

Engineering Statement  
**RADIO MULTIPLE OWNERSHIP STUDY**  
prepared for  
**Legend Communications of Wyoming, LLC**

## Introduction

*Legend Communications of Wyoming, LLC* (“*Legend*”) presently has attributable ownership interest in several radio stations in Wyoming and herein proposes common ownership of KHRW(FM). This statement has been prepared using information provided by *Legend* and their representatives to determine compliance within the common ownership rules for the stations listed below (“*Legend* stations”)<sup>1</sup>.

- KBBS(AM) Buffalo, WY Facility ID 32988
- KHRW(FM) Ranchester, WY Facility ID 166062
- KLGT(FM) Buffalo, WY Facility ID 12698
- KZZS(FM) Story, WY Facility ID 89085

As will be shown herein, the proposed acquisition of KHRW(FM) will be in compliance with the Rules of the Federal Communications Commission as they govern common ownership of multiple radio stations serving the same market.

The Commission issued a Report and Order and Notice of Proposed Rulemaking (“R&O”)<sup>2</sup> for various multiple ownership issues. The R&O establishes a means of evaluating radio station multiple ownership issues utilizing existing Nielsen Audio®<sup>3</sup> and BIA® MEDIA Access Pro™<sup>4</sup> market data for analysis of markets with established geographic boundaries.<sup>5</sup> There is a separate “interim” means for evaluating radio station multiple ownership issues beyond established Nielsen Audio radio markets. In cases where a station is not geographically within a Nielsen Audio boundary but is declared “home” to a Nielsen Audio market, ownership concentration must be studied using both the interim and the BIA methods.

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<sup>1</sup> Legend is also the licensee of a number of radio stations that are outside of the area of interest for this study.

<sup>2</sup> Report and Order in MB Docket No. 02-277 and MM Docket Nos. 01-235, 01-317, and 00-244, and Notice of Proposed Rulemaking for MB Docket 03-130 FCC-03-127, (adopted June 2, 2003)(released July 2, 2003).

<sup>3</sup> Nielsen Audio is a registered mark of Nielsen Holdings, N.V.

<sup>4</sup> MEDIA Access Pro is a trademark of BIA® Financial Network Inc.

<sup>5</sup> As an initial matter, the geographical boundaries of a market are established by reference to the boundaries of the markets established by Nielsen Audio. Within that market, the FCC requires that the BIA count of stations operating in the market be employed.

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Pursuant to §73.3555 of the Commission's Rules, the number of stations that a licensee may own is based on the total number of stations in that particular market, regardless of the study methodology employed. There is also a limit on how many stations each licensee may own in any one service (AM or FM).

- Markets with 45 or more stations are limited to 8 total stations and 5 in any one service.
- Markets with 30-44 stations are limited to 7 total stations and 4 in any one service.
- Markets with 15-29 stations are limited to 6 total stations and 4 in any one service.
- Markets with 14 or fewer stations are limited to 5 total stations and 3 in any one service, but not more than 50% of the market stations.

### **Interim Method - Introduction**

Under the current Rules, any station with a principal community beyond the geographic boundary of a Nielsen Audio Metro shall be studied under the Commission's "interim," contour overlap methodology. A "market" is defined as the area encompassed by the principal community contours of radio stations for which common ownership is proposed<sup>6</sup> and which have a mutual area of principal community contour overlap.

### **Interim Method Specifics – Market Definition**

As shown in **Figure 2**, the principal community contours of KHRW(FM), KLGT(FM) and KZZS(FM) have a mutual area of principal community contour overlap. These stations constitute a "Market", with a boundary delineated by the principal community contours of the Market's stations listed above. This area is shown by the yellow shading in **Figure 2**. Since the principal community coverage contour of KBBS(AM) does not overlap the principal community contour of the proposed acquisition, KHRW(FM), it is not considered to be part of the Market

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<sup>6</sup> Order in Implementation of Sections 202(a) and 202(b)(1) of the Telecommunications Act of 1996 (Broadcast Radio Ownership) FCC 96-90, released March 8, 1996 and Memorandum Opinion and Order in Revision of Radio Rules and Policies 7 FCC Rcd 6387, 6395 para. 39 (1992).

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being studied herein. The area of pertinent common overlap is shown in orange shading on the same figure. The principal community contours of the three *Legend* stations and KHRW(FM) that form the basis of the single Market in this study are shown on the map in **Figure 1**.

