

EXHIBIT NO. 1

ENGINEERING EXHIBIT
APPLICATION FOR CONSTRUCTION PERMIT
RADIO STATION KRME
SHAFTER, CALIFORNIA

October 5, 2000

CH 249A	4.5 KW (MAX-DA)	115 M
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Table of Contents

	Engineering Statement
Figure 1	Engineering Specifications
Figure 2	Sketch of Proposed Antenna and Supporting Structure
Figure 3	Predicted Coverage Contours
Figure 4	Predicted Coverage of Shafter
Figure 5	Allocation Study
Figure 6	Graphs of Field Strength Versus Distance
Figure 7	Directional Antenna Pattern Data

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Engineering Statement

This Engineering Exhibit has been prepared on behalf of FM station KRME at Shafter, California, operating on FM channel 249A, and supports an application for change in transmitting facilities.

KRME will continue to operate on channel 249A (97.7 MHz) but with effective radiated power of 4.5 kilowatts with antenna height above average terrain of 115 meters. A directional antenna will be employed. KRME will employ the existing site of Oildale, CA station KLLY. Processing of the application using the provisions of 47 CFR 73.215 is requested.

Engineering specifications for the proposed operation are shown in Figure 1.

TRANSMITTER LOCATION

Station KRME proposes to utilize the existing KLLY transmitter site located 4.9 kilometers north of

Oildale in Kern County, California. The geographic coordinates for the existing site are:

35° 27' 33" North Latitude

109° 01' 16" West Longitude

A two bay, circularly polarized directional antenna, manufactured by ERI will be employed. The antenna will be side-mounted on the existing tower below the KLLY antenna. A sketch of the tower and antenna is attached as Figure 2. Information regarding the proposed directional antenna pattern is attached as Figure 7.

There are no AM or TV broadcast stations located within 5.8 kilometers of the proposed KRME site. There are four FM stations other than KLLY located within 7.2 kilometers of the site. No intermodulation interference problems are anticipated, however the applicant recognizes the responsibility to resolve any interference problems resulting from the proposed operation.

COVERAGE CONTOURS

The predicted 70 dBu (3.16 mV/m) and 60 dBu (1.0 mV/m) coverage contours are shown on Figure 3. Based on the FCC prediction method, the City of Shafter falls between the predicted 70 dBu and 60 dBu contours. An alternative propagation method has been employed to

demonstrate that the proposed KRME operation would in fact provide 70 dBu service to all of Shafter. The graphs of field strength versus distance in Figure 6, indicate that the 70 dBu contour, based on Longley-Rice calculations, extends beyond the 70 dBu contour distance using the FCC curves in 47 CFR 73.333. The predicted location of the 70 dBu contour based on Longley-Rice propagation model is shown on the map, Figure 4. If waiver of 47 CFR 73.315 is required, it is hereby requested.

Except as noted above, coverage contours were determined employing the method in 47 CFR 73.313. The maximum effective radiated power, 4.5 kilowatts, and the antenna height above average terrain (HAAT), 115 meters, represent equivalent maximum Class A facilities. The HAAT was determined by averaging nine equally spaced radials, rather than the standard eight radials.

ALLOCATION CONDITIONS

At the transmitter site proposed, the separation requirements of 47 CFR 73.207 are met with respect to all pertinent licensed and proposed FM stations, except for the licensed operation of co-channel station KAVS Mojave, California. The provisions of 47 CFR 73.215 will be employed with respect to that station. The attached Figure 5 shows pertinent protected and interfering contours for KAVS and proposed KRME. Prohibited contour overlap will

not occur. The contours for KAVS are based on use of maximum FM station Class A facilities specified in the KAVS construction permit, File Number BPH-901016IB.

ENVIRONMENTAL CONSIDERATIONS

The proposed FM facility was evaluated in terms of potential radiofrequency radiation exposure at two meters above ground level in accordance with OET Bulletin No. 65, *Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields*, Edition 97-01. Using the appropriate equations shown in the Bulletin and a field factor of 0.53, which is appropriate for a 2-bay antenna, the power density at the base of the tower, two meters above ground level was determined to be 0.0352 milliwatts per centimeter squared, or 17.6 percent of the guideline value for an "uncontrolled environment". Collocated station KLLY has a predicted power density at the base of the tower two meter above ground level of 0.0281 milliwatts per centimeter squared, or 14 percent of the guideline value for an "uncontrolled environment". Together, the two stations have combined power density of 31.6 percent of the guideline value.

Power density for KLLY is based on a relative field factor of 0.4, which is appropriate for the four-bay antenna employed.

The applicant verifies that access to the tower is restricted and marked with appropriate warning signs. In addition, the applicant will take measures to protect workers or other authorized personnel granted access to the tower structure from exposure of radiofrequency radiation in excess of the FCC guidelines. These measures include reducing power or taking the station off the air, as necessary.

The proposal is therefore categorically excluded from environmental processing, as it meets all of the criteria for such exclusion in 47 CFR 1.1306.

