

ENGINEERING STATEMENT IN
SUPPORT OF OPPOSITION TO
PETITION TO DENY
BMJP-20020426AAJ, AS AMENDED
KGYN(AM) - GUYMON, OK
Telns Broadcasting Company, Inc.
Guymon, OK

May 8, 2003

Prepared For: Mr. James E. Smith, Jr.
Telns Broadcasting Company, Inc.
P.O. Box 130
Guymon, OK 73942

CARL E. SMITH CONSULTING ENGINEERS

ORIGINAL ARTICLES

THE EFFECT OF THE VARIOUS TYPES OF
DIETARY REST ON THE RECOVERY OF
PATIENTS WITH ACUTE APPENDICITIS

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ENGINEERING AFFIDAVIT

State of Ohio)
) ss:
County of Summit)

Roy P. Stype, III, being duly sworn, deposes and states that he is a graduate Electrical Engineer, a qualified and experienced Communications Consulting Engineer whose works are a matter of record with the Federal Communications Commission and that he is a member of the Firm of "Carl E. Smith Consulting Engineers" located at 2324 North Cleveland-Massillon Road in the Township of Bath, County of Summit, State of Ohio, and that the Firm has been retained by Telns Broadcasting Company, Inc. to prepare the attached "Engineering Statement In Support Of Opposition To Petition To Deny - BMJP-20020426AAJ, As Amended - KGYN(AM) - Guymon, OK."

The deponent states that the Exhibit was prepared by him or under his direction and is true of his own knowledge, except as to statements made on information and belief and as to such statements, he believes them to be true.



Roy P. Stype, III

Subscribed and sworn to before me on **May 8, 2003**.



Notary Public

/SEAL/


NANCY A. ADAMS, Notary Public
Residence - Cuyahoga County
State Wide Jurisdiction, Ohio
My Commission Expires Sept. 5, 2005

ENGINEERING AFFIDAVIT

State of Ohio)
) ss:
County of Summit)


Ronald W. Coffman, being duly sworn, deposes and states that he is a qualified and experienced Communications Consulting Engineer whose works are a matter of record with the Federal Communications Commission and that he is a member of the Firm of "Carl E. Smith Consulting Engineers" located at 2324 North Cleveland-Massillon Road in the Township of Bath, County of Summit, State of Ohio, and that the Firm has been retained by Telns Broadcasting Company, Inc. to prepare the attached "Engineering Statement In Support Of Opposition To Petition To Deny - BMJP-20020426AAJ, As Amended - KGYN(AM) - Guymon, OK."

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Ronald W. Coffman

Subscribed and sworn to before me on **May 8, 2003**.



Nancy A. Adams
Notary Public

/SEAL/

NANCY A. ADAMS, Notary Public
Residence - Cuyahoga County
State Wide Jurisdiction, Ohio
My Commission Expires Sept. 5, 2005

ENGINEERING STATEMENT

This engineering statement is prepared on behalf of the Telns Broadcasting Company, Inc., licensee of Radio Station KGYN(AM) - Guymon, Oklahoma and "long form" applicant (BMJP-20020426AAJ, as amended) for a construction permit for a major modification to the KGYN operating facilities. It supports an opposition to a second petition to deny ("the Ingles petition") the above referenced "long form" application which was filed on behalf of Sharon Berlin Ingles.

KGYN is presently licensed to Guymon, Oklahoma and operates on 1210 kHz with 10 kilowatts nondirectional day and 10 kilowatts at night utilizing a three tower directional antenna system. The above referenced "long form" application, as amended, proposes to change the KGYN community of license to Oklahoma City, Oklahoma and proposes operation with 50 kilowatts day and 10 kilowatts night utilizing separate four tower directional patterns for daytime and nighttime operation.

The Ingles petition claims that the facilities proposed in the KGYN application, as amended, will result in increased first adjacent channel nighttime skywave interference to Class A station WOAI - San Antonio, Texas, which operates on 1200 kHz, in violation of Section 73.182(q) of the FCC Rules. As shown below, however, the proposed modifications to the KGYN nighttime operating facilities will result in a substantial reduction in the prohibited nighttime contour overlap between the KGYN 0.25 mV/m 10% skywave contour and the WOAI 0.5 mV/m groundwave contour, resulting in a substantial reduction in the nighttime interference which is predicted to WOAI's nighttime groundwave service area from KGYN.

