



# **OWL ENGINEERING & EMC TEST LABS, INC.**

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**CONSULTING COMMUNICATIONS ENGINEERS · EMC TEST LABORATORIES**

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**ENGINEERING STUDY ON BEHALF OF  
ARMADA MEDIA  
NORTH PLATTE, NEBRASKA  
RADIO MARKET ANALYSIS**

**April 5, 2009**



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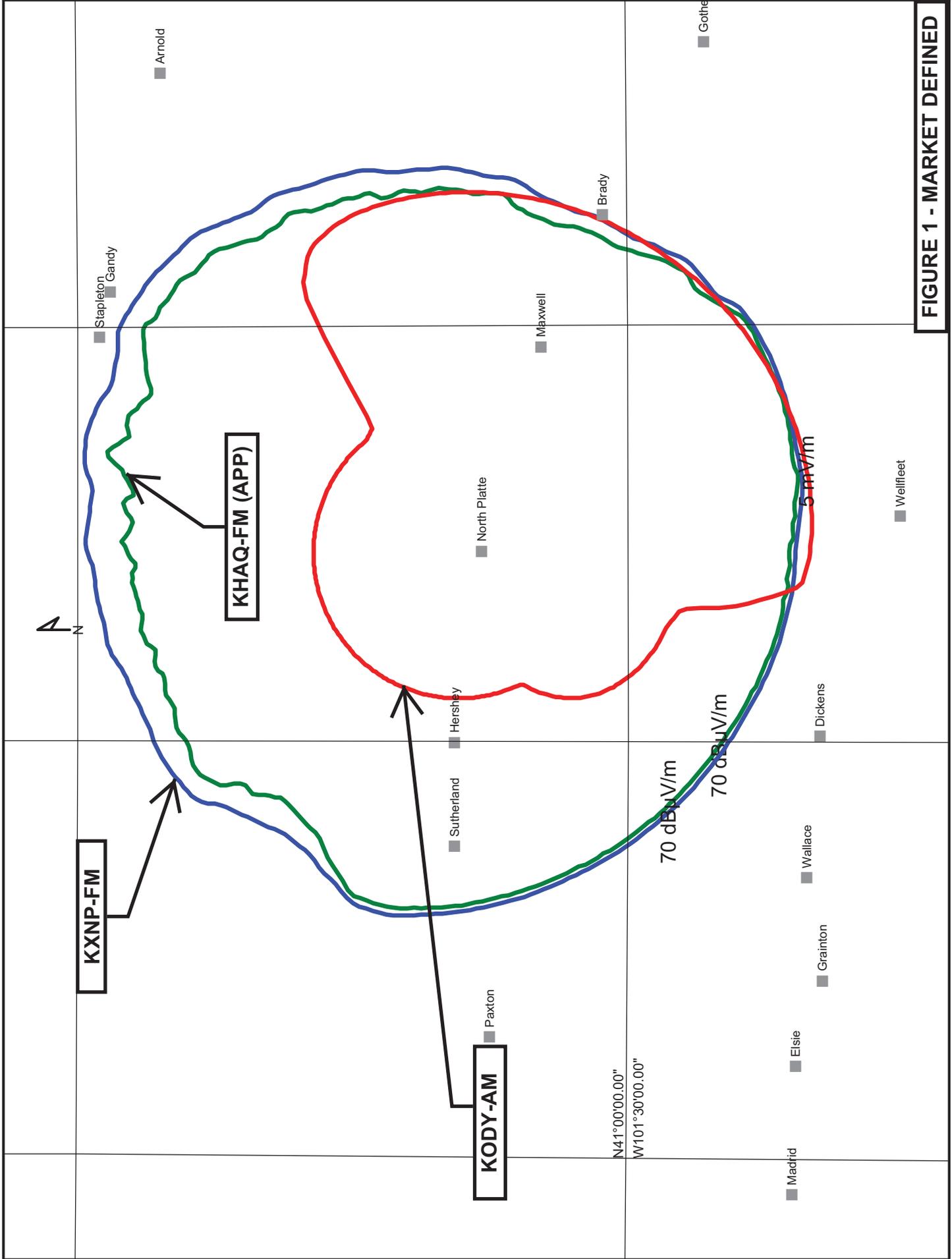
## ENGINEERING STATEMENT