Louis R. du Treil, Sr.
du Treil, Lundin & Rackley, Inc.
201 Fletcher Avenue
Sarasota, Florida 34237-6019

941 329 6000

October 6, 2000

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Engineering Specifications

Channel	249
Frequency	97.7 MHz
Site coordinates	35° 27' 33" North Latitude 119° 01' 16" West Longitude
Site elevation above mean sea level	267.6 m (878 ft.)
Average elevation above mean sea level of nine equally spaced radials, 3.2 to 16.1 km	203.8 m (668.7 ft.)
Overall height of existing antenna structure with lighting	
Above ground	77.0 m (253 ft.)
Above mean sea level	344.6 m (1130.6 ft.)
Height of FM antenna radiation center	
Above ground	51.0 m (167.3 ft.)
Above mean sea level	318.6 m (1045.3 ft.)
Above average terrain	114.8 m (376.6 ft.) (Rounded to 115 m)
Transmitter	*Harris type HT5CD
Rated power output	5.0 kW

Transmission line	*Andrew, type HJ7-50A
Nominal diameter	1-5/8 in.
Length	210 ft.
Efficiency (0.435 dB loss)	90.5%

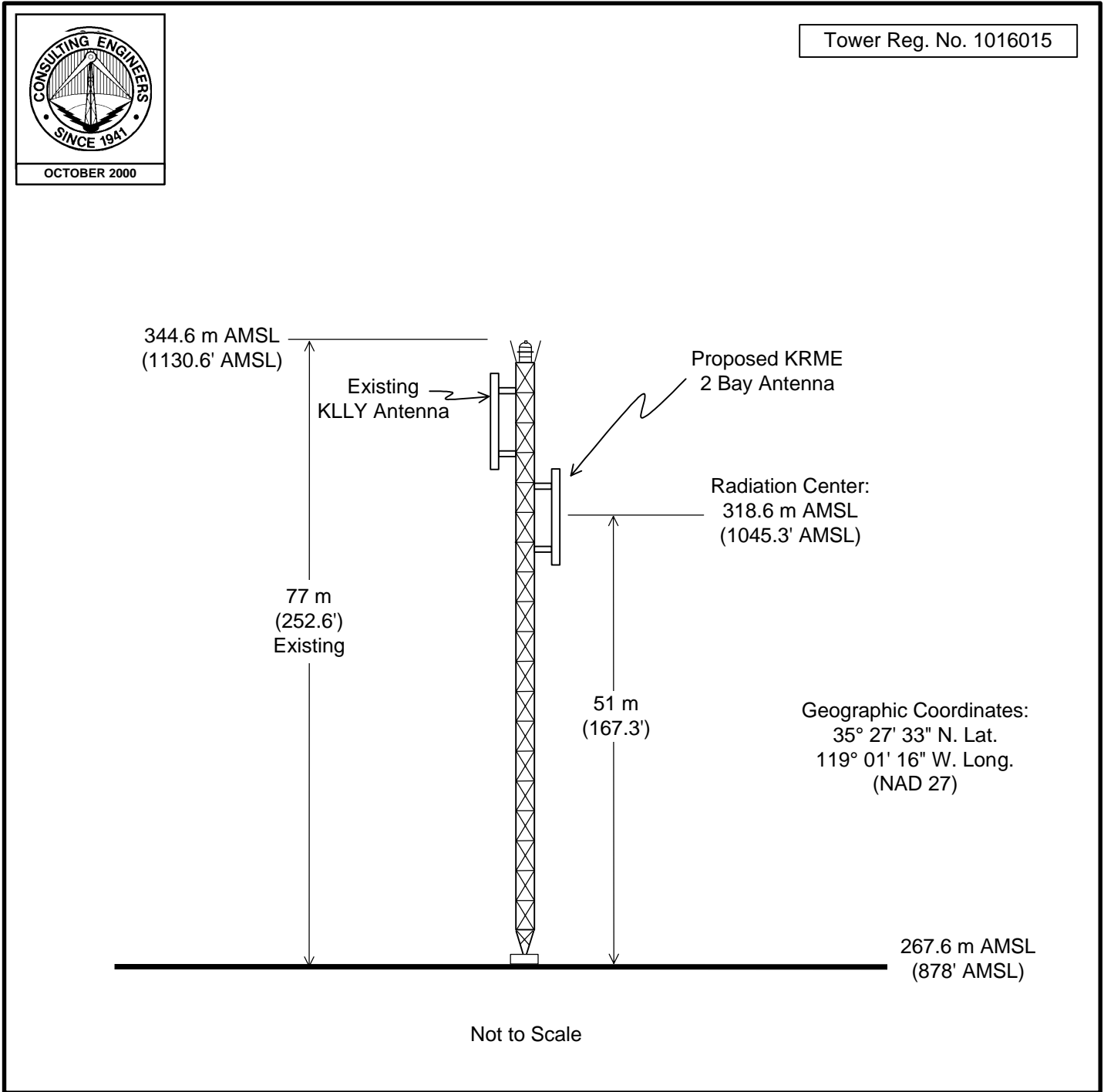
Directional Antenna	*ERI, type LP-2E
Number of bays	2
Polarization	Circular
Maximum Power Gain (estimated)	1.1

