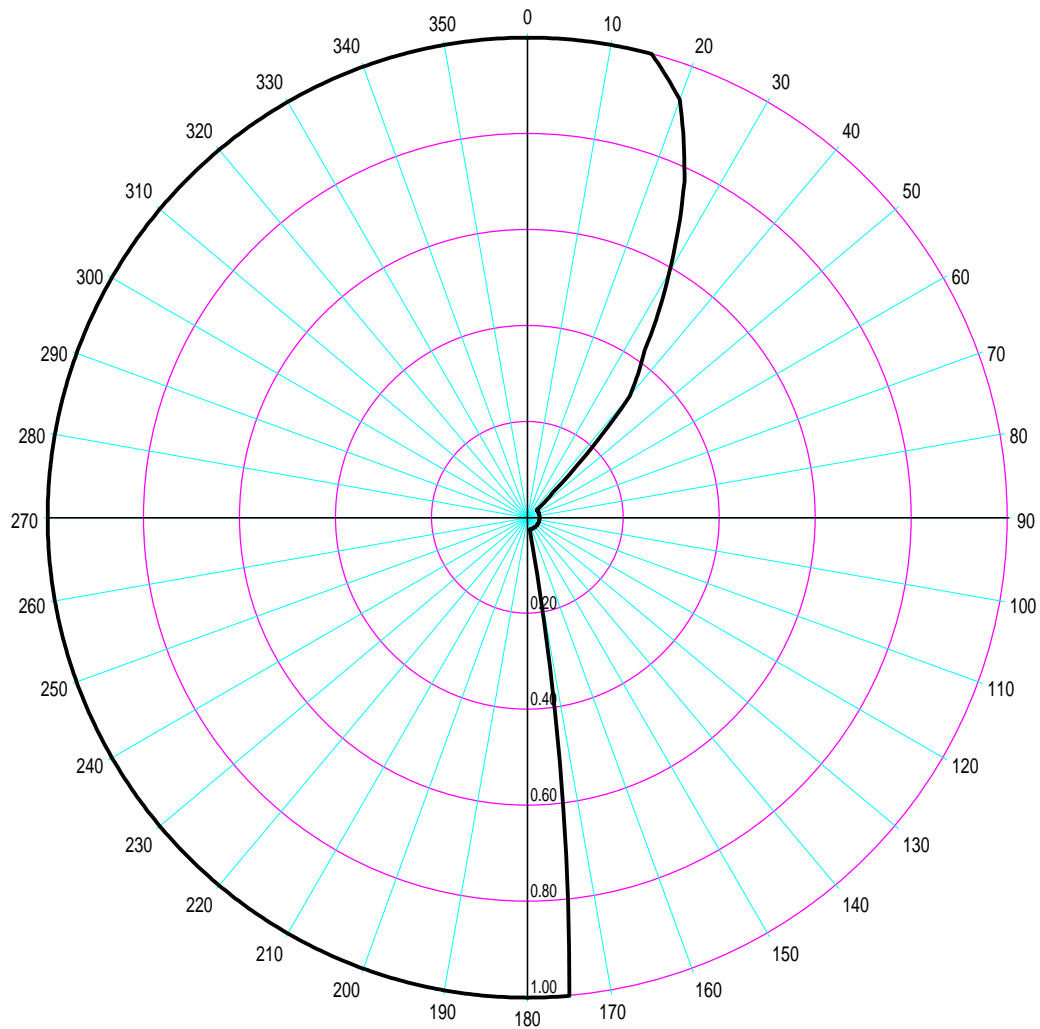
SWR FEMC PLUS single bay antenna

FCC FMMODEL calculates  $S = 0.667 \mu\text{W}/\text{cm}^2$ , which is 0.334% of the uncontrolled public access  $200 \mu\text{W}/\text{cm}^2$ .

