

Federal Communications Commission  
Washington, D.C. 20554

Approved by OMB  
3060-0016 (February 2005)

FOR FCC USE ONLY

**FCC 346**

**APPLICATION FOR AUTHORITY TO CONSTRUCT  
OR MAKE CHANGES IN A LOW POWER TV, TV  
TRANSLATOR OR TV BOOSTER STATION**

FOR COMMISSION USE ONLY  
FILE NO.

- 20091215ABA

Read INSTRUCTIONS Before Filling Out Form

**Section I - General Information**

1. Legal Name of the Applicant UNITED COMMUNICATIONS CORPORATION			
Mailing Address 5800 7TH AVENUE			
City KENOSHA		State or Country (if foreign address) WI	ZIP Code 53140 -
Telephone Number (include area code) 7034652361		E-Mail Address (if available)	
FCC Registration Number: 0002210383	Call Sign NEW	Facility ID Number 183814	
2. Contact Representative (if other than Applicant) NATHANIEL J. HARDY, ESQ.		Firm or Company Name WOOD, MAINES & NOLAN, P.C.	
Mailing Address 4600 FAIRFAX DR. SUITE 604			
City ARLINGTON		State or Country (if foreign address) VA	ZIP Code 22203 - 1553
Telephone Number (include area code) 7034652361		E-Mail Address (if available) HARDY@LEGALCOMPASS.COM	
3. If this application has been submitted without a fee, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114): <input type="radio"/> Governmental Entity <input type="radio"/> Noncommercial Educational Licensee/Permittee <input type="radio"/> Other <input checked="" type="radio"/> N/A (Fee Required)			
4. Facility Information a. <input type="radio"/> Low Power TV Station <input type="radio"/> TV Translator <input type="radio"/> TV Booster <input type="radio"/> Digital Low Power TV <input checked="" type="radio"/> Digital TV Translator b. Community of License: City: ST. JAMES State: MN			
5. Application Purpose <input checked="" type="radio"/> New station <input type="radio"/> Major Modification of construction permit <input type="radio"/> Major Change in licensed facility <input type="radio"/> Minor Modification of construction permit <input type="radio"/> Minor Change in licensed facility <input type="radio"/> Amendment to pending application <input type="radio"/> Digital Flash Cut <input type="radio"/> Digital Companion Channel <input type="radio"/> Displacement [Exhibit 1] <input type="radio"/> Analog <input type="radio"/> Digital			

a. File number of original construction permit or pending application: -

If an amendment, submit as an Exhibit a listing by Section and Question Number the portions of the pending application that are being revised.

[Exhibit 2]

**NOTE:** In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.

## Section II - Legal

1. <b>Certification.</b> Applicant certifies that it has answered each question in this application based on its review of the application instructions and worksheets. Applicant further certifies that where it has made an affirmative certification below, this certification constitutes its representation that the application satisfies each of the pertinent standards and criteria set forth in the application instructions and worksheets.	<input checked="" type="radio"/> Yes <input type="radio"/> No
2. <b>Parties to the Application.</b> List the applicant and all parties to the application. If other than natural persons, list officers, directors, stockholders with interests of 1% or more, general and limited partners and/or members.	
a. Name and address of the applicant and, if applicable, its officers, directors, stockholders with interests of 1% or greater, or partners (if other than individual also show name, address and citizenship of natural person authorized to vote the stock). List the applicant first, officers next, then directors and, thereafter remaining stockholders and partners.	b. Citizenship.
	c. Positional Interest: Officer, director, general partner, limited partner, LLC member, etc.
	d. Percentage of votes.
	e. Percentage of equity.

[Enter Parties Information]

### Parties to the Application

**Parties to the Application.** List the applicant and all parties to the application. If other than natural persons, list officers, directors, stockholders with interests of 1% or more, general and limited partners and/or members.

- a. Name and address of the applicant and, if applicable, its officers, directors, stockholders with interests of 1% or greater, or partners (if other than individual also show name, address, and citizenship of natural person authorized to vote the stock). List the applicant first, officers next, then directors and, thereafter, remaining stockholders and partners.
- b. Citizenship.
- c. Positional Interest: Officer, director, general partner, limited partner, LLC member, etc.
- d. Percentage of votes.
- e. Percentage of equity.

(a) Name and Address	(b) Citizenship	(c) Positional Interest	(d) Percentage of Votes	(e) Percentage of Equity
UNITED COMMUNICATIONS CORPORATION	DE	APPLICANT	0	0

(a) Name and Address	(b) Citizenship	(c) Positional Interest	(d) Percentage	(e) Percentage
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			of Votes	of Equity
HOWARD J. BROWN, 6926 SECOND AVENUE, KENOSHA, WI 53143	US	PRESIDENT/DIRECTOR /SHAREHOLDER	39.80	11.00

(a) Name and Address	(b) Citizenship	(c) Positional Interest	(d) Percentage of Votes	(e) Percentage of Equity
RONALD MONTEMURRO, 3503 16TH PLACE, KENOSHA, WI 53144	US	VICE PRESIDENT/TREASURER/DIRECTOR /SHAREHOLDER	0.00	0.10

(a) Name and Address	(b) Citizenship	(c) Positional Interest	(d) Percentage of Votes	(e) Percentage of Equity
KENNETH DOWDELL, 11449 61ST STREET, PLEASANT PRAIRIE, WI 53158	US	VICE PRESIDENT/TREASURER /DIRECTOR /SHAREHOLDER	0.00	0.10