Proposed Operation

Transmitter output power	4.52 kW
Transmission line loss	0.43 kW
Antenna input power	4.09 kW
Effective radiated power	
Circular polarization	4.5 kW

*Or Equivalent

Figure 2



PROPOSED ANTENNA AND SUPPORTING STRUCTURE

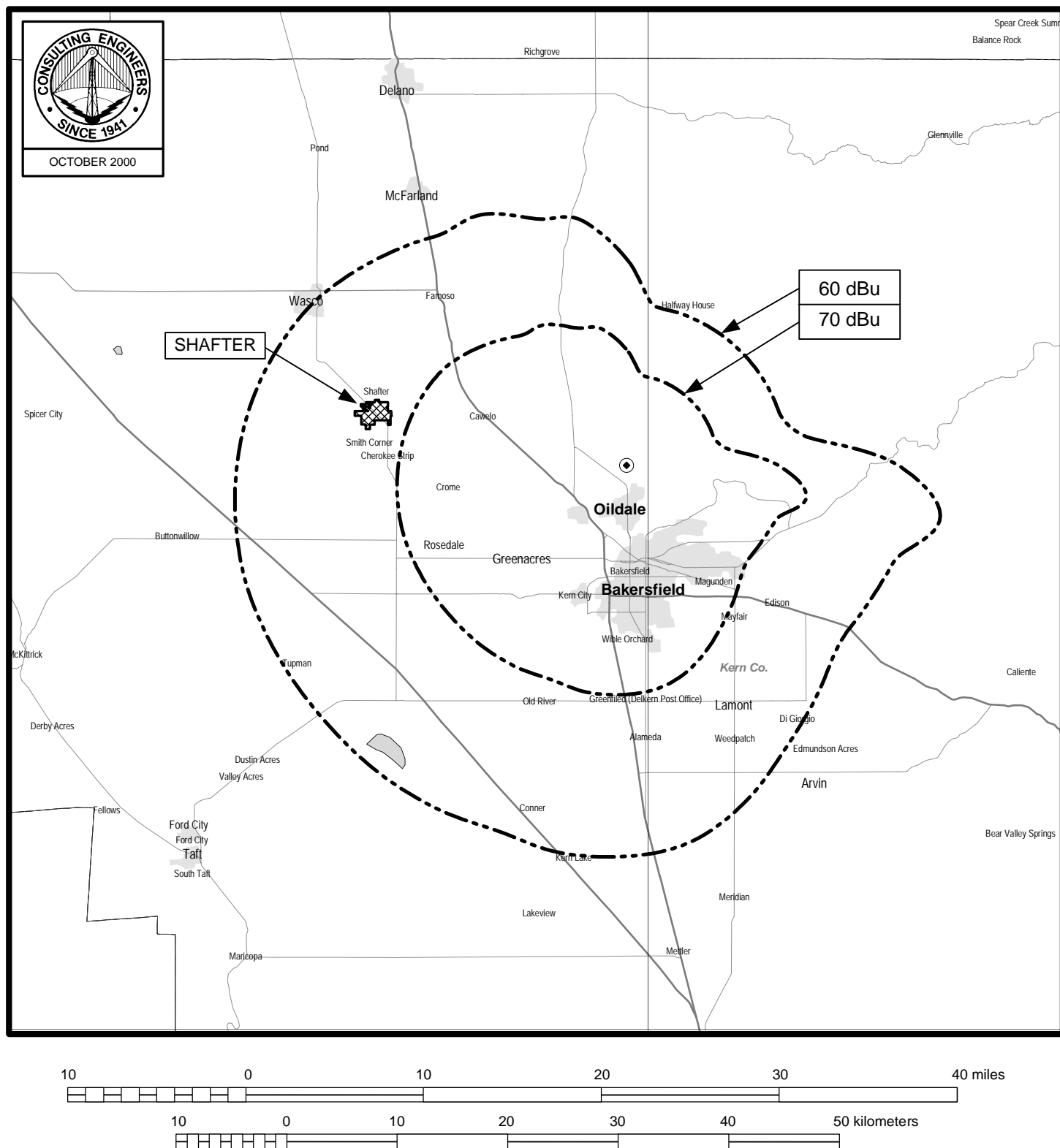
RADIO STATION KRME