An “interim” study of this three-station market determined 16 identifiable, operating commercial and noncommercial stations have principal community contours that overlap some portion of the Market as shown in **Figure 3**. All stations shown have transmitter locations that are situated less than 92 km from the nearest edge of the mutual principal community contour overlap. The proposed ownership complies with Rules, which state that a licensee may own up to six stations or four stations in any one service in markets with 15 to 29 stations.

## **Summary**

In preparing the attached maps and tables, pertinent station data were extracted from the Commission's engineering databases. For AM stations, these included the operating power, radiation efficiency, directional antenna data (where appropriate), and geographic coordinates. The distances to the 5 mV/m contours were then using the digitized version of the *Atlas of Ground Conductivity* published in 1981 by the International Telecommunication Union along with a computer program which simulates the FCC's AM groundwave propagation curves. For the FM stations, pertinent data for determining the distances to the contour included the antenna elevation above mean sea level, geographic coordinates, effective radiated power, and, where appropriate, directional antenna patterns. The requisite 3.16 mV/m (70 dB $\mu$ ) contours were determined using digitized 3 arc-second U.S.G.S. terrain data along radials spaced every degree from the transmitter site and an implementation of the Commission's TVFMFS computer program which simulates the FM propagation curves. The detailed distances to the principal community contours were then used with a GIS mapping program to generate the attached maps.

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**Conclusion**

As shown herein, the *Legend* common ownership of *Legend* Stations is in compliance with §73.3555 of the Commission's Rules regarding the multiple ownership of radio stations. This conclusion was based on the interim, contour-overlap method.

**Certification**

Under the penalty of perjury, the undersigned hereby certifies that the foregoing statement was prepared by her or under her direction on behalf of *Legend* and that it is true and correct to the best of her knowledge and belief. Ms. Cavell is a senior engineer in the firm of *Cavell, Mertz & Associates, Inc.* and has submitted numerous engineering exhibits to the Federal Communications Commission. Her qualifications are a matter of record with the Commission.



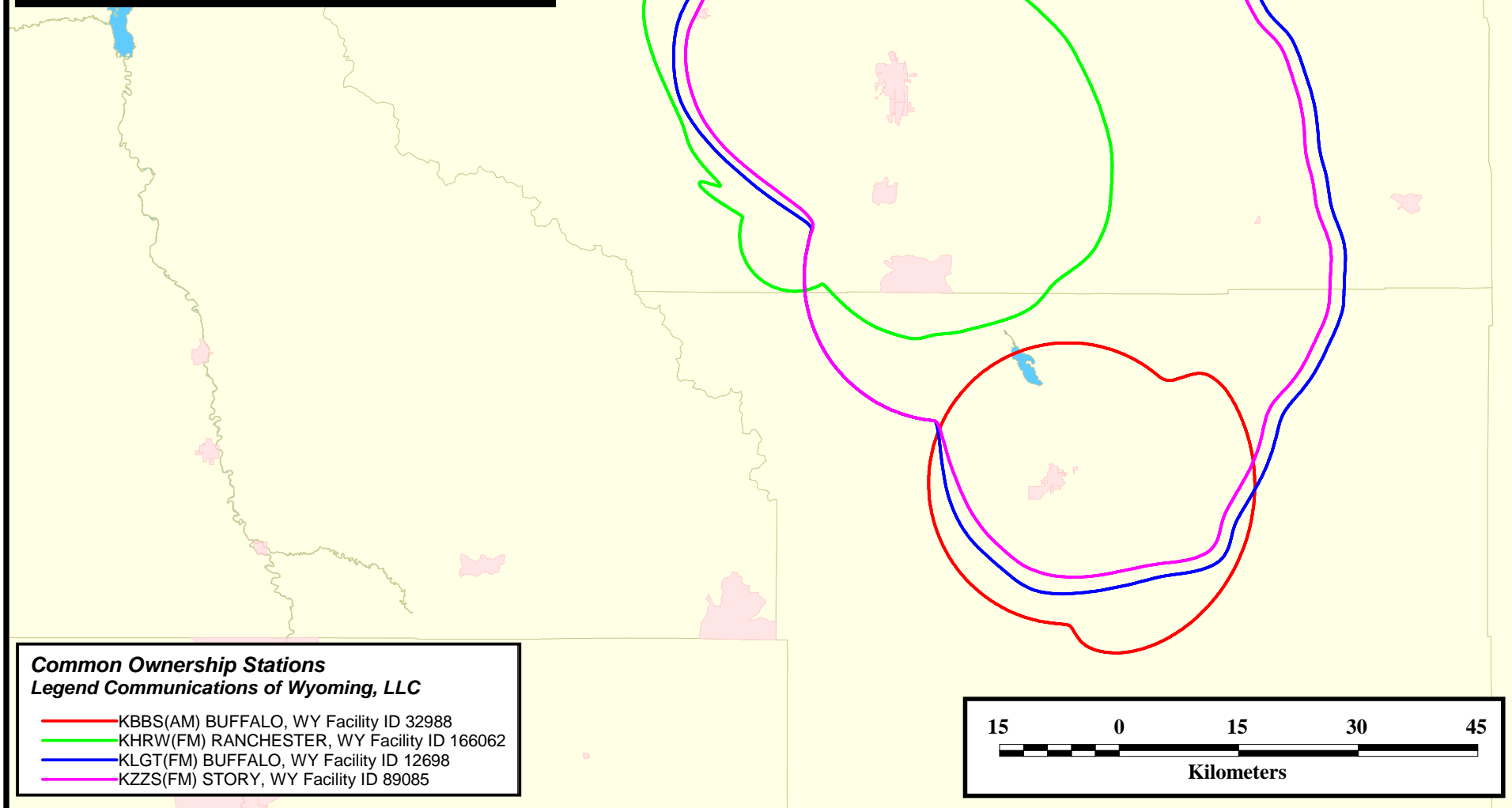
Lucinda Hutter Cavell  
November 24, 2014

