

TECHNICAL EXHIBIT  
APPLICATION FOR FM CONSTRUCTION PERMIT  
RADIO STATION KJUL(FM)  
MOAPA VALLEY, NEVADA

NOVEMBER 24, 2010

CH 284C0      100 KW      450 M

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Technical Narrative

The technical exhibit of which this narrative is part supports an application for construction permit for KJUL(FM) as a Class C0 facility, replacing the Class C0 facilities authorized in BPH-20070724ACZ, which has been cancelled.

The proposal would not be subject to environmental processing in accordance with Section 1.1306. It is believed that this proposal conforms with all applicable rules and regulations of the FCC.

Proposed Transmitter Location

The transmitting facility will be located on a proposed antenna supporting structure. The location is uniquely described by the following geographic coordinates:

36° 44' 10" North Latitude  
114° 29' 53" West Longitude

A sketch showing the antenna and proposed supporting structure is shown on Figure 2.

It is noted that an Antenna Structure Registration (ASR) number has been previously obtained for the proposed structure (ASR 1261486). However, as the underlying FAA No Hazard Determination has expired, a request to reinstate the Determination has been filed with the FAA.

#### Proposed Site Allocation Study

It is believed that Channel 284C0 at the proposed site will satisfy the Commission's minimum separation distance requirements, specified in Section 73.207(b) of the Rules, to all assignments. As shown by the tabulation provided in Figure 4, the proposed site is short-spaced to a counterproposal filed in MB Docket 05-263 to allocate Channel 285C2 at Laughlin, Nevada. However, this proposal was denied by the Commission in its Report and Order and therefore, it is believed that protection to this proposal is no longer required.<sup>1</sup>

#### FCC Predicted Coverage Contours

The predicted coverage contours for the proposed operation were calculated in accordance with the provisions of Section 73.313. In accordance with current FCC practice, the distances to the contours were calculated without consideration given to terrain roughness correction factors.

The average terrain elevations from 3 to 16 kilometers along eight radials evenly spaced at 45 degree intervals were obtained from the N.G.D.C. 30-second terrain database.

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<sup>1</sup> Although the Report and Order in MB Docket 05-263 has a pending Petition for Partial Reconsideration, that Petition does not challenge the dismissal of the counterproposal that sought the Channel 285C2 allotment at Laughlin, Nevada.

Figure 3 is a map showing the predicted coverage contours. As the map illustrates, the FCC predicted 70 dBu contour entirely encompasses the principal community of Moapa Valley.

Class C0 Allotment Reference Point

It appears that KJUL(FM) already has an Class C0 allotment as authorized in its previous application for construction permit, BPH-20070724ACZ. However, if the Commission believes that the KJUL(FM) again needs to justify the herein Class C0 proposal, a recommended allotment reference point is discussed below.

A fully-spaced Channel 284C0 allotment reference site, described by the following geographic coordinates, is available:

36° 49' 45" North Latitude  
114° 34' 50" West Longitude

Figure 5 is a topographic map showing the allotment reference site. As can be seen from this map, the assumed reference site could be suitable for a transmission facility. Figure 7 is an Allocation Study for Channel 284C0 at the reference allotment site. The proposed allotment reference site satisfies the Commission's minimum distance separations contained in Section 73.207(b) of the Commission's Rules.

Figure 6 is a coverage map showing that the allotment site 70 dBu reference contour entirely encompasses the principal community of Moapa Valley.<sup>2</sup>

#### Interference Concerns

The 115 dBu predicted "blanketing" contour of the proposed station would extend radially approximately 4 kilometers from the transmitting site. The applicant recognizes its responsibility to resolve complaints of interference, including blanketing and receiver-induced interference as required by Sections 73.315(b), 73.316(e) and 73.318.

#### Groundlevel Radiofrequency Electromagnetic Considerations

The proposed facility has been evaluated in terms of potential radiofrequency electromagnetic field exposure at ground level in accordance with OET Bulletin No. 65, *Evaluating Compliance with FCC Specified Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields*.<sup>3</sup> The power density at the base of the tower was calculated using the appropriate procedure contained in Section 2, Supplement A, *Additional Information for Radio and Television Broadcast Stations*, of the Bulletin.

