

**APPLICATION FOR ONE STEP UPGRADE
FOR
WILLIAM J. JAEGER AND DONALD W. JAEGER
LICENSEE OF
KNKK, CH 296, NEEDLES, CALIFORNIA
ZONE II TRANSMITTER SITE**

JUNE 2001

**BY:
BEEM COMPANY
ARCADIA, CA
(626) 446-3468**

ENGINEERING STATEMENT OF JOEL T. SAXBERG

This application for one step upgrade, Channel 296C2 to Channel 296C1, was prepared for William J. Jaeger and Donald W. Jaeger, licensee of FM station KNKK, Needles, California. The KNKK transmitter site is located in Zone II (Arizona) and this site meets domestic and international allocation requirements in accordance with §73.207 with respect to full Class C1 operation.

RADIOFREQUENCY ELECTROMAGNETIC FIELDS – There are three FM stations mounted on the proposed antenna support structure, KNKK CH 296 (2.35 kW present, 16.5 kW proposed), KADD CH228C1 (2.75 kW ERP), and KRCY CH224C1 (17 kW ERP). The combined ERP is 72.5 kW (H+V). Worst case computations with KNKK center of radiation at 24 meters AGL, KRCY center of radiation at 26 meters AGL and KADD center of radiation at 26 meters show REF levels at 2 meters above ground level to be at 4.58 mW/cm². Using the elevation plane pattern of KNKK, the REF level at two meters above ground level does not exceed 0.05 mW/cm². The other two antennas consist of multiple elements with a downward relative field of less than 0.35, which gives a REF value of 0.29 mW/cm². The combined estimated downward field, at two meters above ground level, is computed to be less than 0.34 mW/cm². The antenna support structure is located on a very steep butte approximately 1000 feet from the transmitter building. The only road to the site is fenced and locked. The entire area is not accessible to the general public. The base of the tower is marked with RF warning signs. Access to the site is for authorized personnel only. This transmitter site location is a controlled area. When necessary for others to climb the tower, KNKK will reduce terminate transmissions to keep personnel from exposure of radiofrequency electromagnetic fields in excess of FCC guidelines and as specified in OET-65.

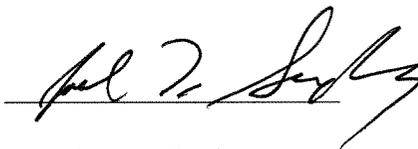
ENGINEERING CERTIFICATION

JOEL T. SAXBERG deposes and says:

1. That he is President of Broadcast Engineering and Equipment Maintenance Company, "**BEEM CO.**", radio engineering consultants. **BEEM CO.** maintains offices at: 2322 S. Second Avenue, Arcadia, CA 91006. Telephone (626) 446-3468
2. That he was graduated from California State University at Los Angeles, February 1966, with a Bachelor of Science degree in Electronic Engineering. He received a MS degree in Electronic Engineering Technology in August 1996.
3. That he has submitted many applications to the Federal Communications Commission for broadcast and auxiliary broadcast construction permits and licenses.
4. That his experience in broadcast engineering is a matter of record and he has spent over thirty years working in the field of radio engineering.
5. That the attached engineering exhibit and reports were prepared by him or under his direction and supervision. That he believes the facts stated therein to be both true and accurate. Statements that are based on information supplied by others are also believed to be true and accurate.
6. That he has performed field work on AM and FM broadcast transmitting systems throughout this country and continues to provide technical consulting services on a daily basis to broadcasters.
7. That he declares under penalty of perjury the foregoing is true and correct.