SHAFTER, CALIFORNIA

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Figure 3

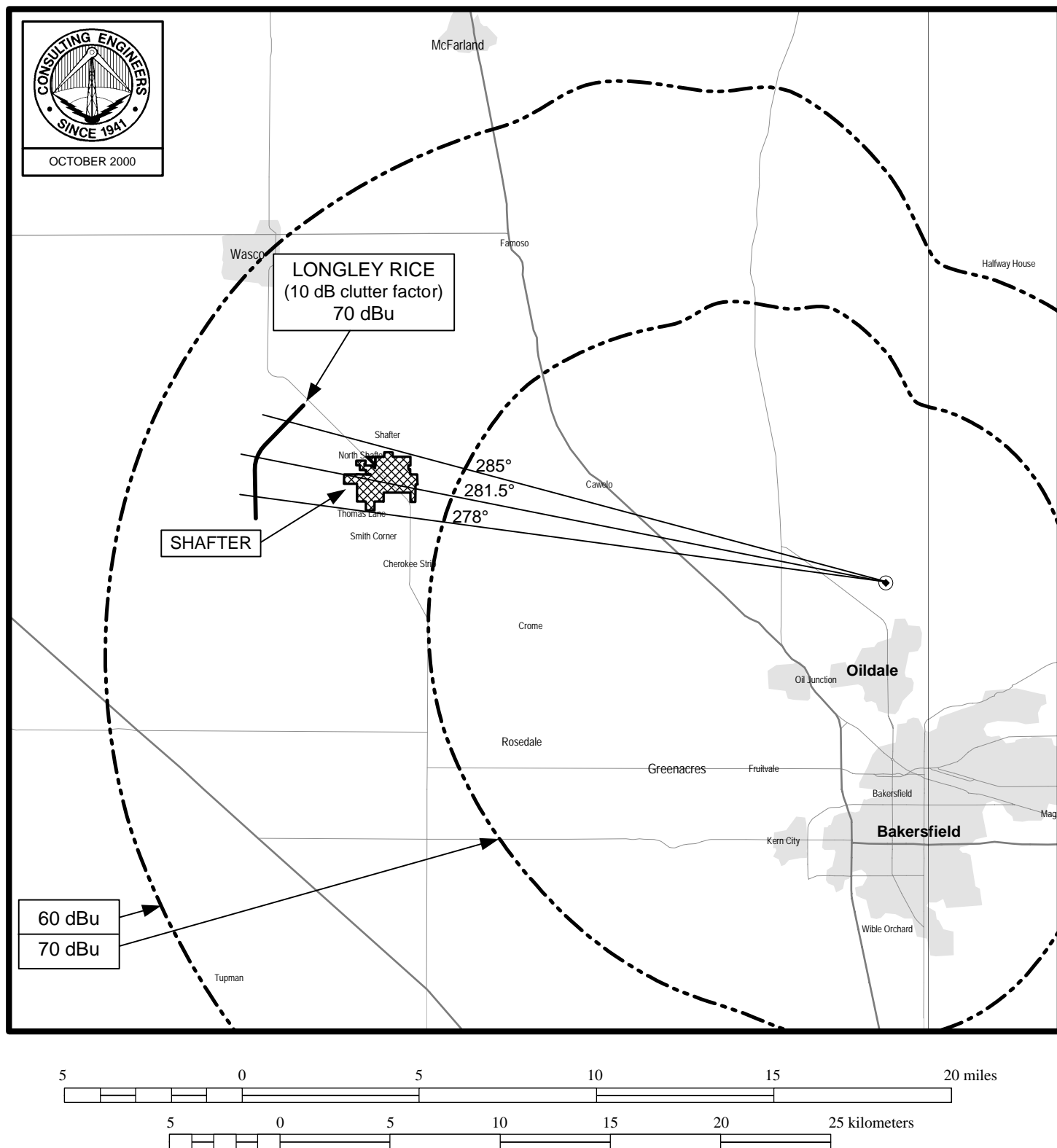


PREDICTED COVERAGE CONTOURS

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Figure 4

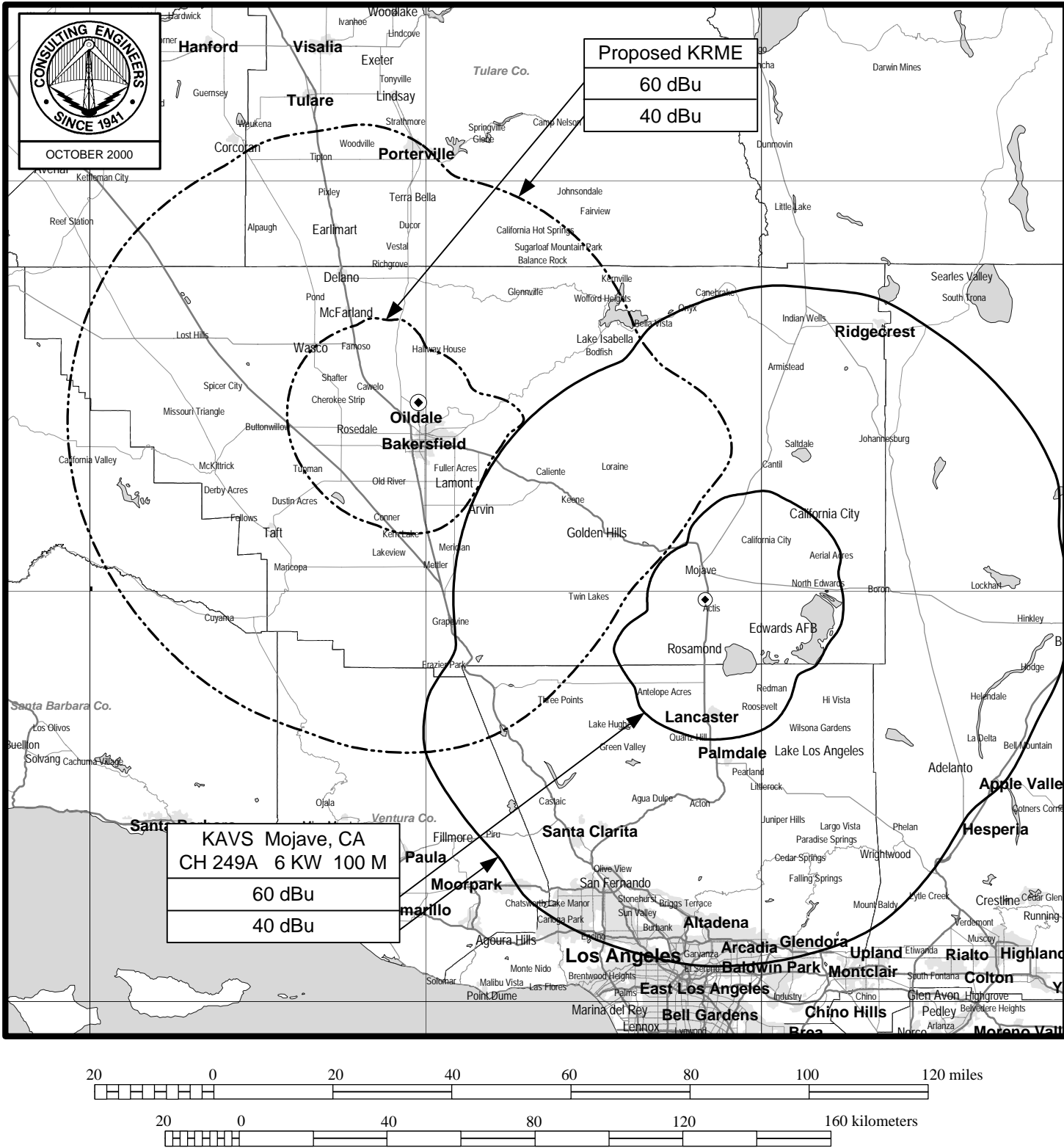


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Figure 5