The proposed antenna is to be mounted 122 meters above ground level. Even assuming 200 kW of power (100 kW horizontal/100 kW vertical) radiated in a downward direction (a "worst-case" pattern relative field in the downward

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<sup>2</sup> At the allotment stage, the Commission typically employs the reference city coverage contour, assuming uniform terrain in all radial directions, to determine if an allotment site will satisfy the Commission's coverage criteria. This was used in this instance.

<sup>3</sup> OET Bulletin 65, Second Edition 97-01, August, 1997.

direction of 1), the "worst-case" calculated RFR power density from Equation 8 on page 22 of OET Bulletin 65 (Edition 97-01, August 1997) at 2 meters above ground level at the tower base is  $0.045 \text{ mW/cm}^2$  or 22.5% of the FCC limit for uncontrolled environments. There are no other known, nearby high-powered emitters.

Therefore, it is believed that the proposal complies with the FCC limits for human exposure to RF radiation, and with respect to RF radiation, it is categorically excluded from environmental processing. The applicant certifies that access to the tower will be restricted by means of a fence, and that it will reduce power or cease operation, as necessary, to protect persons having access to the tower from RFR exposure in excess of the FCC guidelines.

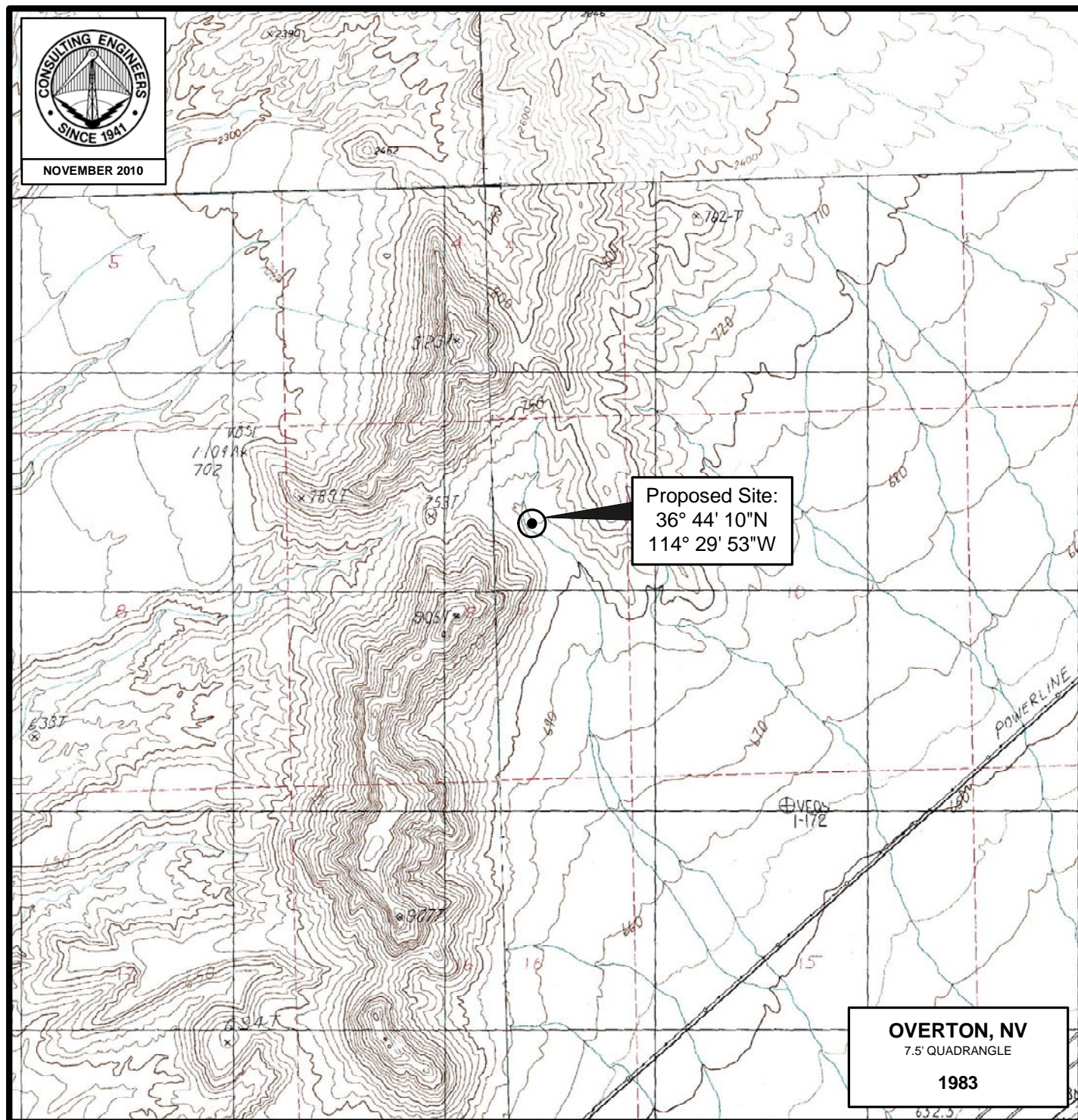
The only environmental certification that this Technical Exhibit addresses is with respect to human exposure to radiofrequency radiation. Certifications with respect to all other aspects of environmental compliance are the responsibility of the applicant and will be addressed in the tower registration process.