Figure 1.0 is a detailed allocation study depicting the predicted WOAI 0.5 mV/m nighttime groundwave contour¹ in relation to the pertinent portions of the predicted 0.25 mV/m 10% skywave contours for both the presently licensed KGYN nighttime facilities and the nighttime facilities proposed in the KGYN major change application, as amended. This map exhibit also depicts the areas in which both the present and proposed KGYN nighttime facilities would be predicted to cause skywave interference to WOAI at locations within its 0.5 mV/m protected nighttime contour.² Table 1.0 provides complete data regarding the reduction in prohibited contour overlap to WOAI, both in terms of land area and population, which would result from the proposed KGYN modifications, as well as a detailed tabulation summarizing the reduced interference which would result to WOAI from KGYN as a result of these proposed modifications to the KGYN operating facilities.

Section 73.182 of the FCC Rules clearly indicates that nighttime protection to Class A stations, both co-channel and first adjacent channel, is evaluated on a single signal contour overlap basis and provides no foundation for using the type of interference analysis included in the Ingles petition³ to attempt to document that the proposed

¹The WOAI 0.5 mV/m nighttime groundwave contour was projected utilizing conductivity data extracted from FCC Figure M3.

²In defining these areas of predicted interference, interference was considered to be caused to WOAI at any location where its groundwave signal did not exceed the KGYN 10% skywave signal by at least 6 dB.

³Although the engineering statement supporting the Ingles petition does not adequately describe the methodology which was employed in the studies which were conducted to support their claim that the proposed KGYN modifications will result in increased interference to WOAI, it appears that these studies included predicted nighttime interference to WOAI from other domestic and Region 2 stations as part of this analysis. While the Ingles engineering statement fails to identify any other such stations which might have been included in these studies, this omission is clearly not germane to an analysis of this situation, since, as outlined in Note 1 to the table in Section 73.182(q) of the FCC Rules, Class A stations "...are
(continued...)

KGYN modifications will result in increased nighttime interference to WOAI. As shown in Figure 1.0, the 0.25 mV/m 10% skywave contour for the presently licensed KGYN nighttime operating facilities totally encompasses the WOAI 0.5 mV/m nighttime groundwave contour. While Section 73.182 of the FCC Rules does not directly address such grandfathered prohibited nighttime overlap,⁴ the FCC has historically permitted stations which have such grandfathered overlap to modify their operating facilities so long as the area of the grandfathered prohibited overlap on U.S. soil is reduced by the proposed modifications.⁵ As is clearly shown in Figure 1.0, the proposed modifications to the KGYN nighttime operating facilities will result in a substantial reduction in the U.S. land area encompassed by this grandfathered prohibited overlap. In fact, as outlined in Note 3 to Table 1.0, the proposed KGYN modifications will eliminate this grandfathered prohibited overlap to a U.S. land area of 17,373.0 square kilometers containing a population of 323,820 persons.

Based on the above data, it is obvious that the nighttime facilities proposed in the KGYN application, as amended, fully comply with the applicable nighttime protection requirements to WOAI when evaluated on a single signal contour protection basis, as specified in the FCC Rules and applicable FCC policies. As a result, there should be

³(...continued)

normally protected on a single signal, non-RSS basis." This situation was also discussed in Paragraph 62 of the October 25, 1991 *Report and Order* in MM Docket 87-267, which adopted the most recent revisions to the nighttime protection requirements for AM stations, and clearly indicates that the single signal method "...is used to evaluate the protection afforded to stations designed to provide wide area service (Class I stations)...".

⁴The present KGYN nighttime operating facilities were authorized prior to the adoption of the *Report and Order* in MM Docket 87-267 which created this present first adjacent channel skywave protection requirement and, as a result, this overlap was not an issue at the time these nighttime facilities were authorized. Thus, this now prohibited contour overlap is grandfathered.

⁵See Note 1 to Section 73.37 of the FCC Rules.

no need to conduct any sort of further interference analysis, such as that contained in the Ingles petition, to evaluate whether or not the proposed KGYN nighttime facilities provide the required protection to WOAI. As outlined below, however, even if it is determined for some reason that such an interference analysis is appropriate in this case, such an analysis, when properly conducted, clearly shows that the proposed KGYN modifications will result in a substantial reduction in the predicted nighttime interference to WOAI from KGYN.