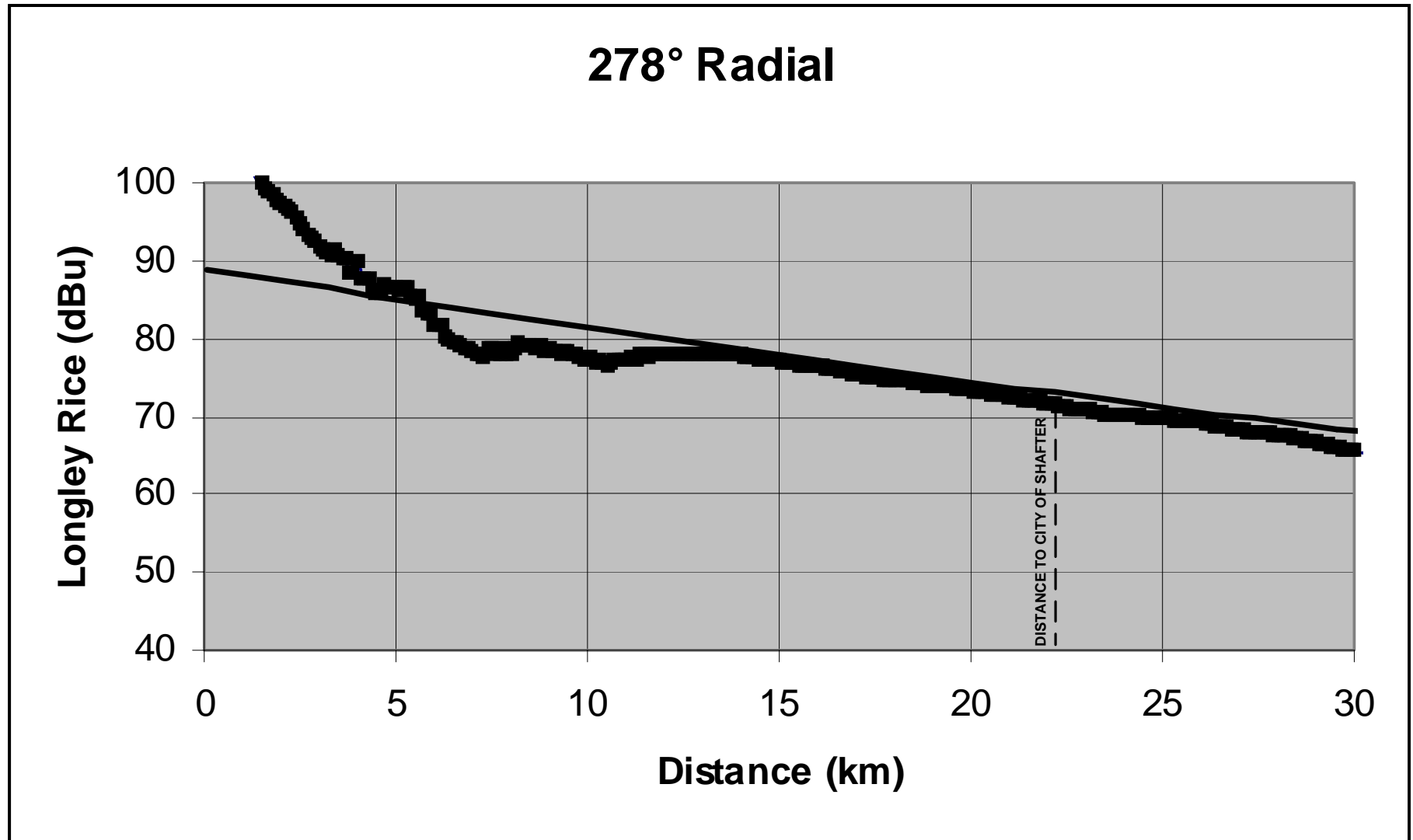
ALLOCATION STUDY

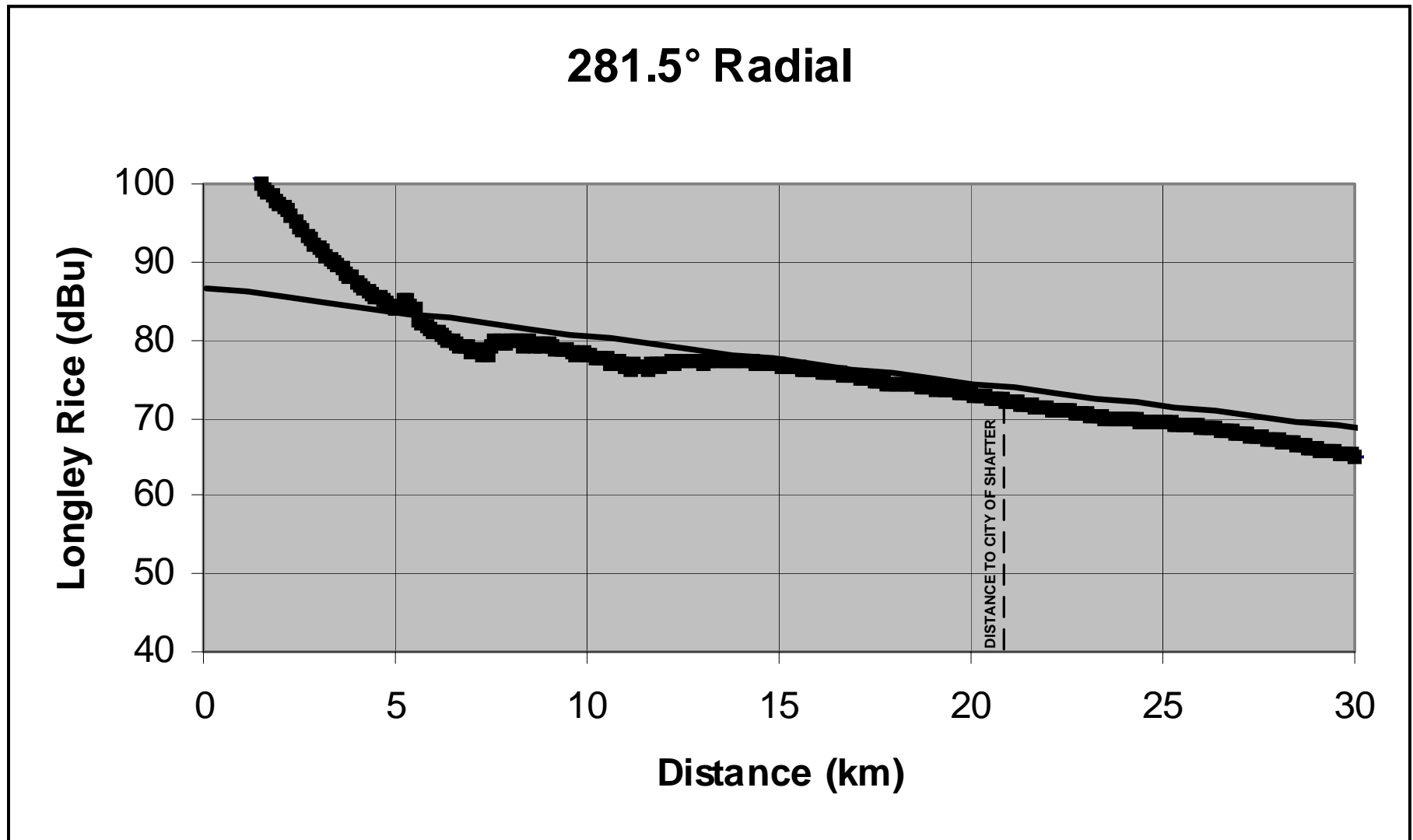
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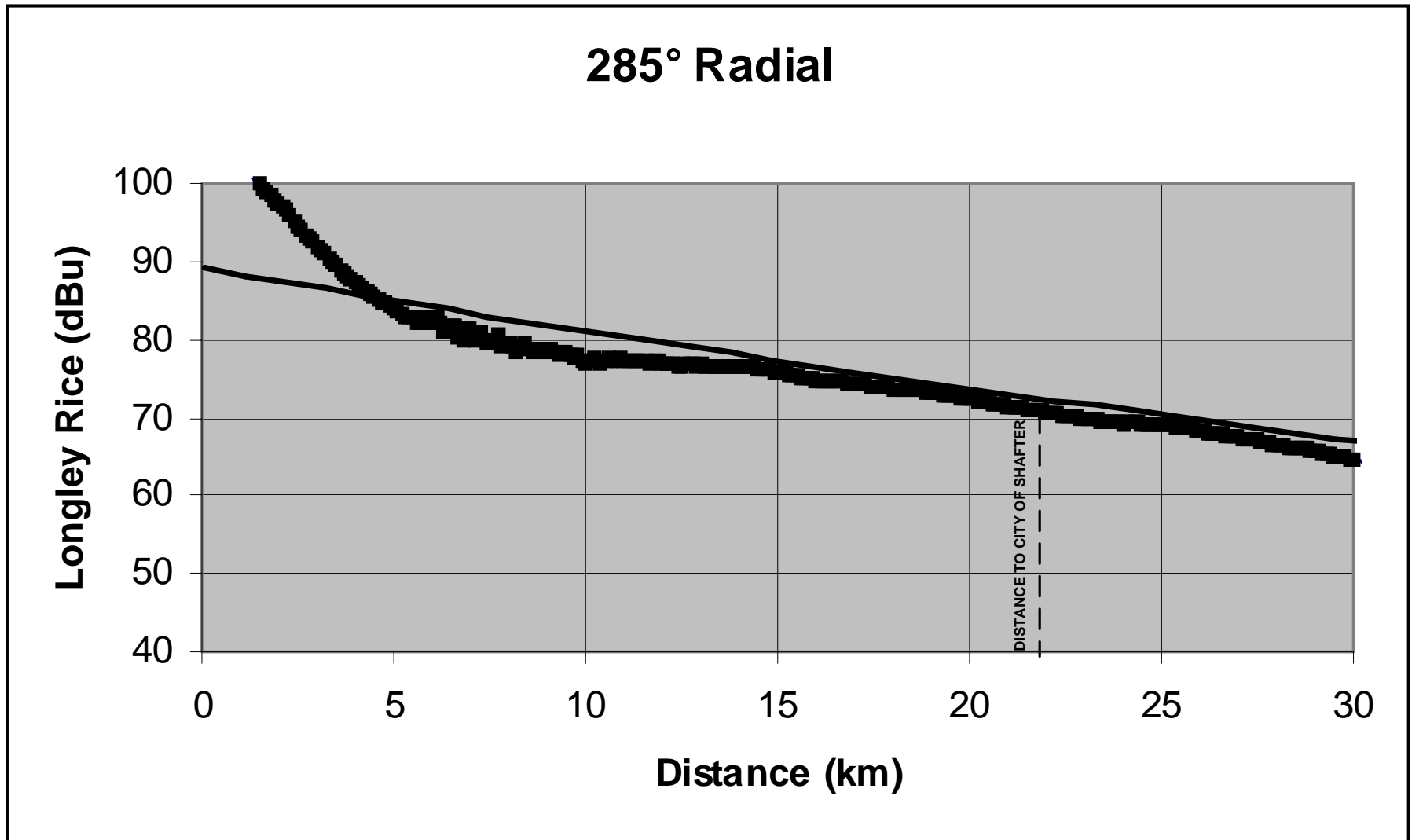
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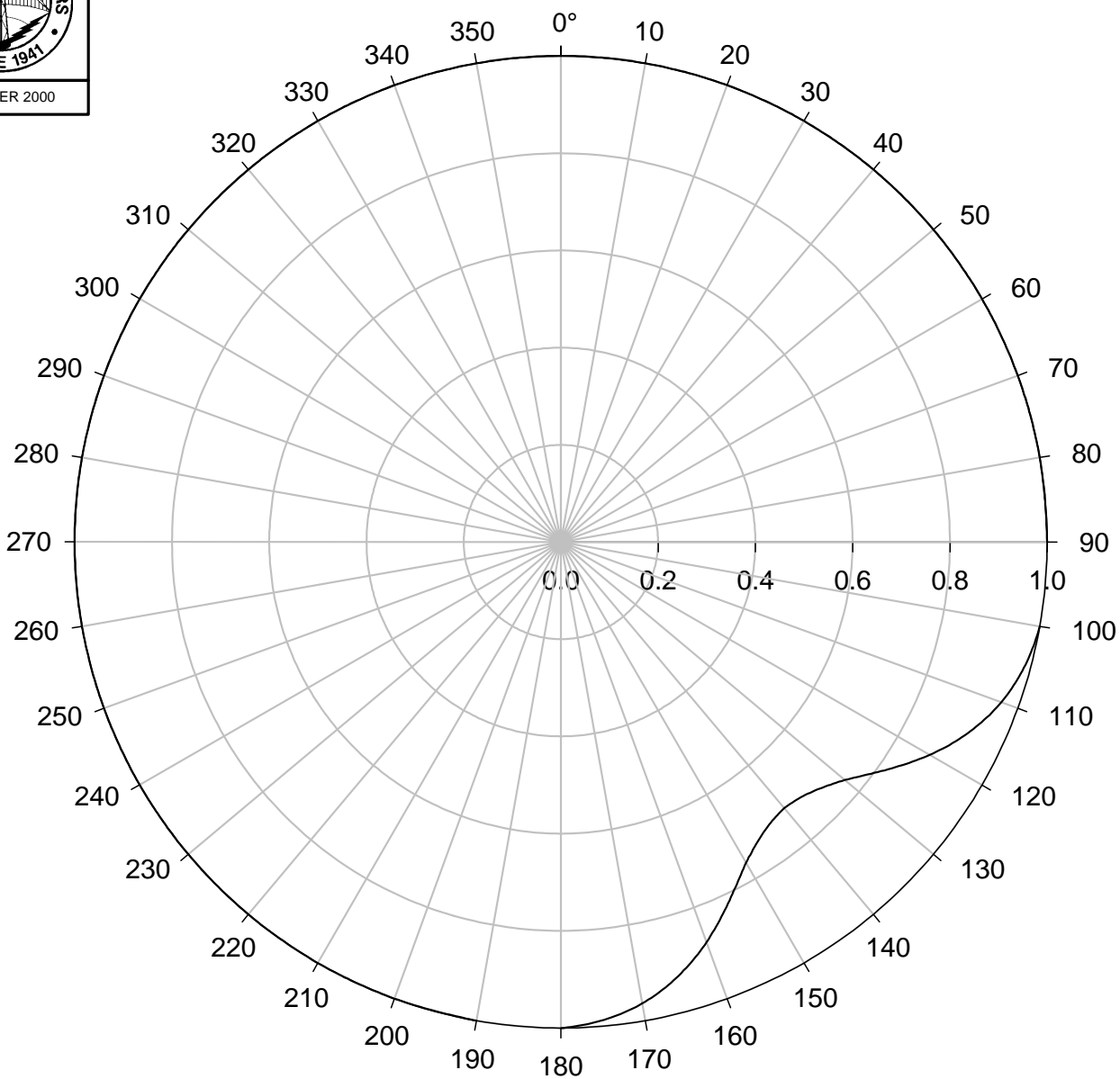