Charles A. Cooper

November 24, 2010

du Treil, Lundin & Rackley, Inc.  
201 Fletcher Avenue  
Sarasota, Florida 34237  
941.329.6000

Figure 1



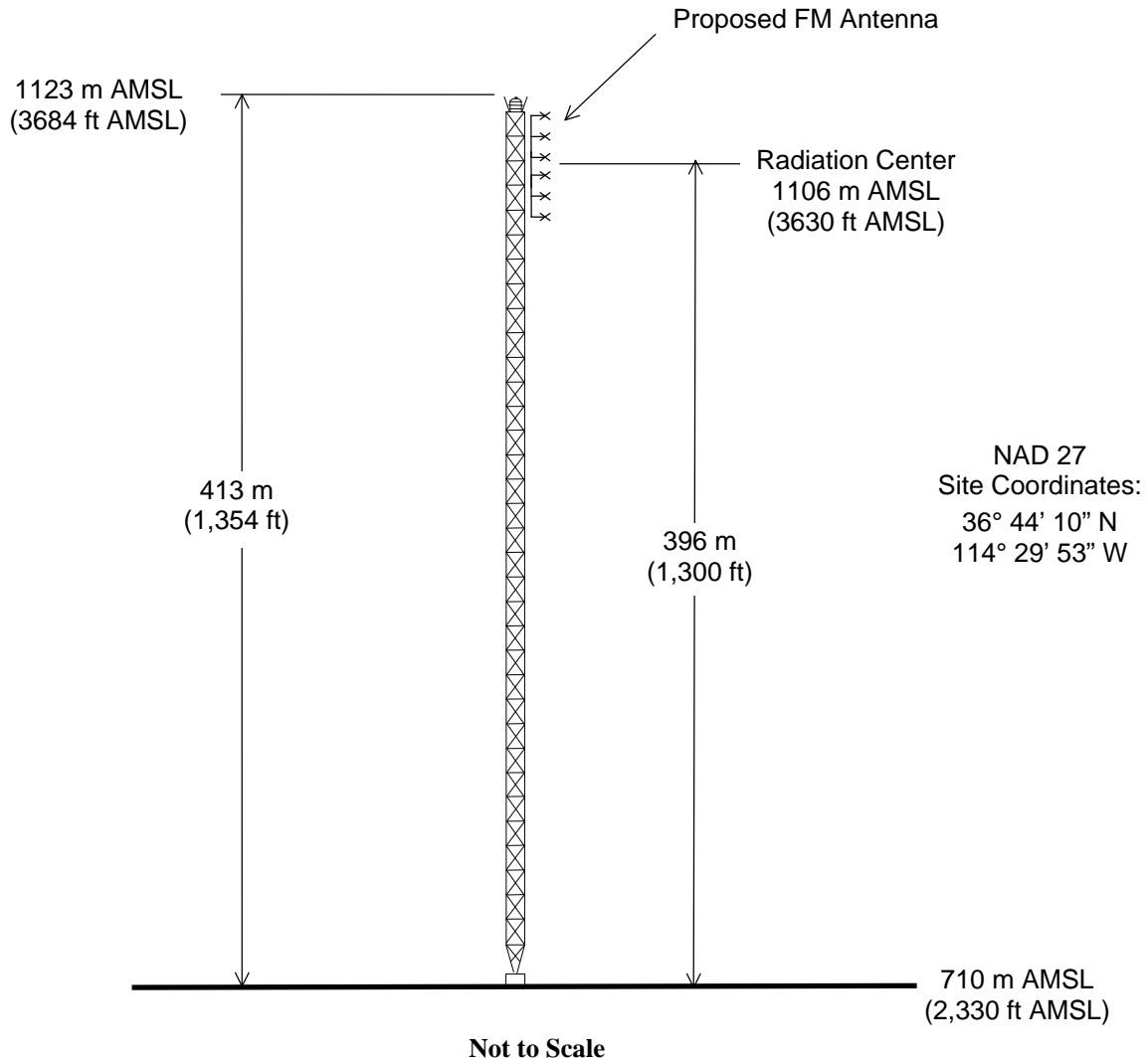
## PROPOSED TRANSMITTER SITE

RADIO STATION KJUL(FM)  