Executed on

6/18/01



Joel T. Saxberg

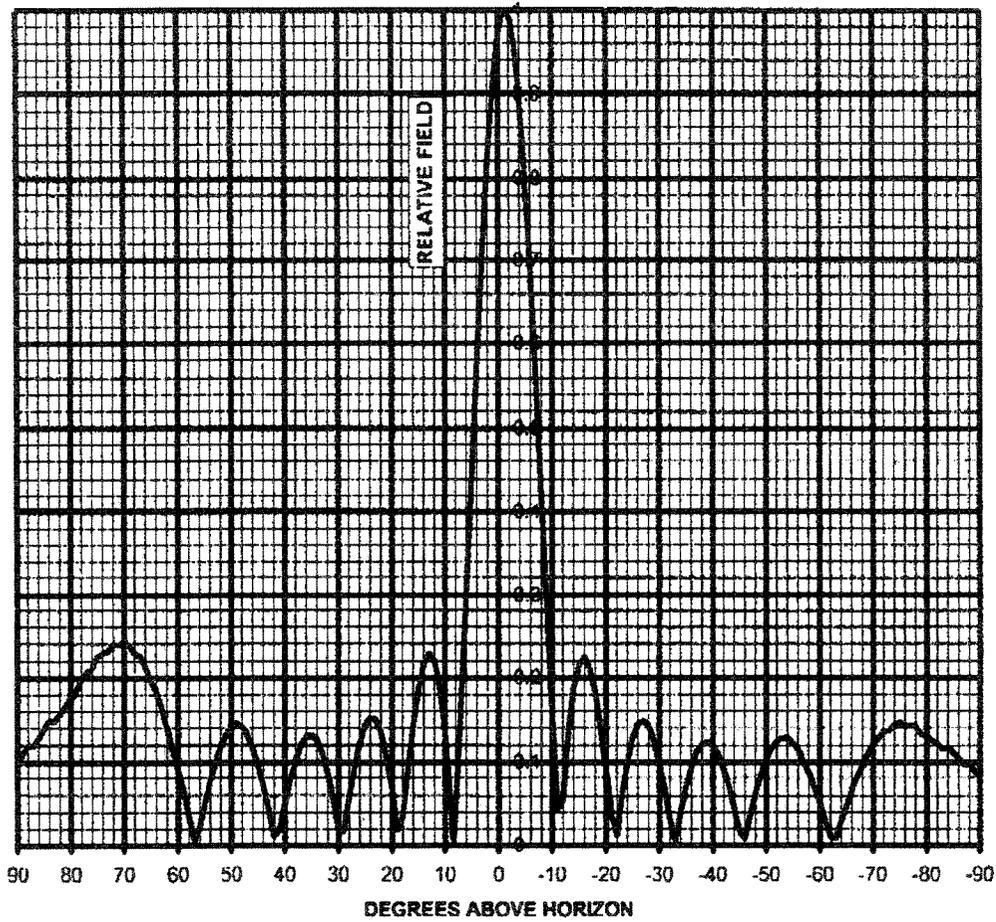


6340 Sky Creek Drive, Sacramento, California 95828
P.O. Box 282880, Sacramento, California 95829-2880

(916) 383-1177 FAX (916) 383-1182

PLOT OF ELEVATION PLANE PATTERN

STATION: KLUK 107.1 MHz JMPC-6 1.00 lambda spacing





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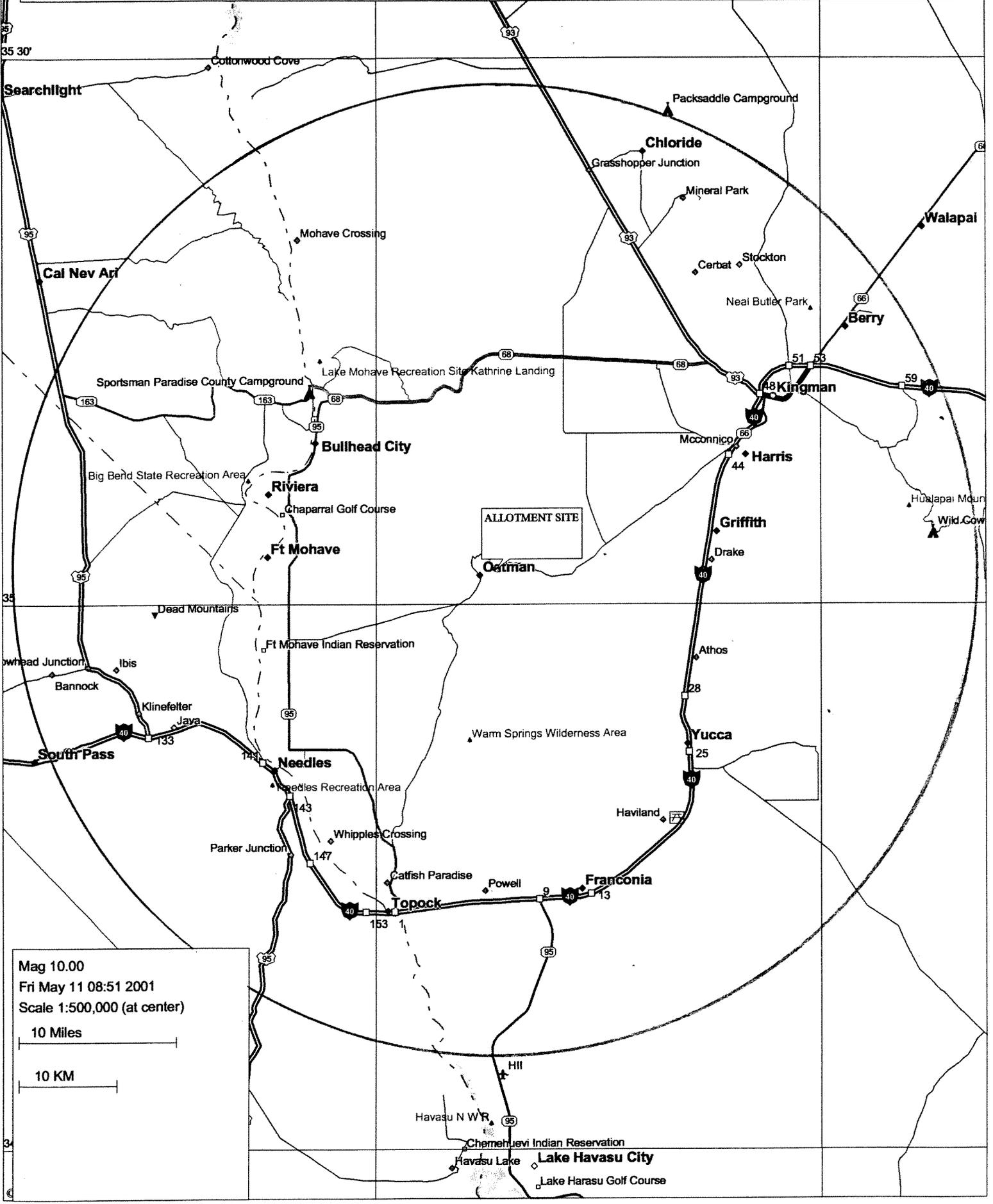
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TABULATION OF ELEVATION PLANE PATTERN

STATION: KLUK 107.1 MHz JMPC-6 1.00 lambda spacing

ELEVATION RELATIVE		ELEVATION RELATIVE		ELEVATION RELATIVE	
ANGLE	FIELD	ANGLE	FIELD	ANGLE	FIELD
10	0.134	-25	0.128	-60	0.052
9	0.053	-26	0.144	-61	0.031
8	0.049	-27	0.149	-62	0.011
7	0.168	-28	0.143	-63	0.009
6	0.300	-29	0.125	-64	0.029
5	0.438	-30	0.099	-65	0.047