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**FIGURE 1**  
**COMMON OWNERSHIP STATIONS**  
**PRINCIPAL COMMUNITY CONTOURS**

**KHRW(FM) Ranchester, WY**  
**Channel 224C2 2.3 kW 346 m**

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**FIGURE 2**  
**COMMON OWNERSHIP STATIONS**  
**WITHIN THE MARKET**

**KHRW(FM) Ranchester, WY**  
**Channel 224C2 2.3 kW 346 m**

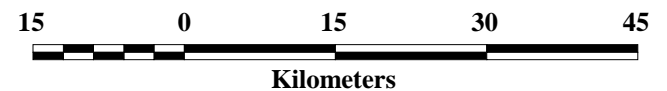
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Area of Common  
Contour Overlap

**Common Ownership Stations**  
**Legend Communications of Wyoming, LLC**

- KBBS(AM) BUFFALO, WY Facility ID 32988
- KHRW(FM) RANCHESTER, WY Facility ID 166062
- KLGT(FM) BUFFALO, WY Facility ID 12698
- KZZS(FM) STORY, WY Facility ID 89085





### FIGURE 3 PRINCIPAL COMMUNITY CONTOURS WITHIN THE MARKET

KHRW(FM) Ranchester, WY  
Channel 224C2 2.3 kW 346 m

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Area of Common  
Contour Overlap

#### Principal Community Contours

Within Market 1

- KBBS(AM) BUFFALO, WY FAC ID 32988
- KBUW(FM) BUFFALO, WY FAC ID 88434
- KDTI(FM) SHERIDAN, WY FAC ID 91354
- KHRW(FM) RANCHESTER, WY FAC ID 166062
- KLGT(FM) BUFFALO, WY FAC ID 12698
- KLQQ(FM) CLEARMONT, WY FAC ID 165310
- KOHR(FM) SHERIDAN, WY FAC ID 89342
- KOWY(FM) DAYTON, WY FAC ID 189506
- KPRQ(FM) SHERIDAN, WY FAC ID 89885
- KROE(AM) SHERIDAN, WY FAC ID 38626
- - - KSUW(FM) SHERIDAN, WY FAC ID 82438
- KWCF(FM) SHERIDAN, WY FAC ID 90842
- KWYO(AM) SHERIDAN, WY FAC ID 12942
- KYTI(FM) SHERIDAN, WY FAC ID 12931
- KZWW(FM) SHERIDAN, WY FAC ID 38627
- - - KZZS(FM) STORY, WY FAC ID 89085