MOAPA VALLEY, NEVADA  
CH 284C0 100 KW 450 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida



ASRN: 1261486



## ANTENNA AND SUPPORTING STRUCTURE

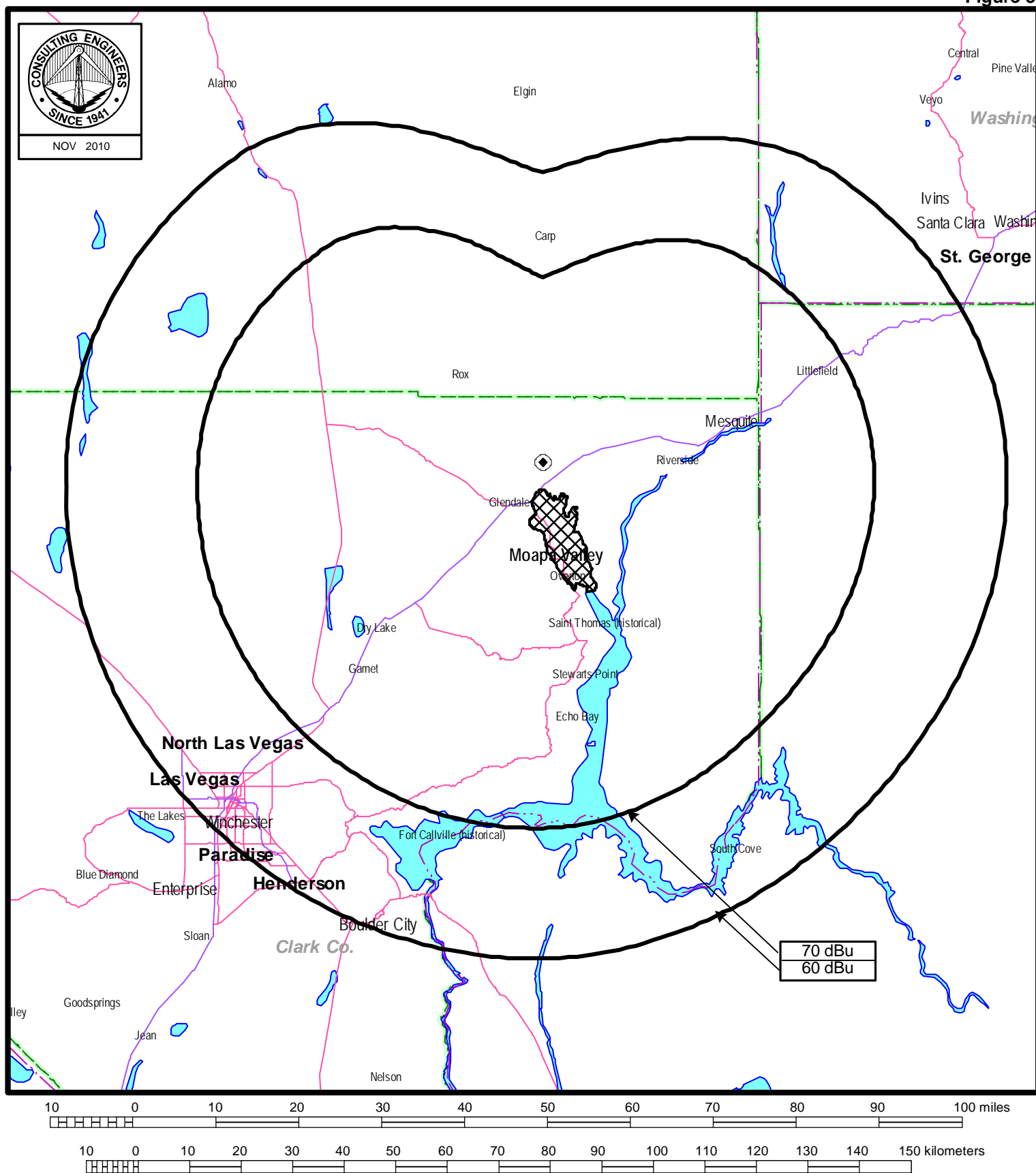
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Figure 3