4	0.575	-31	0.067	-66	0.066
3	0.703	-32	0.031	-67	0.083
2	0.815	-33	0.005	-68	0.096
1	0.904	-34	0.039	-69	0.109
0	0.966	-35	0.069	-70	0.122
-1	0.997	-36	0.094	-71	0.128
-2	0.995	-37	0.112	-72	0.136
-3	0.960	-38	0.121	-73	0.138
-4	0.894	-39	0.124	-74	0.143
-5	0.802	-40	0.120	-75	0.147
-6	0.689	-41	0.109	-76	0.142
-7	0.561	-42	0.092	-77	0.143
-8	0.425	-43	0.070	-78	0.142
-9	0.289	-44	0.045	-79	0.133
-10	0.160	-45	0.018	-80	0.130
-11	0.043	-46	0.010	-81	0.126
-12	0.055	-47	0.036	-82	0.121
-13	0.133	-48	0.062	-83	0.116
-14	0.187	-49	0.084	-84	0.118
-15	0.216	-50	0.103	-85	0.111
-16	0.225	-51	0.116	-86	0.104
-17	0.212	-52	0.126	-87	0.097
-18	0.184	-53	0.129	-88	0.098
-19	0.141	-54	0.129	-89	0.090
-20	0.091	-55	0.123	-90	0.082
-21	0.038	-56	0.115		
-22	0.014	-57	0.102		
-23	0.060	-58	0.088		
-24	0.099	-59	0.070		

