

Technical Report
In Support of
47 C.F.R. Section 73.3555
Based
Interim Contour Method Multiple
Ownership Studies

for

Saga Communications of South Dakota, LLC
Mitchell, SD & Yankton, SD Regions
“Interim Method Markets A & B”

KMIT(FM) - MITCHELL, SD (Facility ID: 43239)
KUQL(FM) - ETHAN, SD (Facility ID: 42113)
WNAX(AM) - YANKTON, SD (Facility ID: 57846)
WNAX-FM - YANKTON, SD (Facility ID: 57839)

EXPLANATION OF REPORT: This Technical Report has been prepared to determine the number of commercial and non-commercial principal community contours associated with the Transfer/Assignment applications for the below Saga Communications of South Dakota, LLC stations. These stations comprise the entirety of the Saga Communications of South Dakota, LLC holdings. In this instance, there will be two (2) interim method markets and no BIA markets associated with this grouping. Therefore, this common report has been prepared to address the below five (5) Saga Communications of South Dakota, LLC facilities. Ownership studies for other holdings associated with parent company Saga Communications, Inc., have been prepared separately. This Interim Contour-Overlap Methodology Study has been prepared to address the unrated market portions for each filing.

Saga Communications of South Dakota, LLC, presently holds a broadcast interest in four (4) total aural services relevant to these Transfer/Assignment filings. Saga holdings not overlapping these groupings need not be discussed herein. Concerning these relevant holdings, there will be two (2) unique and distinct interim method markets within this affected ownership group. "Market A" is comprised of three (3) stations. "Market B" is comprised of two (2) stations. Each Market is as follows:

"Market A"

<u>CALL SIGN</u>	<u>CH/FREQ</u>	<u>CITY</u>	<u>STATE</u>	<u>FILE NUMBER</u>
WNAX (AM)	570	YANKTON	SD	BL19860411AI
KMIT (FM)	290C1	Mitchell	SD	BLH20010919AAS
KUQL (FM)	252C1	Ethan	SD	BLH20090617ACE

"Market B"

<u>CALL SIGN</u>	<u>CH/FREQ</u>	<u>CITY</u>	<u>STATE</u>	<u>FILE NUMBER</u>
WNAX (AM)	570	YANKTON	SD	BL19860411AI
WNAX-FM	281C1	Yankton	SD	BLH19891026KA

EXPLANATION OF METHODOLOGY: The facilities and results reported herein were taken from current copies of AM and FM computer databases as prepared by the FCC and supplied by V-Soft Communications, LLC. The facilities listed above serve as the basis for the respective principal community contours studied. The accuracy of the results of these studies is understood to be limited to the accuracy of these databases. The FCC databases give no indication of licensed facilities that may be inoperative, construction permit facilities that may now be operating under program test authority (but have not yet been issued a license) or facilities which may have been licensed since the last update. Therefore, some stations may have been included or excluded erroneously. However, unless otherwise indicated, all licensed facilities known to be inoperative and all known applications and construction permit facilities, have been eliminated from consideration in this study.

For AM stations, Map M3 soil conductivity values and the authorized licensed transmitting facilities served as the basis for the computation of the predicted 5.0 mV/m groundwave contour in accordance with 47 C.F.R. Section 73.183 of the FCC Rules. The distance to the contour was computed for seventy-two (72) equally spaced azimuths beginning with 0° True. For FM stations, the authorized Center of Radiation and ERP values were utilized to compute the predicted 3.16 mV/m (70 dBμ) contour as provided in 47 C.F.R. Section 73.313 of the Rules. The predicted FM contours shown in this report are based on seventy-two (72) equally spaced terrain radials beginning with 0° True and assume NED 03 Second Terrain data.

As stated before, there will be two (2) unique and distinct interim method markets within this affected ownership group. The interim markets have been defined, in accordance with 47 C.F.R. Section 73.3555 of the FCC Rules, as the area within the total perimeter formed by the combined principal community contours of each interim market as noted above.

EXPLANATION OF RESULTS: The four (4) stations, under common control and relevant for these ownership groupings, have been noted in **Exhibit 1.0**. As stated before, no other Saga Communications of South Dakota, LLC holdings, or any other holdings of parent company Saga Communications, Inc, are affected by these stations. To aid in identifying the respective contours, currently controlled AM contours have been shown with solid light red lines. Currently controlled FM contours have been shown with varying-colored solid lines. The “Market A & B” common overlap areas have been designated as well.