## FCC PREDICTED COVERAGE CONTOURS

RADIO STATION KJUL(FM)

MOAPA VALLEY, NEVADA

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du Treil, Lundin & Rackley, Inc Sarasota, Florida

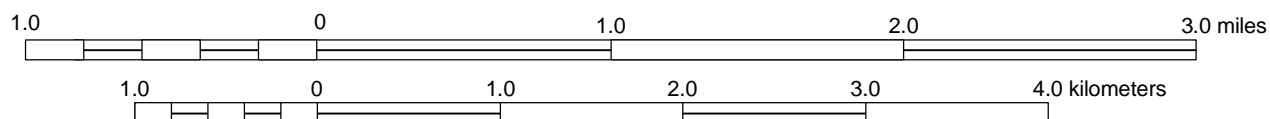
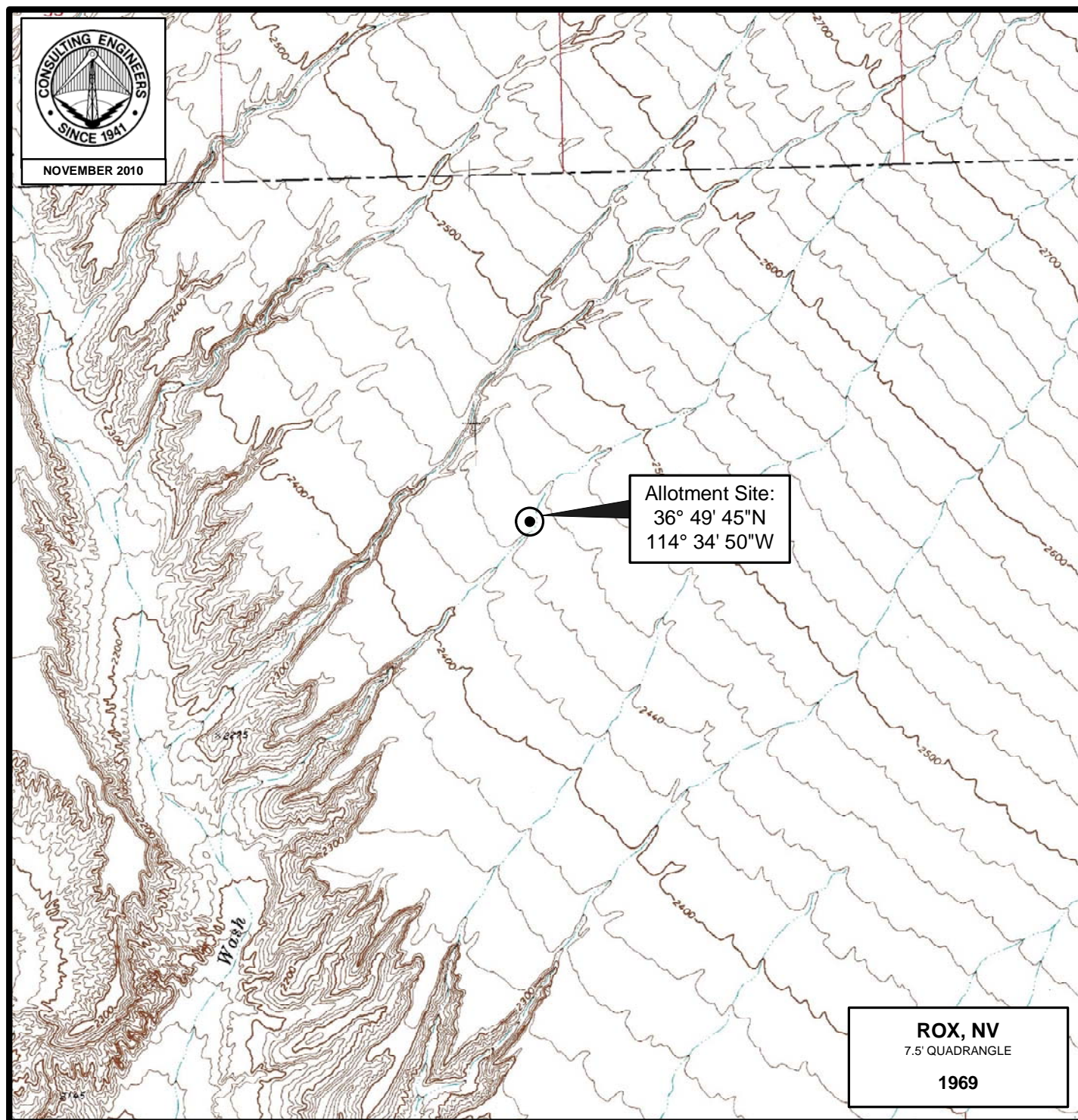
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Channel 284C0 Proposed Site