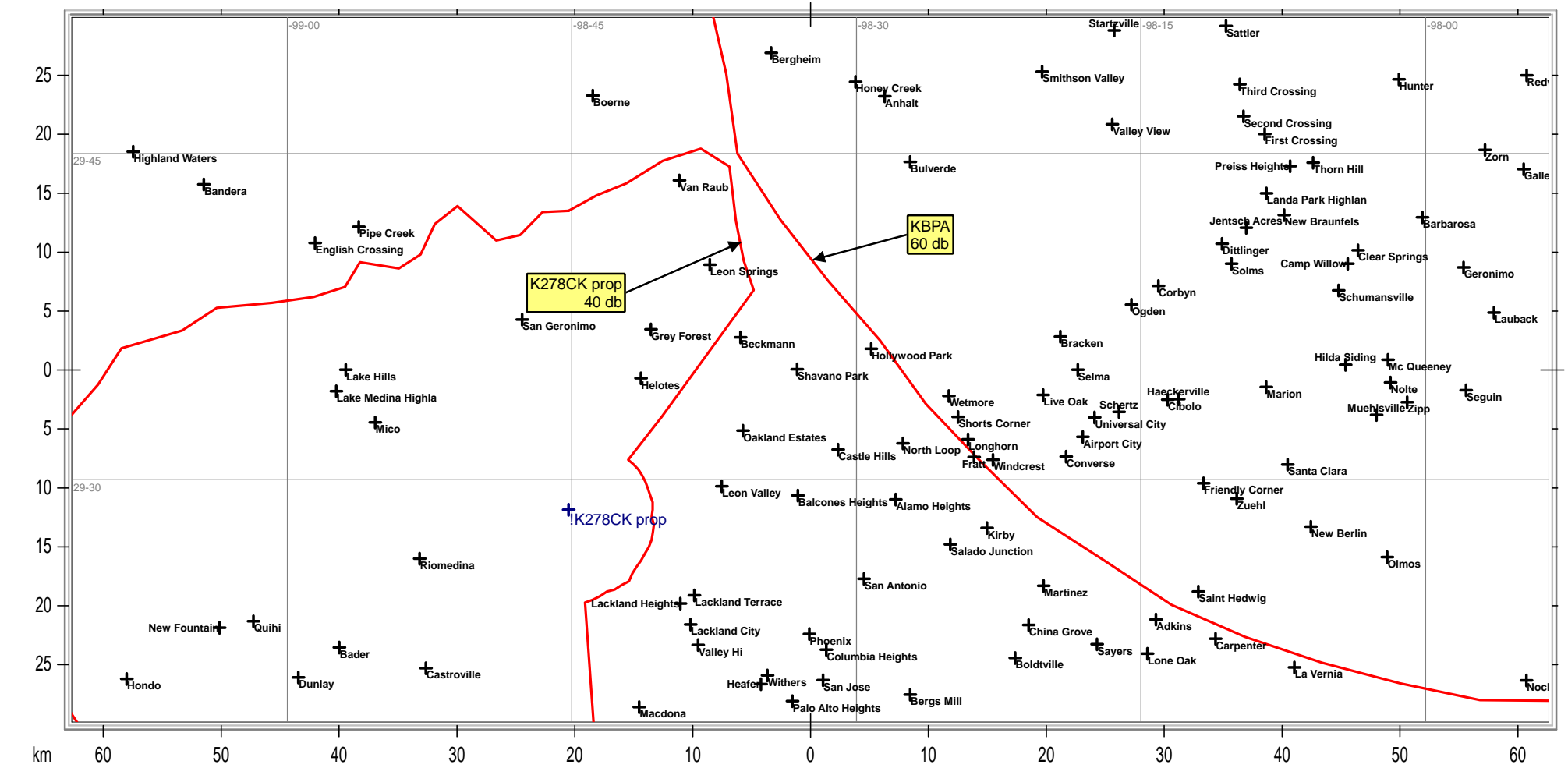


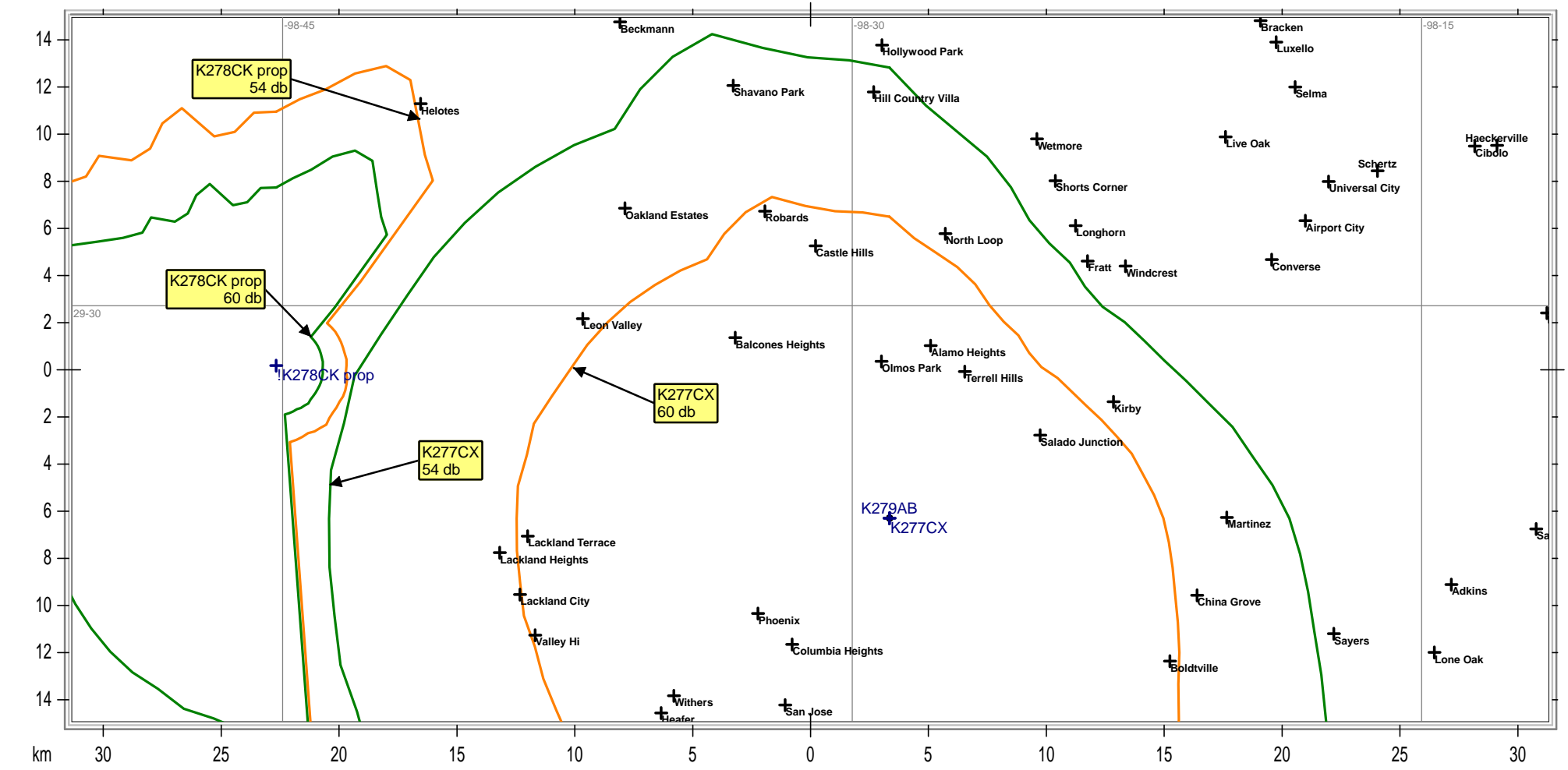
Channel Selection	Channel 278 (103.5 MHz)		
Antenna Type +	EPA Type 2: Opposed V Dipole		
Height (m)	85	Distance (m)	100
ERP-H (W)	250	ERP-V (W)	250
Num of Elements	1	Element Spacing ( $\lambda$ )	1
Num of Points	500	Apply	

Applicant will reduce power or cease operations whenever there are personal working on the tower.