“Market A”

<u>CALL SIGN</u>	<u>CH/FREQ</u>	<u>CITY</u>	<u>STATE</u>	<u>FILE NUMBER</u>
WNAX (AM)	570	YANKTON	SD	BL19860411AI
KMIT (FM)	290C1	Mitchell	SD	BLH20010919AAS
KUQL (FM)	252C1	Ethan	SD	BLH20090617ACE

For “Market A”, the market defining contours have been shown in **Exhibit 2.0** of this report along with a total number of principal community contours entering the market. The defining contours have been shown with yellow lines on this map. AM contours entering the market have been denoted in blue lines. FM contour entering the market have been shown in red lines. As stated before, the contours shown represent the total number of stations entering or defining the market. Co-owned stations entering the market, but not defining the market have been omitted. Under the current rules, the market falls within the minimum limitations set forth in §73.3555(a)(1)(ii): *In a radio market with between 30 and 44 (inclusive) full-power, commercial and noncommercial radio stations, not more than 7 commercial radio stations in total and not more than 4 commercial stations in the same service (AM or FM) may be owned.* The principal community contours of twenty-eight (28) other stations entering the market are shown in **Exhibit 2.0**. Including the one (1) AM and two (2) FM station(s) which define the market, there are thirty-one (31) aural services in this market. **Exhibit 2.1** lists the facilities of the individual stations used in this report.

"Market B"

<u>CALL SIGN</u>	<u>CH/FREQ</u>	<u>CITY</u>	<u>STATE</u>	<u>FILE NUMBER</u>
WNAX (AM)	570	YANKTON	SD	BL19860411AI
WNAX-FM	281C1	Yankton	SD	BLH19891026KA

For "Market B", the market defining contours have been shown in **Exhibit 3.0**. The defining contours have been shown with yellow lines on this map. Under the latter provisions as set forth in §73.3555(a)(1)(iv): *...no person or single entity (or entities under common control) may have a cognizable interest in more than 50% of the full-power, commercial and noncommercial radio stations in such market unless the combination of stations comprises not more than one AM and one FM station*. As the above ownership one (1) AM and one (1) FM station falls under the latter provision of §73.3555(a)(1)(iv), the market is categorically permitted. **Exhibit 3.1** lists the facilities of the individual stations used in this report.

CERTIFICATION OF TECHNICAL CONSULTANT: *I declare, under penalty of perjury, that the contents of this report are true and accurate to the best of my knowledge and belief. I further certify I have over twenty-four years of experience as a broadcast technical consultant before the Federal Communications Commission ("the FCC"); and am familiar with the Code of Federal Regulations Title 47 ("the Rules") as pertaining to this report and its contents herein. The underlying data utilized in this report was taken directly from FCC databases or indirectly through third party software vendors securing data directly from FCC databases. This firm cannot be held liable for errors or omissions resulting from the underlying data. The information contained herein is believed accurate to the date reported below.*


Justin W. Asher
Technical Consultant
July 7, 2023

Exhibit 1.0 Map of Commonly Owned Stations

AM Contours: Daytime 5.0 mV/m
Map M3 Ground Conductivity
NAD 1983 Coordinate Datum

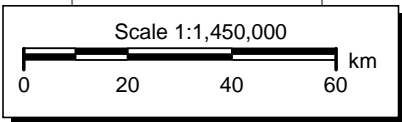
FM Contours: 70 dBμ F(50:50)
NED 03 sec Terrain Database
NAD 1983 Coordinate Datum

BIA Market - Sioux Falls, SD (180)

"Market A" Defining Contours
WNAX(AM) - YANKTON, SD
KMIT(FM) - MITCHELL, SD
KUQL(FM) - ETHAN, SD

"Market B" Defining Contours
WNAX(AM) - YANKTON, SD
WNAX-FM - YANKTON, SD

BIA Market - Sioux City, IA (244)