Owl Engineering, Inc. has been retained by Armada Media (hereafter "Armada") to complete this radio market analysis. This study was initially completed in November, 2007 and included as an attachment to BMPH-20071203CIM to determine the number of AM and FM broadcast stations located in the competitive market consisting of KODY(AM), KXNP(FM) and the KHAQ(FM) (formerly KRKU(FM)) facilities operating at 85 kW from the transmitter site specified in the instant application. The 2007 study, a copy of which is attached, demonstrated that the KHAQ(FM) city-grade contour was wholly contained within the KXNP(FM) contour and that, without even taking into account the three Armada Stations, a minimum of four FM stations and three AM stations are located within the KXNP(FM) contour-meaning that the market includes at least ten stations. Figure 1, attached hereto, shows the market area defined by these stations with the KODY(AM) contour shown in red, the KXNP-FM contour shown in blue and the contour for the requested KHAQ-FM facilities shown in green. This instant application is to increase the operating output power of KHAQ-FM from 85 kW to 100kW. The transmitter site is not being changed and the antenna remains a non-directional antenna. As can be seen in Figure 1 the defined market area will not be increased from the original area in the November, 2007 study and inasmuch as the KHAQ(FM) contour, even at 100 kW, continues to remain wholly within the KXNP(FM) contour.

Because the seven additional stations set forth in the 2007 study continue to overlap the KXNP(FM) contour, a total of at least ten stations still serve the market. As a result, Armada is allowed to own, operate, or control up to 5 commercial radio stations with not more than 3 being in the same service pursuant to §73.3555. The combination of KHAQ(FM), KXNP(FM), and KODY(AM) satisfies this limit.

Garrett G. Lysiak, P.E.

April 5, 2009



**FIGURE 1 - MARKET DEFINED**



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**ENGINEERING STUDY ON BEHALF OF  
ARMADA MEDIA  
NORTH PLATTE, NEBRASKA  
RADIO MARKET ANALYSIS**

**November 27, 2007**



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## **ENGINEERING STATEMENT**

Owl Engineering, Inc., has been retained by Armada Media (hereafter "Armada") to complete this radio market analysis. This study was completed to determine the number of AM and FM broadcast stations located in the competitive market consisting of KODY-AM, KXNP-FM and the KRKU-FM facilities being sought by Armada in the instant application. Figure 1 shows the market area defined by these stations with the KODY-AM contour shown in red, the KXNP-FM contour shown in blue and the contour for the requested KRKU-FM facilities shown in green. None of the other stations of which any Armada subsidiary is a licensee or proposed assignee has a principal community contour that overlaps the principal community contour of KODY-AM, KXNP-FM or the requested KRKU-FM facilities. Although KRKU-FM currently holds a construction permit for facilities that have principal community contour overlap with both KODY-AM and KXNP-FM and Armada has demonstrated that its common ownership of KODY-FM, KXNP-FM and KRKU-FM is consistent with the Commission's ownership rules (see BALH - 20070906AEC), the present study is being provided to the Commission to demonstrate that, even after construction of the KRKU-FM facilities sought in the instant application, Armada's ownership of KODY-AM, KXNP-FM and KRKU-FM would continue to be in accordance with the Commission's ownership rules

To determine which stations are located in a given competitive market, the appropriate principal community coverage contours of all broadcast stations in the vicinity of the market must be calculated and a determination must be made if there is any overlap of these contours. Each station involved in coverage overlap is included in the market count. The 3.16 mV/m (70 dBu) contour level is utilized when studying overlap of FM stations.

## **FM STATIONS IN THE MARKET**

A comprehensive search of all FM broadcast stations surrounding the North Platte, Nebraska market area was conducted. The 70 dBu contour for each station was calculated for each of the eight standard 45-degree spaced radials in conjunction with the F(50,50) metric curves of Figure 1 of Section 73.333 of the Commission's Rules. The results of the search are shown in Figure 2. It was determined that at least four (4) additional FM stations serve the North Platte, Nebraska area market.