The data included in Table 1.0 shows that the proposed KGYN modifications will reduce the U.S. land area in which KGYN is predicted to cause nighttime interference to WOAI by 3314.3 square kilometers, or 9.5%. Similarly, these proposed modifications will reduce the population within this predicted area of nighttime interference by 360,826, or 42.1%. Thus, even utilizing such an interference methodology, which is not provided for in the FCC Rules, it is obvious that the proposed modifications to the KGYN nighttime operating facilities will result in a substantial reduction in the predicted interference to WOAI from KGYN.

The Ingles petition also faults KGYN for not submitting a revised 307(b) showing as part of the most recent amendment to this application to reflect the actual facilities proposed in this amendment. It also submits data purporting to show that the daytime facilities proposed in this most recent amendment will result in daytime service to significantly less population than the daytime facilities proposed in this "long form" application, as originally filed, therefore invalidating KGYN's previously submitted 307(b) showing. The data included in the Ingles engineering statement is flawed, however, in that it's daytime coverage comparison is based on the 5 mV/m contour, rather than the

2 mV/m and 0.5 mV/m contours which are employed by the FCC in conducting a day-time 307(b) evaluation. As outlined below, the facilities proposed in this most recent amendment to the KGYN "long form" application actually result in no meaningful changes in the population data submitted by KGYN for the underlying "short form" application in its November, 2001 supplemental 307(b) showing. It was for this reason that an updated 307(b) showing was not included as part of this most recent amendment.




Table 1.1(a) provides detailed 2 mV/m area and population data for the daytime facilities proposed in the most recent amendment to the KGYN "long form" application. As shown by this data, the net 2 mV/m daytime population gain for these proposed facilities is 1,492,183, a reduction of only 0.9% from the 1,506,360 population gain which would have resulted from the daytime facilities specified in the underlying "short form" application. Similarly, Table 1.1(b) provides detailed 0.5 mV/m area and population data for the daytime facilities proposed in the most recent amendment to the KGYN "long form" application. As shown by this data, the net 0.5 mV/m daytime population gain for these proposed facilities is 1,757,957, which represents an increase of 0.2% from the 1,755,066 population gain which would have resulted from the daytime facilities specified in the underlying "short form" application. Finally, Table 1.2 provides detailed nighttime interference free area and population data for the nighttime facilities proposed in the most recent amendment to the KGYN "long form" application. As shown by this data, the net nighttime interference free population gain for these proposed facilities is 957,833, an increase of 12.9% from the 848,410 population gain which would have resulted from the nighttime facilities specified in the underlying "short

form” application. Based on this data, it is obvious that the modifications proposed in this most recent amendment to the KGYN “long form” application have in no way resulted in a degradation of KGYN’s position in a 307(b) analysis.

Finally, the Ingles petition also faults KGYN for not including revised data regarding the increases which would be realized in nighttime interference free service by other stations as part of the most recent amendment to the KGYN “long form” application. This revised data was not submitted because the FCC had not cited it as being a decisional factor in their decision to award KGYN a substantial 307(b) preference in this proceeding. For the sake of completeness, however, Table 1.3 has been included as part of this engineering statement to provide this data based on the revised nighttime facilities proposed in the KGYN application, as amended. As shown in this table, the nighttime facilities proposed in the most recent amendment to the KGYN application will still result in a total of 155,342 persons receiving a new nighttime interference free service as a result in a reduction in the nighttime interference free contour values of other stations. While this is less than the value associated with the facilities specified in the underlying “short form” application, it still represents a substantial supplemental public interest benefit above and beyond the criteria cited by the FCC in awarding the KGYN application a substantial 307(b) preference.



LEGEND:

-  - AREA PREDICTED TO RECEIVE NIGHTTIME INTERFERENCE FROM BOTH PRESENT AND PROPOSED KGYN
-  - AREA PREDICTED TO RECEIVE NIGHTTIME INTERFERENCE FROM ONLY PRESENT KGYN
-  - AREA PREDICTED TO RECEIVE NIGHTTIME INTERFERENCE FROM ONLY PROPOSED KGYN