36° 44' 10" North Latitude  
114° 29' 53" West Longitude

Call Id	City St	File Status Num	Channel Freq	ERP HAAT	DA Id	Latitude Longitude	73 215	Bear	Dist. (km)	Req. min
KCYE 19062	NORTH LAS V NV LIC C	BLH 19961122KB	282C 104.3	24.5 1128	N	35-58-02 115-30-06	N	226.7	124.08	105.0
KJUL 63769	MOAPA VALLE NV LIC C	BLH 20041115ACG	284C1 104.7	100 184	N	36-41-00 114-30-48	N	193.1		
<i>(Applicant's existing facility.)</i>										
KVAL 164263	CAL-NEV-ARI NV LIC	BNPH 19961122KB	285A 104.9	0.1 723	N	35-15-08 114-44-58	Y	187.9	166.20	152.0
KVAL 164263	CAL-NEV-ARI NV APP C	BMPH 20080402ACX	285C3 104.9	1.18 450	N	35-16-38 114-45-00	N	188.0	163.46	163.0
0	LAUGHLIN NV ADD C	RM bg-144*	285C2 104.9			35-15-08 114-44-58		187.9	166.20	176.0
<i>(It is believed that this proposed Laughlin counterproposal filed in MB Docket 05-263 is no longer required to be protected as its rejected by the Commission in the subsequent Report and Order.)</i>										
KQRT 51731	LAS VEGAS NV LIC C	BPH 20080429AAO	286C2 105.1	50 19	N	36-20-00 115-21-41	N	240.1	89.30	89.0