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The additional FM stations are:

KJLT	North Platte, NE
KELN	North Platte, NE
KPNE	North Platte, NE
KOGA	Ogallala, NE

### AM STATIONS IN THE MARKET

A comprehensive search of all AM broadcast stations surrounding the market area was conducted. The 5 mV/m contour for each station was calculated every 5 degrees using the FCC metric curves and M3 map conductivity data. The results of the search are shown in Figure 3. It was determined that at least three (3) additional AM stations serve the North Platte, Nebraska area market.

The additional AM stations are:

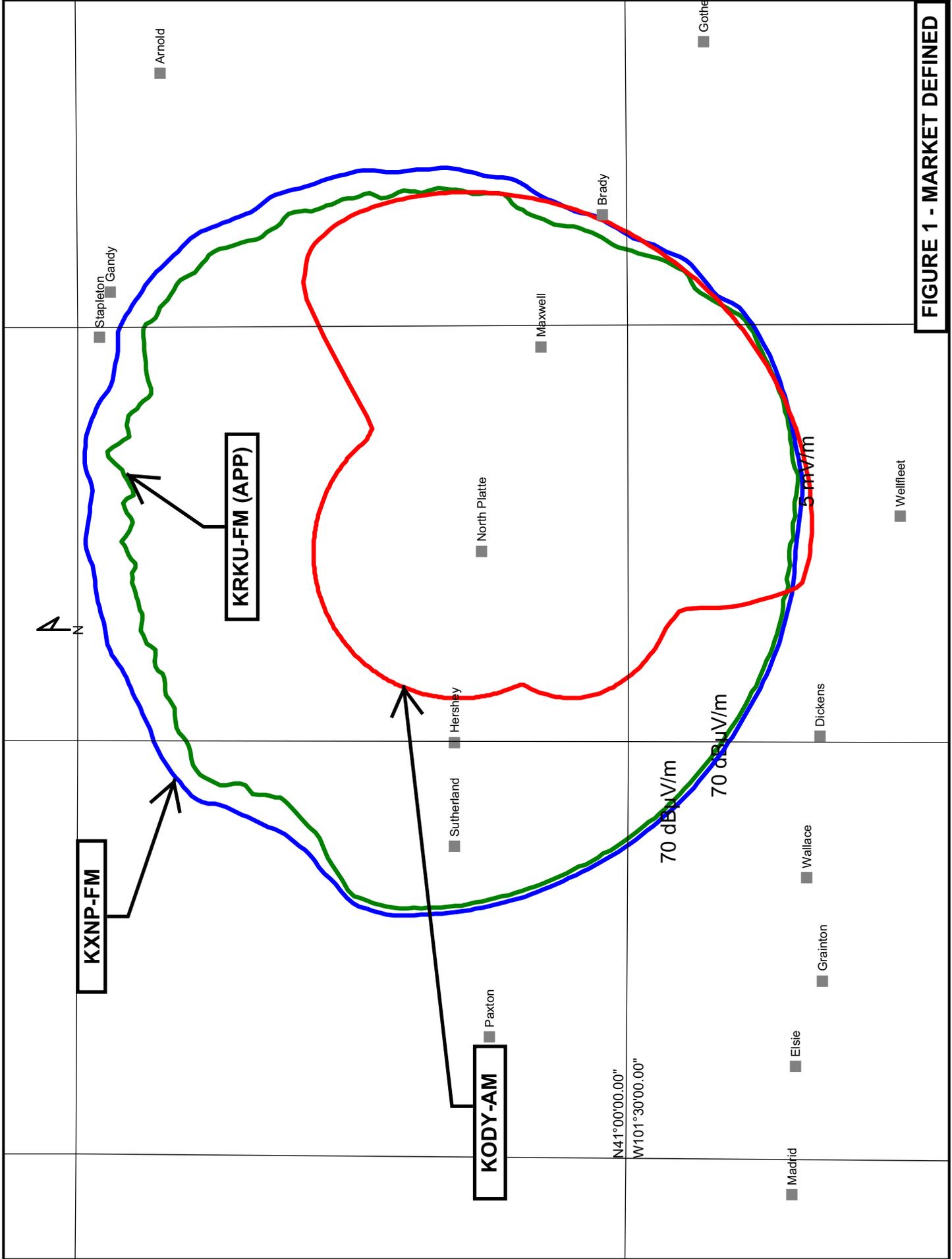
KJLT	North Platte, NE
KOOQ	North Platte, NE
KOGA	Ogallala, NE

None of the overlapping signals has a transmitter site more than 92 kilometers from the point of overlap.