PROPOSED KGYN
0.25 mV/m
10% SKYWAVE

**BOUNDARY OF AREA OF
PREDICTED NIGHTTIME INTERFERENCE
TO WOAI FROM PROPOSED KGYN**

WOAI

**BOUNDARY OF AREA OF
PREDICTED NIGHTTIME INTERFERENCE
TO WOAI FROM PRESENT KGYN**

PRESENT KGYN
0.25 mV/m
10% SKYWAVE

WOAI
0.5 mV/m
GROUNDWAVE

CARL E. SMITH CONSULTING ENGINEERS
2324 N. CLEVE-MASS RD., BOX 807
BATH, OHIO 44210-0807
330/659-4440

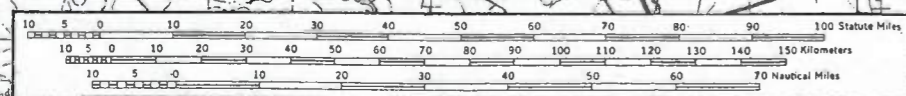


FIG. 1.0
DETAILED NIGHTTIME INTERFERENCE STUDY
WOAI - SAN ANTONIO, TX
Telns Broadcasting Co., Inc.
Guymon, OK



TABLE 1.0

**PRESENT AND PROPOSED PREDICTED SKYWAVE
INTERFERENCE FROM KGYN TO WOAI 0.5 mV/m
NIGHTTIME GROUNDWAVE SERVICE AREA**

Telns Broadcasting Company, Inc.
Guymon, OK

	<u>Land Area (Square Kilometers)</u>	<u>Population (2000 Census)</u>
Present Interference	34,820.9	761,267
Area of New Interference	3,702.0	90,054
Area of Interference Eliminated	7,016.3	450,880
Proposed Interference	31,506.6	400,441
Net Interference Reduction	3,314.3	360,826

Notes:

- 1) Total land area within WOAI 0.5 mV/m nighttime groundwave contour is 110,945.5 square kilometers.
- 2) Total population within WOAI 0.5 mV/m nighttime groundwave contour is 4,125,334.
- 3) The 0.25 mV/m 10% skywave contour for the presently licensed KGYN nighttime facilities totally encompasses the WOAI 0.5 mV/m nighttime groundwave contour. The proposed modifications to the KGYN nighttime facilities will eliminate this grandfathered overlap to a land area of 17,373.0 square kilometers containing a population of 323,820.

TABLE 1.1(a)

PRESENT AND PROPOSED KGYN
2 mV/m DAYTIME AREA AND POPULATION
(AMENDED "LONG FORM" FACILITIES)

Telns Broadcasting Company, Inc.
Guymon, OK

	Area (<u>Square Kilometers</u>)	Population (<u>2000 Census</u>)
Present	34,833.7	125,257
Gain	44,776.7	1,617,440
Loss	34,833.7	125,257
Proposed	44,776.7	1,617,440
Net Gain	9,943.0	1,492,183