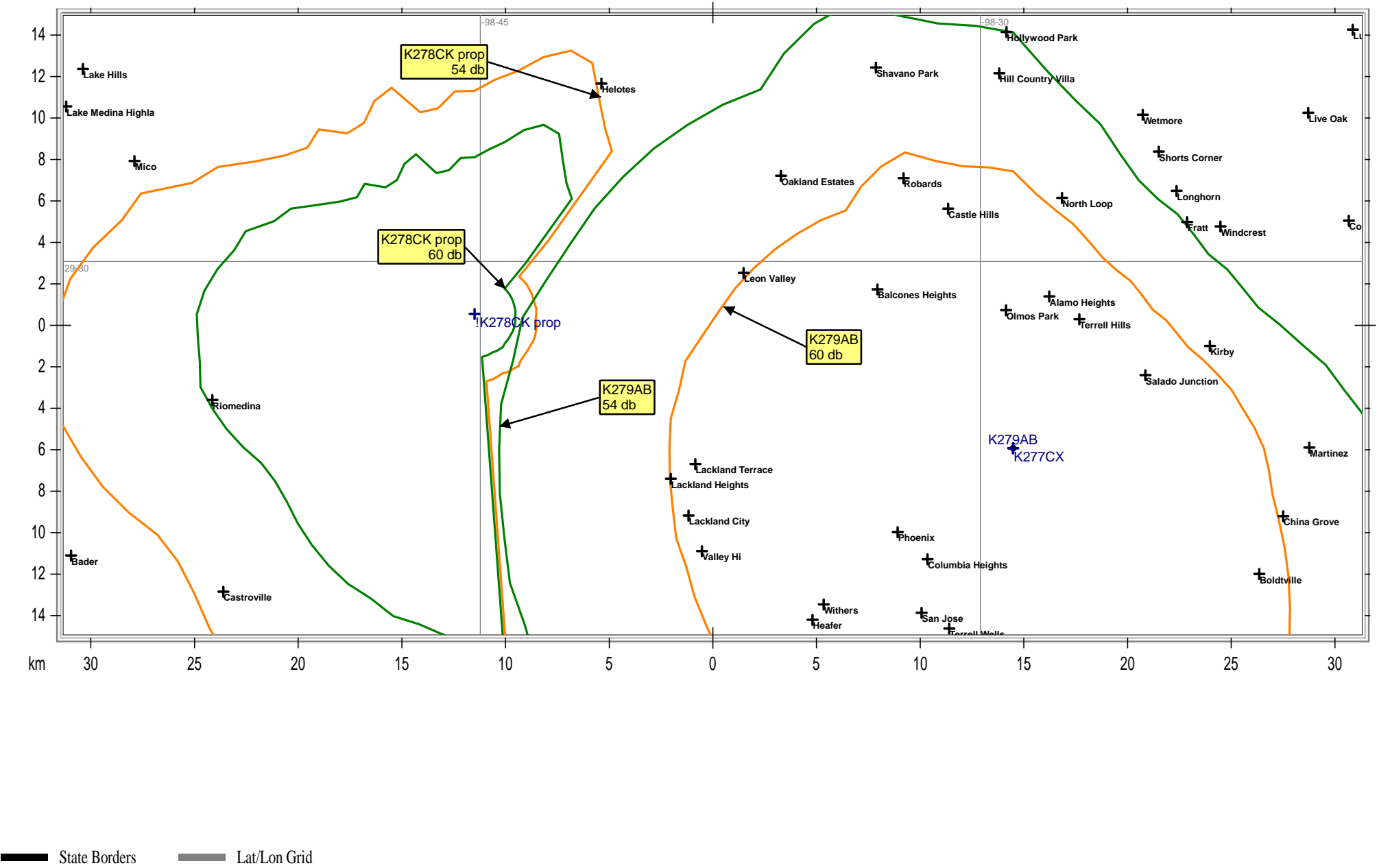


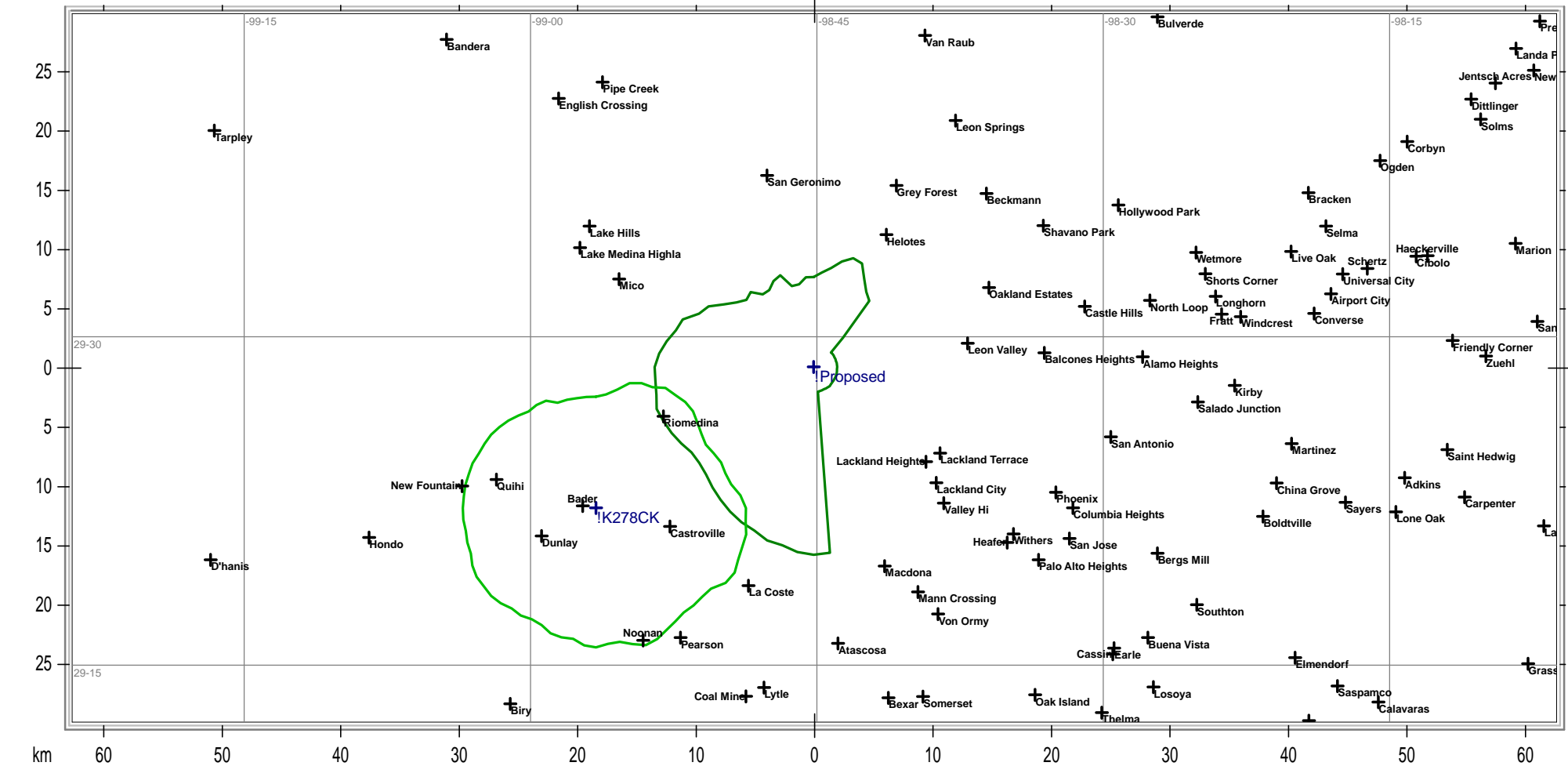
Azim	Rel.FS	ERP [W]	dBk	Azim	Rel.FS	ERP [W]	dBk
0.0	1.000	250.000	-6.021	185.0	1.000	250.000	-6.021
5.0	1.000	250.000	-6.021	190.0	1.000	250.000	-6.021
10.0	1.000	250.000	-6.021	195.0	1.000	250.000	-6.021
15.0	1.000	250.000	-6.021	200.0	1.000	250.000	-6.021
20.0	0.927	214.832	-6.679	205.0	1.000	250.000	-6.021
25.0	0.773	149.382	-8.257	210.0	1.000	250.000	-6.021
30.0	0.590	87.025	-10.604	215.0	1.000	250.000	-6.021
35.0	0.425	45.156	-13.453	220.0	1.000	250.000	-6.021
40.0	0.331	27.390	-15.624	225.0	1.000	250.000	-6.021
45.0	0.075	1.406	-28.519	230.0	1.000	250.000	-6.021
50.0	0.025	0.156	-38.062	235.0	1.000	250.000	-6.021