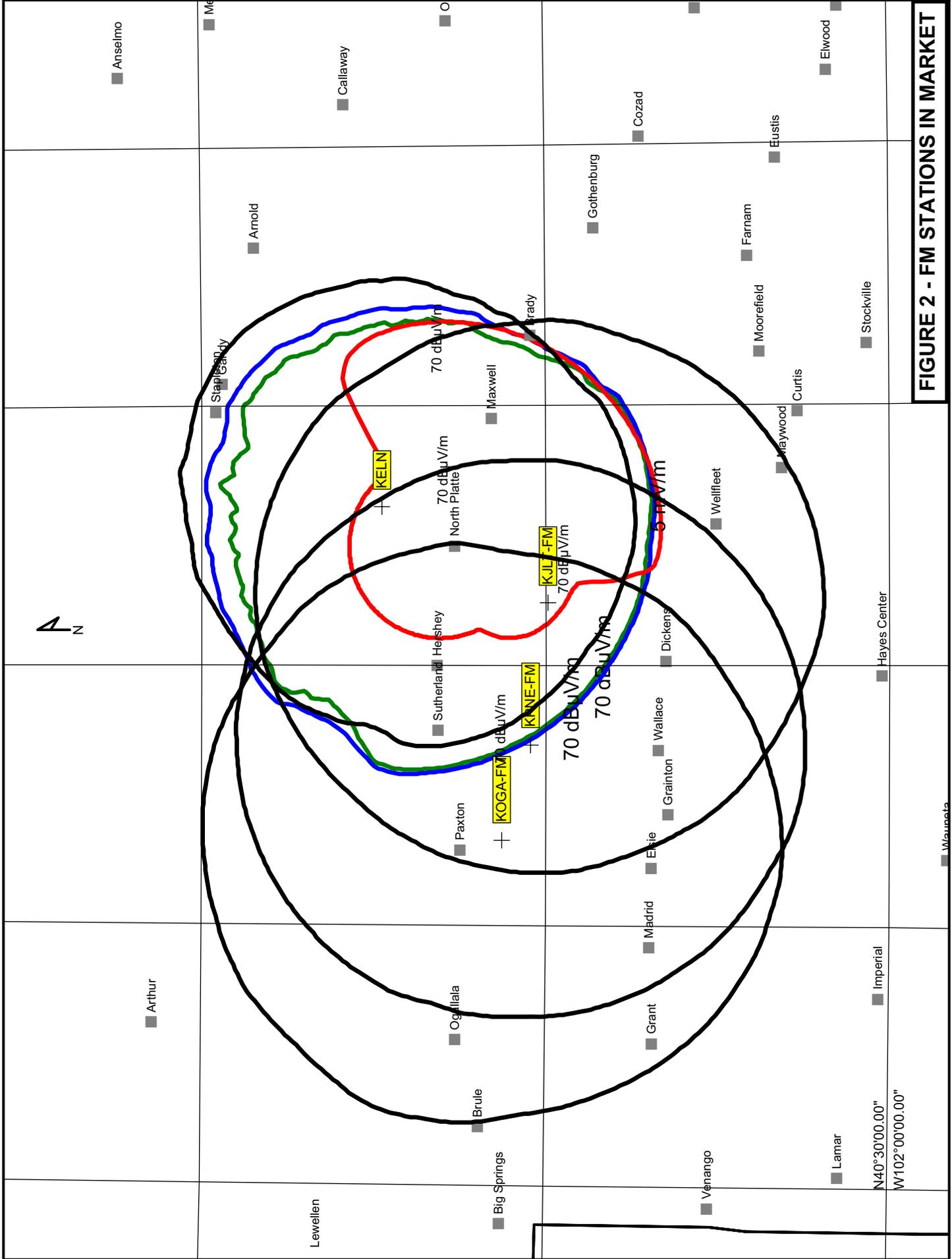
Based on the above findings, it can be determined that at least a total of ten (10) stations serve the North Platte, Nebraska market. As a result, "Armada" is allowed to own, operate, or control up to 5 commercial radio stations with not more than 3 of which are in the same service pursuant to §73.3555. The combination of KRKU-FM, KXNP-FM, and KODY-AM satisfies this limit

A handwritten signature in black ink that reads "Garrett G. Lysiak". The signature is written in a cursive, flowing style.