Figure 5

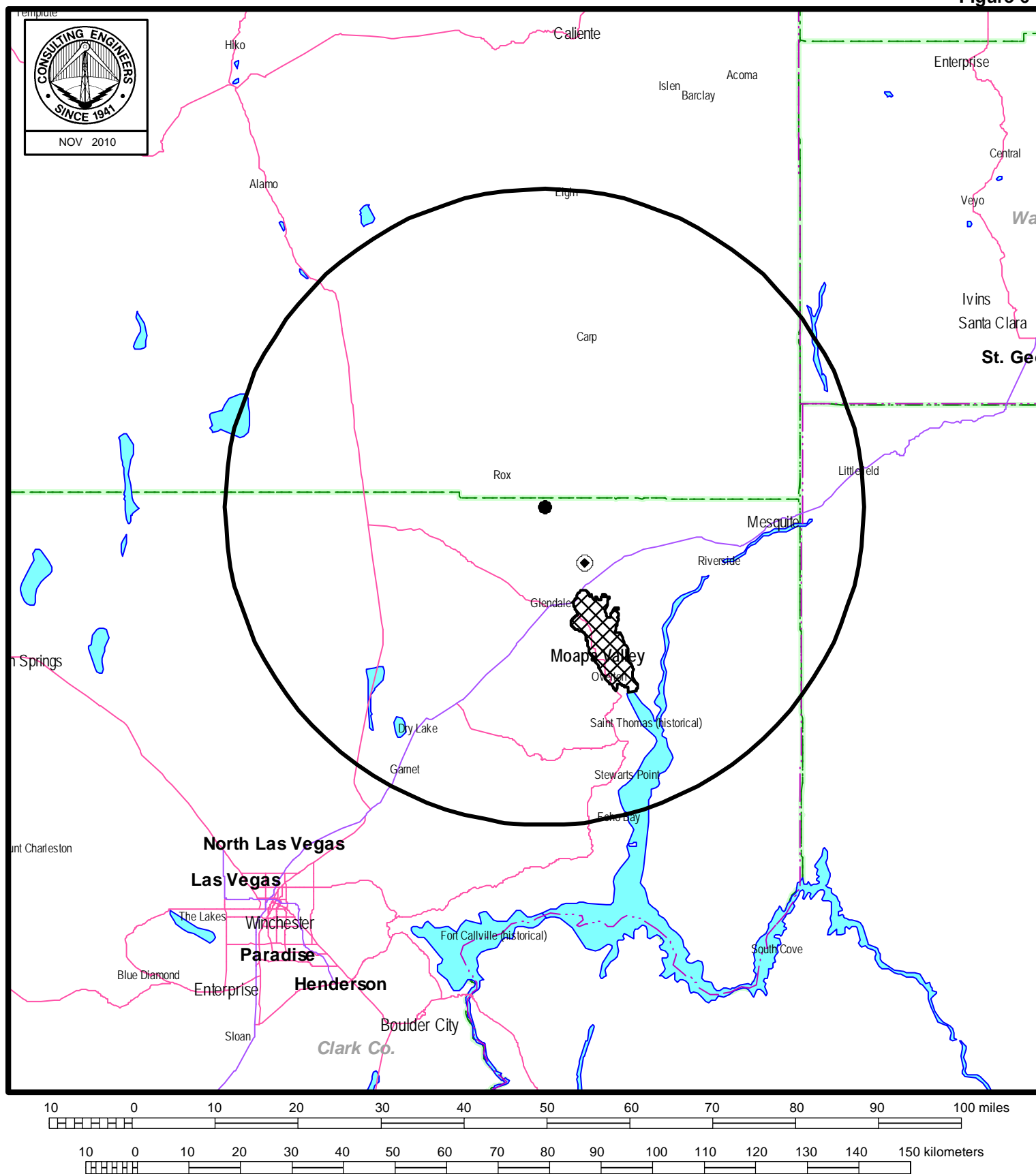


## **PROPOSED ALLOTMENT SITE**

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du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 6



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Channel 284C0 Allocation Study at Reference Site

36° 49' 45" North Latitude  
114° 34' 50" West Longitude

Call Id	City St	Status	File Num	Channel Freq	ERP HAAT	DA Id	Latitude Longitude	73 215	Bear	Dist. (km)	Req. min
KCYE 19062	NORTH LAS V NV LIC	C	BLH 19961122KB	282C 104.3	24.5 1128	N	35-58-02 115-30-06	N	221.0	126.40	105.0
KJUL 63769	MOAPA VALLE NV LIC	C	BLH 20041115ACG	284C1 104.7	100 184	N	36-41-00 114-30-48	N	159.7	17.26	
<i>(Applicant's existing facility.)</i>											
KVAL 164263	CAL-NEV-ARI NV LIC	BNPH		285A 104.9	0.1 723	N	35-15-08 114-44-58	Y	185.0	175.63	152.0
KVAL 164263	CAL-NEV-ARI NV APP	BMPH C	20080402ACX	285C3 104.9	1.18 450	N	35-16-38 114-45-00	N	185.1	172.88	163.0
	LAUGHLIN NV ADD	RM C	bg-144*	285C2 104.9			35-15-08 114-44-58		185.0	175.63	176.0
<i>(It is believed that this proposed Laughlin counterproposal filed in MB Docket 05-263 is no longer required to be protected as its rejected by the Commission in the subsequent <u>Report and Order</u>.)</i>											
	MILFORD UT ADD	RM C	rfs122*	285C 104.9			38-31-11 113-17-07		30.8	219.69	220.0
<i>(Separation Distance Rounds to 220 kilometers. No allocation issue.)</i>											
KQRT 51731	LAS VEGAS NV LIC	BPH C		286C2 105.1	50 19	N	36-20-00 115-21-41	N	231.9	88.94	89.0
<i>(Separation Distance Rounds to 89 kilometers. No allocation issue.)</i>											