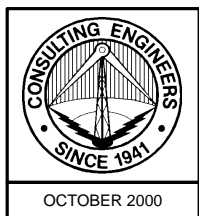
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DIRECTIONAL ANTENNA PATTERN

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Tabulation of Directional Antenna Patterns

<u>Azimuth (deg.)</u>	<u>Relative Field</u>	<u>E.R.P. (kW)</u>	<u>Azimuth (deg.)</u>	<u>Relative Field</u>	<u>E.R.P. (kW)</u>
0	1.000	4.50	180	1.000	4.50
10	1.000	4.50	190	1.000	4.50
20	1.000	4.50	200	1.000	4.50
30	1.000	4.50	210	1.000	4.50
40	1.000	4.50	220	1.000	4.50
50	1.000	4.50	230	1.000	4.50
60	1.000	4.50	240	1.000	4.50
70	1.000	4.50	250	1.000	4.50
80	1.000	4.50	260	1.000	4.50
90	1.000	4.50	270	1.000	4.50
100	1.000	4.50	280	1.000	4.50
110	0.964	4.18	290	1.000	4.50
120	0.876	3.45	300	1.000	4.50
130	0.762	2.61	310	1.000	4.50
140	0.715	2.30	320	1.000	4.50
150	0.762	2.61	330	1.000	4.50
160	0.876	3.45	340	1.000	4.50
170	0.964	4.18	350	1.000	4.50