EXHIBIT 13 - ALLOCATION SITE COVERAGE MAP 70 DBU



Mag 10.00
Fri May 11 08:51 2001
Scale 1:500,000 (at center)

10 Miles

10 KM

FM Study for: KNKK
Location: NEEDLES, CA

FCC Database Date: 6/1/2001

35-01-58

Channel Class: C1

114-21-57

[*] by HAAT indicates calculated as missing in database.

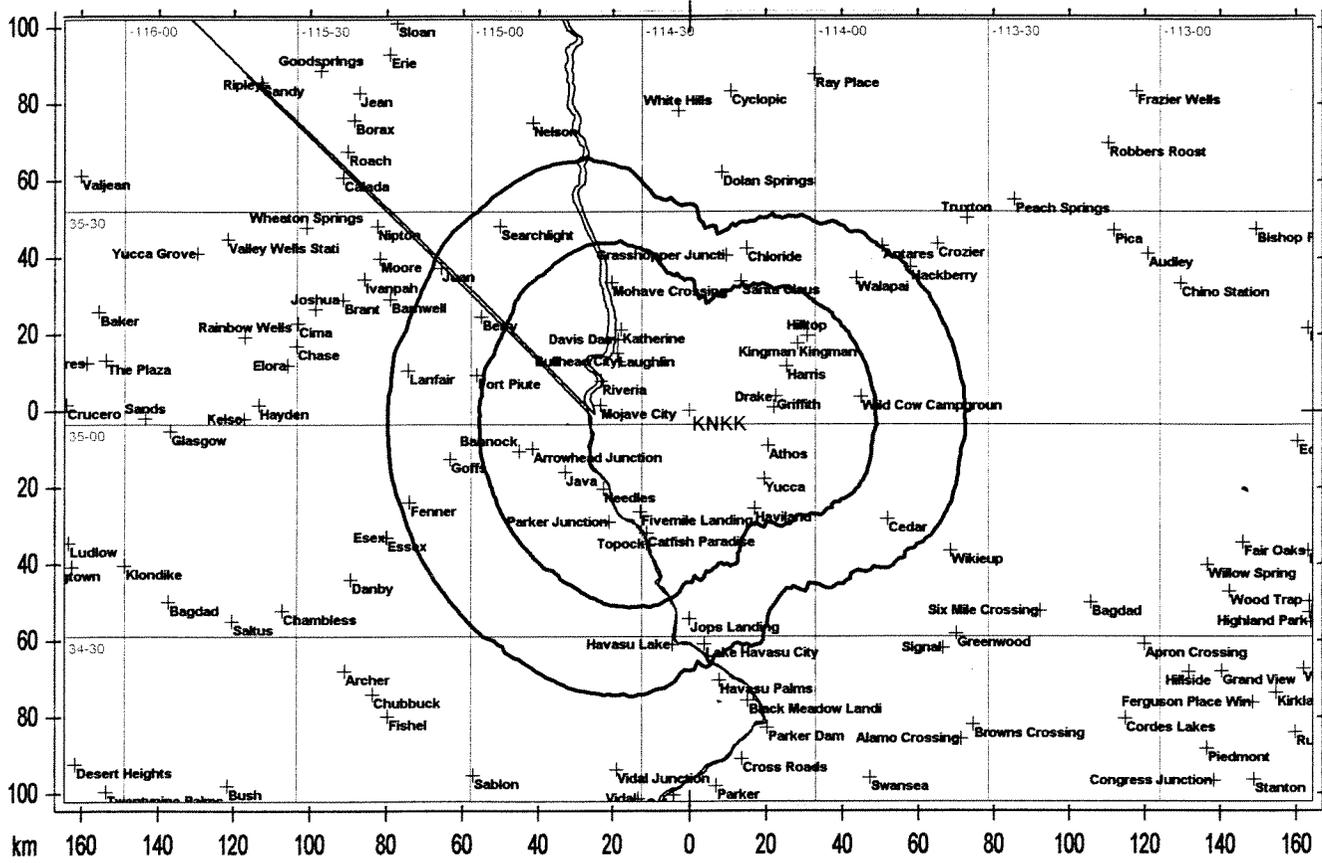
[^] by HAAT indicates value taken from 1999 VAX file.