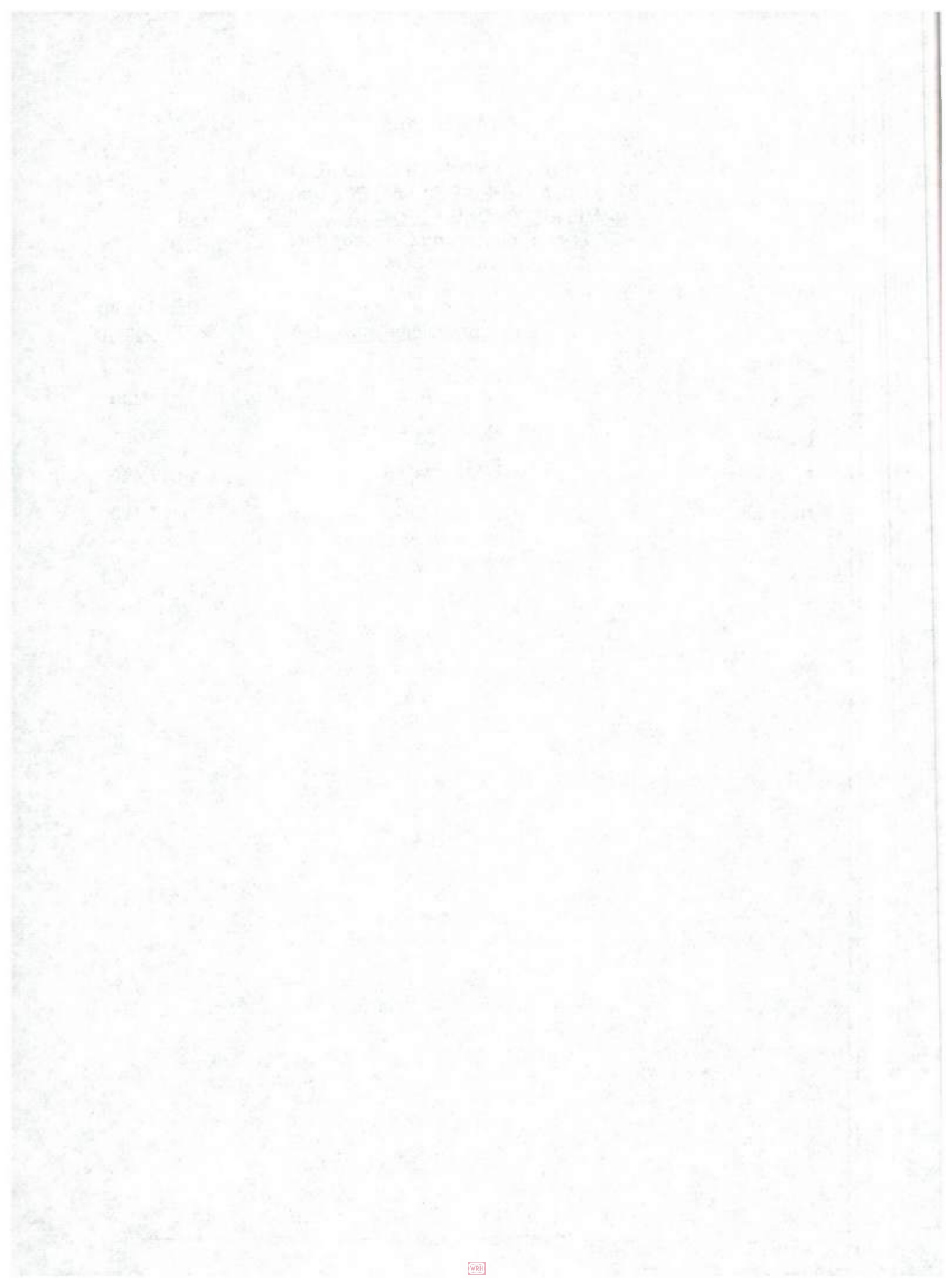


TABLE 1.1(b)

PRESENT AND PROPOSED KGYN
0.5 mV/m DAYTIME AREA AND POPULATION
(AMENDED "LONG FORM" FACILITIES)
Telns Broadcasting Company, Inc.
Guymon, OK

	Area (<u>Square Kilometers</u>)	Population (<u>2000 Census</u>)
Present	92,925.1	223,403
Gain	115,127.7	1,972,634
Loss	88,425.5	214,677
Proposed	119,627.3	1,981,360
Net Gain	26,702.2	1,757,957

TABLE 1.2

**PRESENT AND PROPOSED KGYN NIGHTTIME
INTERFERENCE FREE AREA AND POPULATION
(AMENDED "LONG FORM" FACILITIES)**

Telns Broadcasting Company, Inc.
Guymon, OK

	<u>Area (Square Kilometers)</u>	<u>Population (2000 Census)</u>
Present	11,572.4	32,899
Gain	6,337.5	990,732
Loss	11,572.4	32,899
Proposed	6,337.5	990,732
Net Gain(Loss)	(5,234.9)	957,833

TABLE 1.3

**STATIONS WHICH WOULD BENEFIT FROM
REDUCED NIGHTTIME INTERFERENCE LEVELS
DUE TO PROPOSED KGYN MODIFICATIONS (AS AMENDED)**

Telns Broadcasting Company, Inc.
Guymon, OK

<u>Call</u>	<u>Location</u>	<u>Nighttime Interference Free Contour (mV/m)</u>		<u>Nighttime Interference Free Population (2000 Census)</u>		
		<u>Present</u>	<u>Proposed</u>	<u>Present</u>	<u>Proposed</u>	<u>Gain</u>
KQTL	Sahuarita, AZ	12.136	9.708	133,388	181,952	48,564
KQEQ	Fowler, CA	10.145	9.865	85,556	90,430	4,874
KEBR	Rocklin, CA	8.775	8.209	639,744	677,562	37,818
KPRZ	San Marcos, CA	7.851	7.067	2,389,973	2,438,400	48,427
KOKK	Huron, SD	5.373	4.714	16,661	17,339	678
KUBR	San Juan, TX	12.221	10.915	527,552	540,193	12,641
KUNF	Washington, UT	11.057	10.732	41,831	43,381	1,550
KRSV	Afton, WY	16.170	12.935	3,433	3,802	369
KKHI	Laramie, WY	25.562	13.932	29,131	29,552	421
Total population which will receive new nighttime interference free service:						155,342