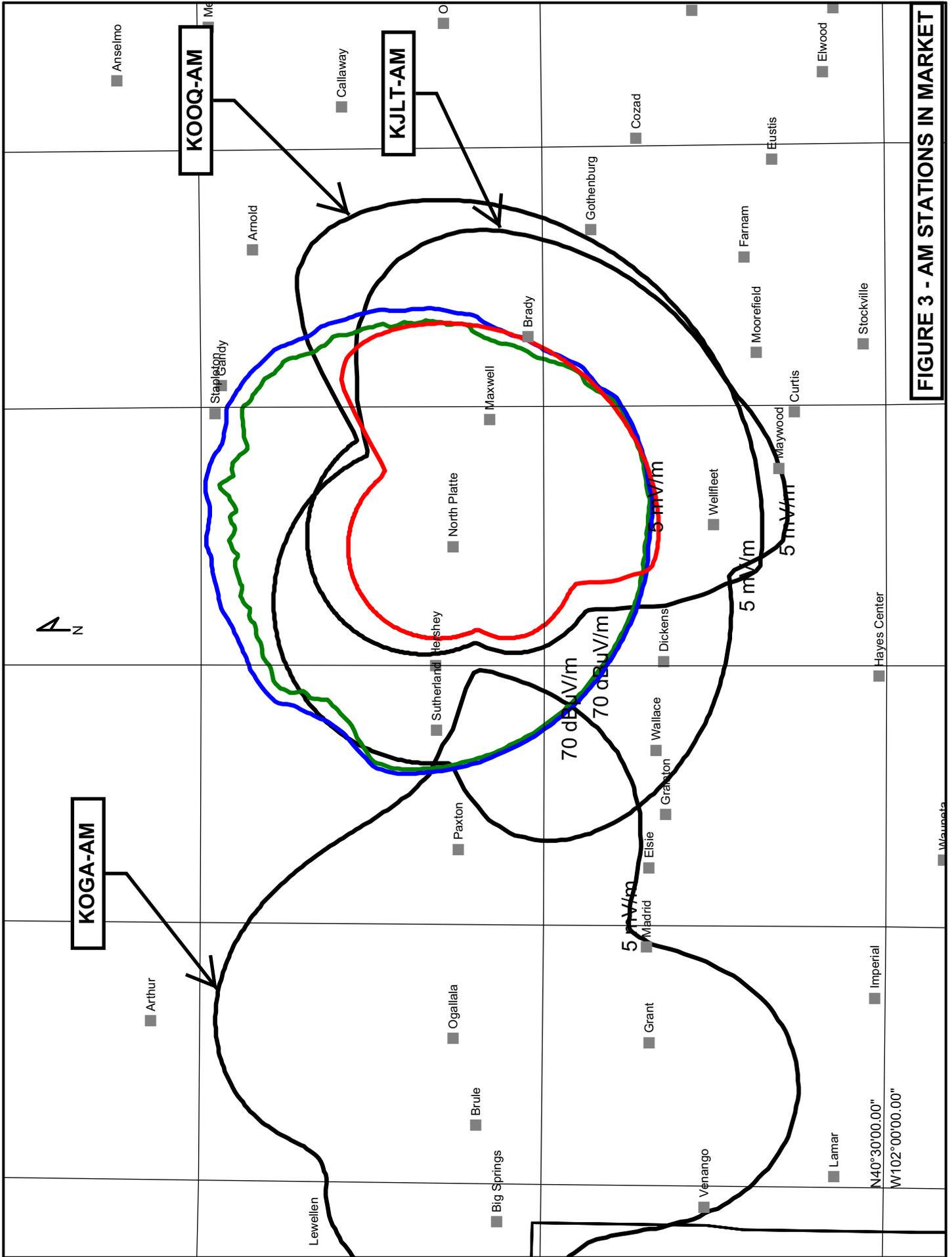
Garrett G. Lysiak, P.E.  
November 27, 2007



**FIGURE 1 - MARKET DEFINED**



**FIGURE 2 - FM STATIONS IN MARKET**



**FIGURE 3 - AM STATIONS IN MARKET**