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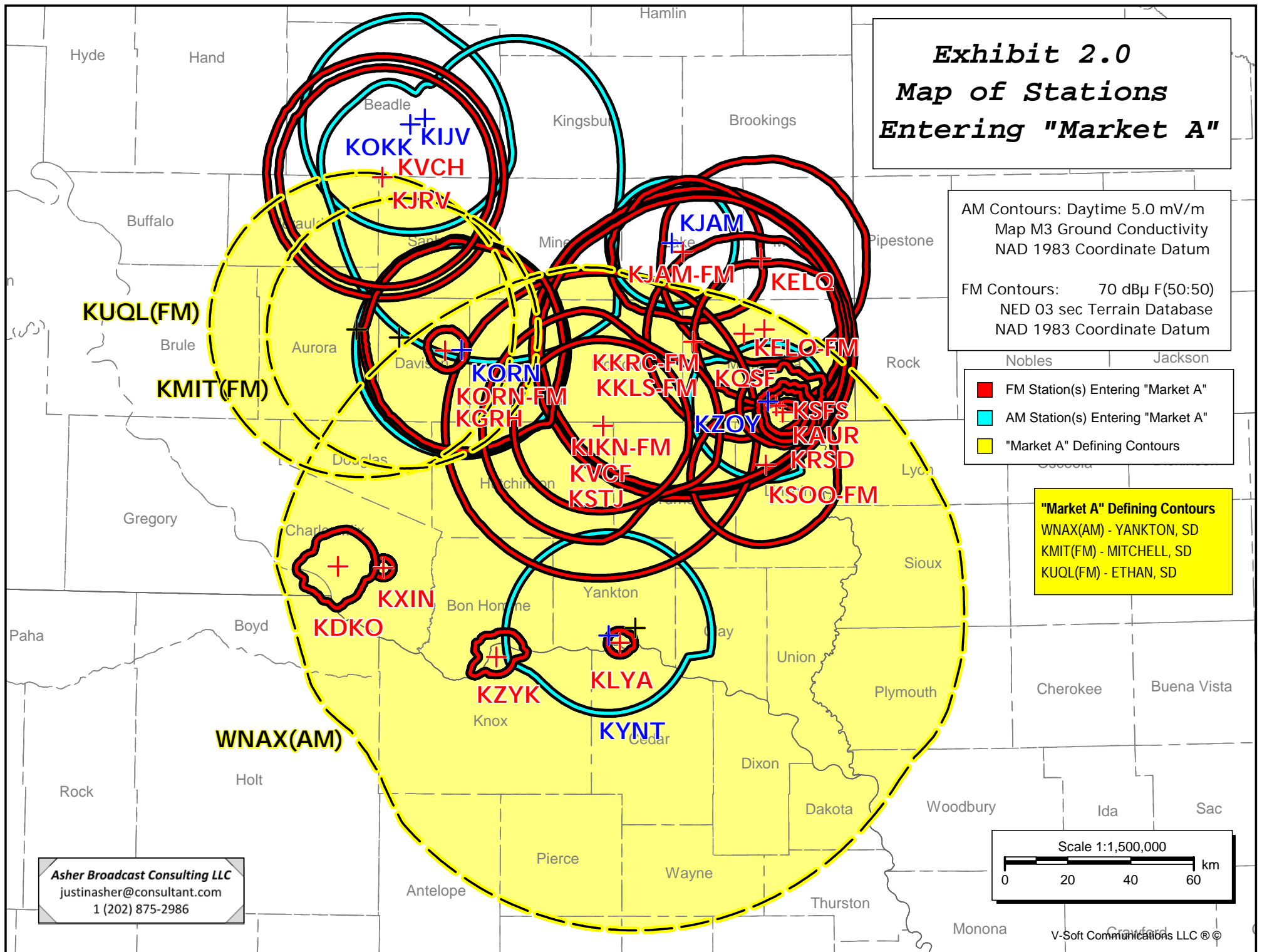
Exhibit 2.0 Map of Stations Entering "Market A"

AM Contours: Daytime 5.0 mV/m
Map M3 Ground Conductivity
NAD 1983 Coordinate Datum

FM Contours: 70 dBμ F(50:50)
NED 03 sec Terrain Database
NAD 1983 Coordinate Datum

- FM Station(s) Entering "Market A"
- AM Station(s) Entering "Market A"
- "Market A" Defining Contours

"Market A" Defining Contours
WNAX(AM) - YANKTON, SD
KMIT(FM) - MITCHELL, SD
KUQL(FM) - ETHAN, SD



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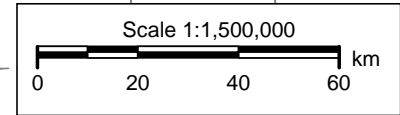


Exhibit 2.1

Tabulation of Select Stations Entering “Market A”

Total number of overlapping contours: 31

Reference:

Callsign	Type	Chan	City	St	File Number	Dist (km)	Azi (deg)
WNAX(AM)	AM	570	YANKTON	SD	BL19860411AI	0.0	0.0
KUQL(FM)	FM	252C1	Ethan	SD	BLH20090617ACE	129.4	317.0
KMIT(FM)	FM	290C1	Mitchell	SD	BLH20010919AAS	118.6	320.9