Call Status	City, State	Proponent	Chan File	Class Number	Freq HAAT	kW	Latitude	Longitude	Dist. Azm.	Required Clear (km)
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>>>>>>> Study For Channel 296 107.1 MHz <<<<<<<<

KNKK CP	NEEDLES, CA Facility No. 78087	296 B BPH-950921ML	107.1 150	50.0	34-52-10 114-38-50	31.4 234.9	270 -238.6			SHORT SHORT
Use of 73.215 for short spacing requires: 241 -209.6										
ALLOC VAC	NEEDLES, CA Facility No. 78087	296 C2 -	107.1	0	35-01-58 114-21-57	0.0 0.0	224 -224.0			SHORT
KNKK APP	NEEDLES, CA Facility No. 78087	296 C2 BMPH-010131ABU	107.1	2.35 585*	35-01-58 114-21-57	0.0 0.0	224 -224.0			SHORT
ALLOC VAC	NEEDLES, CA Facility No. 78087	296 C2 -	107.1	0	35-01-58 114-21-57	0.0 0.0	224 -224.0			SHORT
KNKK APP	NEEDLES, CA Facility No. 78087	296 C2 BMPH-010131ABU	107.1	2.35 585*	35-01-58 114-21-57	0.0 0.0	224 -224.0			SHORT
ALLOC	CIUDAD MORELOS, BN Facility No. 96185	296 B -	107.1	0	32-38-00 114-51-00	270.49 189.7	270 +0.49			CLOSE
ALLOC VAC	COLORADO CITY, AZ Facility No. 69623	296 C1 -	107.1	0	37-05-42 113-11-12	252.3 24.6	245 +7.3			CLOSE
KZMZ APP	COLORADO CITY, AZ Facility No. 69623	296 C1 BPH-010306ABX	107.1	34.0 344	37-05-42 113-11-12	252.3 24.6	245 +7.3			CLOSE
ALLOCR ADD	QUARTZSIDE, AZ RM-10082	297 C3 RM-10082	107.3	0	33-39-06 114-04-56	155.4 170.3	144 +11.4			CLOSE
KYOR LIC	YUCCA VALLEY, CA Facility No. 14058	295 B BLH-880516KD	106.9	4.00 418	34-04-55 116-20-32	209.8 240.4	195 +14.8			CLOSE
KSNEFM LIC	LAS VEGAS, NV Facility No. 71525	293 C BLH-870827KC	106.5	100. 352	36-00-30 115-00-20	122.8 332.0	105 +17.8			CLEAR
ALLOCR ADD	AGUILA, AZ RM-10016	297 C3 RM-10016	107.3	0	33-56-34 113-10-24	163.1 137.5	144 +19.1			CLEAR
ALLOC ADD	OVERTON, NV Docket-99-85	295 C1 Docket-99-85	106.9	0	36-53-17 114-34-27	206.7 354.8	177 +29.7			CLEAR
ALLOC VAC	OVERTON, NV Facility No. 106508	295 C1 Docket-99-85	106.9	0	36-53-17 114-34-27	206.7 354.8	177 +29.7			CLEAR

BEEM CO. Arcadia, CA



Map Footer

State Borders Lat/Lon Grid