55.0	0.025	0.156	-38.062	240.0	1.000	250.000	-6.021
60.0	0.025	0.156	-38.062	245.0	1.000	250.000	-6.021
65.0	0.025	0.156	-38.062	250.0	1.000	250.000	-6.021
70.0	0.025	0.156	-38.062	255.0	1.000	250.000	-6.021
75.0	0.025	0.156	-38.062	260.0	1.000	250.000	-6.021
80.0	0.025	0.156	-38.062	265.0	1.000	250.000	-6.021
85.0	0.025	0.156	-38.062	270.0	1.000	250.000	-6.021
90.0	0.025	0.156	-38.062	275.0	1.000	250.000	-6.021
95.0	0.025	0.156	-38.062	280.0	1.000	250.000	-6.021
100.0	0.025	0.156	-38.062	285.0	1.000	250.000	-6.021
105.0	0.025	0.156	-38.062	290.0	1.000	250.000	-6.021
110.0	0.025	0.156	-38.062	295.0	1.000	250.000	-6.021
115.0	0.025	0.156	-38.062	300.0	1.000	250.000	-6.021
120.0	0.025	0.156	-38.062	305.0	1.000	250.000	-6.021
125.0	0.025	0.156	-38.062	310.0	1.000	250.000	-6.021
130.0	0.025	0.156	-38.062	315.0	1.000	250.000	-6.021
135.0	0.025	0.156	-38.062	320.0	1.000	250.000	-6.021
140.0	0.025	0.156	-38.062	325.0	1.000	250.000	-6.021
145.0	0.025	0.156	-38.062	330.0	1.000	250.000	-6.021
150.0	0.025	0.156	-38.062	335.0	1.000	250.000	-6.021
155.0	0.025	0.156	-38.062	340.0	1.000	250.000	-6.021
160.0	0.025	0.156	-38.062	345.0	1.000	250.000	-6.021
165.0	0.025	0.156	-38.062	350.0	1.000	250.000	-6.021
170.0	0.025	0.156	-38.062	355.0	1.000	250.000	-6.021
175.0	1.000	250.000	-6.021				
180.0	1.000	250.000	-6.021				





State Borders      Lat/Lon Grid





State Borders Lat/Lon Grid