Overlapping Contours:

Callsign	Type	Chan	City	St	File Number	Dist (km)	Azi (deg)
KZYK	FM	205A	Santee	NE	BLED20120727AJS	45.0	258.3
KGRH	FM	201A	Loomis	SD	BLED20170519ABA	106.5	325.6
KRSD	FM	201A	Sioux Falls	SD	BLED19970130KA	82.8	34.3
KLYA	FM	204A	Yankton	SD	0000202901	6.8	226.6
KVCH	FM	204C1	Huron	SD	BLED20110224ACF	163.8	330.7
KAUR	FM	206A	Sioux Falls	SD	BLED19870129KB	82.8	34.3
KDKO	FM	208A	Lake Andes	SD	BLED20110211ABV	96.2	281.7
KSFS	FM	211C3	Sioux Falls	SD	0000135996	83.3	32.4
KVCF	FM	213C2	Freeman	SD	BLED20020110AAJ	64.9	350.9
KSTJ	FM	217C1	Hartford	SD	BLED20131022AMW	64.9	350.9
KORN-FM	FM	221C1	Parkston	SD	BLH20151217AGV	103.8	328.0
KJRV	FM	227C1	Wessington Springs	SD	BLH20050801APD	163.8	330.7
KQSF	FM	239C3	Dell Rapids	SD	BLH19981028KE	103.1	23.4
KKRC-FM	FM	247C1	Sioux Falls	SD	BLH20121116AJV	92.6	11.5
KSOO-FM	FM	256C3	Lennox	SD	BLH20080731AKJ	66.2	38.7
KIKN-FM	FM	263C1	Salem	SD	BLH20071113AIH	64.9	350.9
KXIN	FM	265A	Wagner	SD	BLH20171204ABZ	82.1	283.4
KELO-FM	FM	270C2	Sioux Falls	SD	BLH19900606KD	99.3	20.2
KJAM-FM	FM	276C2	Madison	SD	BLH199601113K	120.1	7.2
KKLS-FM	FM	284C1	Sioux Falls	SD	BLH20000410ABM	92.6	11.5
KQRN	FM	297C1	Mitchell	SD	BLH19790731AF	103.9	328.0
KELQ	FM	300C2	Flandreau	SD	BMLH20181218AAI	123.6	18.8
KYNT	AM	1450	YANKTON	SD	BL19830706AK	8.8	254.3
KZOY	AM	1520	SIOUX FALLS	SD	BL12684	83.2	30.4
KORN	AM	1490	MITCHELL	SD	BL19790801AD	103.9	328.0
KJAM	AM	1390	MADISON	SD	BL7749	122.5	5.4
KOKK	AM	1210	HURON	SD	BMML20110328ACM	174.6	337.5
KIJV	AM	1340	HURON	SD	BL19990414DC	174.8	335.9

Distance and bearing calculations from coordinates: 42-54-47 N, 097-18-58 W

Duopoly Options:

TV: Not Included

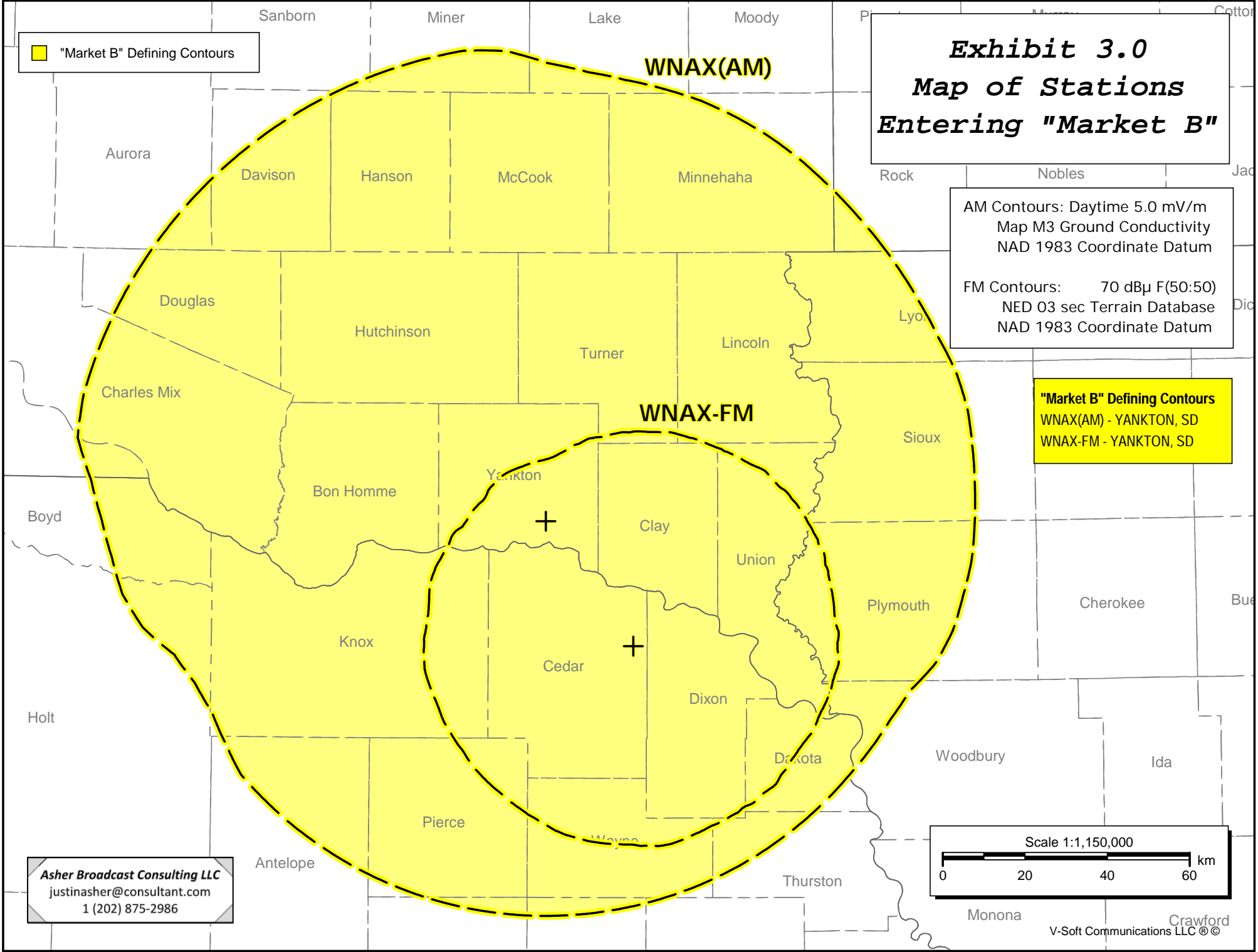
FM: 3.16 mV/m (70 dBu); Include NCE

AM: 5.0 mV/m

Stations more than 92 km from the common area were excluded.

*** Co-owned stations entering, but not defining the market, have been excluded.**

*** Stations more than 92 km from the common area have been excluded.**



■ "Market B" Defining Contours

Exhibit 3.0
Map of Stations
Entering "Market B"

AM Contours: Daytime 5.0 mV/m
Map M3 Ground Conductivity
NAD 1983 Coordinate Datum

FM Contours: 70 dBμ F(50:50)
NED 03 sec Terrain Database
NAD 1983 Coordinate Datum

"Market B" Defining Contours
WNAX(AM) - YANKTON, SD
WNAX-FM - YANKTON, SD

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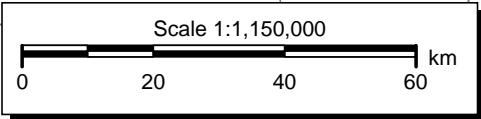


Exhibit 3.1

Tabulation of Select Stations Entering “Market B”

Total number of overlapping contours: 2

Reference:

Callsign	Type	Chan	City	St	File Number	Dist (km)	Azi (deg)
WNAX(AM)	AM	570	YANKTON	SD	BL19860411AI	0.0	0.0
WNAX-FM	FM	281C1	Yankton	SD	BLH19891026KA	37.1	144.9

Overlapping Contours:

Callsign	Type	Chan	City	St	File Number	Dist (km)	Azi (deg)
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Distance and bearing calculations from coordinates: 42-54-47 N, 097-18-58 W

Duopoly Options:

TV: Not Included

FM: 3.16 mV/m (70 dBu); Include NCE

AM: 5.0 mV/m

Stations more than 92 km from the common area were excluded.

***Under the latter provisions as set forth in §73.3555(a)(1)(iv): ...no person or single entity (or entities under common control) may have a cognizable interest in more than 50% of the full-power, commercial and noncommercial radio stations in such market unless the combination of stations comprises not more than one AM and one FM station. As the above ownership one (1) AM and one (1) FM station falls under the latter provision of §73.3555(a)(1)(iv), the market is categorically permitted.**