(a) Name and Address	(b) Citizenship	(c) Positional Interest	(d) Percentage of Votes	(e) Percentage of Equity
FRANK MISSURELLI, 4618 TAFT ROAD, KENOSHA, WI 53142	US	DIVISIONAL VICE PRESIDENT/SHAREHOLDER	0	0.1

(a) Name and Address	(b) Citizenship	(c) Positional Interest	(d) Percentage of Votes	(e) Percentage of Equity
DENNIS WAHLSTROM, 1700 QUAIL ROOST DRIVE, N. MANKATAO, MN 56003	US	DIVISIONAL VICE PRESIDENT	0.00	0.00

(a) Name and Address	(b) Citizenship	(c) Positional Interest	(d) Percentage of Votes	(e) Percentage of Equity
CATHERINE M. PIRCSUK, 16270 SANDY CREEK VALLEY ROAD, WATERTOWN, NY 13601	US	DIVISIONAL VICE PRESIDENT	0.00	0.00

(a) Name and Address	(b) Citizenship	(c) Positional Interest	(d) Percentage of Votes	(e) Percentage of Equity
PATRICIA PECHURA, 169 30TH AVENUE, KENOSHA, WI 53144	US	ASSISTANT SECRETARY	0.00	0.00

(a) Name and Address	(b) Citizenship	(c) Positional Interest	(d) Percentage of Votes	(e) Percentage of Equity
ELIZABETH K. BROWN, 6926 SECOND AVENUE, KENOSHA, WI 53143	US	DIRECTOR, SHAREHOLDER	5.60	0.20

(a) Name and Address	(b) Citizenship	(c) Positional Interest	(d) Percentage of Votes	(e) Percentage of Equity
LUCILLE BROWN MINN, 7 OVERHOLT PASS, EDINA, MN 55439	US	DIRECTOR, SHAREHOLDER	19.60	39.00

(a) Name and Address	(b) Citizenship	(c) Positional Interest	(d) Percentage of Votes	(e) Percentage of Equity
SARAH BROWN RUSS, 3765 FARBAR ST., HOUSTON, TX 77006	US	DIRECTOR, SHAREHOLDER	12.40	18.00

(a) Name and Address	(b) Citizenship	(c) Positional Interest	(d) Percentage of Votes	(e) Percentage of Equity
AMY BROWN TUCHLER, 2983 TECHNY RD., NORTHBROOK, IL 60062	US	DIRECTOR, SHAREHOLDER	12.40	18.00

(a) Name and Address	(b) Citizenship	(c) Positional Interest	(d) Percentage of Votes	(e) Percentage of Equity
JAMES A. TUCHLER, 2983 TECHNY RD., NORTHBROOK, IL 60062	US	DIRECTOR, SHAREHOLDER	0.70	1.00

(a) Name and Address	(b) Citizenship	(c) Positional Interest	(d) Percentage of Votes	(e) Percentage of Equity
STEVEN M. MINN, 7 OVERHOLT PASS, EDINA, MN 55439	US	DIRECTOR, SHAREHOLDER	0.70	1.00

(a) Name and Address	(b) Citizenship	(c) Positional Interest	(d) Percentage of Votes	(e) Percentage of Equity
MARK J. RUSS, 3765 FARBAR ST, HOUSTON, TX 77006	US	DIRECTOR, SHAREHOLDER	0.70	1.00

(a) Name and Address	(b) Citizenship	(c) Positional Interest	(d) Percentage of Votes	(e) Percentage of Equity
BROWN GENERATION TRUST, WILLIAM DOYLE, TRUSTEE, 35 WEST WACKER DR., CHICAGO, IL 60601	US	SHAREHOLDER	8.1	6

3. **Character Issues.** Applicant certifies that neither applicant nor any party to the application has or has had any interest in or connection with:

- a. any broadcast application in any proceeding where character issues were left unresolved or were resolved adversely against the applicant or party to the application; or  
b. any pending broadcast application in which character issues have been raised.

☒ Yes ☐ No

See Explanation in  
[Exhibit 3]

4. <b>Adverse Findings.</b> Applicant certifies that, with respect to the applicant and any party to the application, no adverse finding has been made, nor has an adverse final action been taken related to the following: any felony; mass media-related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination.	<input checked="" type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 4]
5. <b>Alien Ownership and Control.</b> Applicant certifies that it complies with the provisions of Section 310 of the Communications Act of 1934, as amended, relating to interests of aliens and foreign governments.	<input checked="" type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 5]
6. <b>Program Service Certification.</b> (For Low Power Television Applicants Only) Applicant certifies that this station will offer a broadcast program service.	<input checked="" type="radio"/> Yes <input type="radio"/> No
7. <b>Local Public Notice.</b> (For new station and major change Applicants Only) Applicant certifies that it has or will comply with the public notice requirements of 47 C.F.R. Section 73.3580.	<input checked="" type="radio"/> Yes <input type="radio"/> No
8. <b>Rebroadcast Certification.</b> (For Applicants proposing translator rebroadcasts that are not the licensee of the primary station) Applicant certifies that written authority has been obtained from the licensee of the station whose programs are to be retransmitted.	<input type="radio"/> Yes <input type="radio"/> No
9. <b>Auction Authorization.</b> If the application is being submitted to obtain a construction permit for which the applicant was the winning bidder in an auction, then the applicant certifies, pursuant to 47 C.F.R. Section 73.5005(a), that it has attached an exhibit containing the information required by 47 C.F.R. Sections 1.2107(d), 1.2110(i), 1.2112(a) and 1.2112(b), if applicable. <b>An exhibit is required unless this question is inapplicable.</b>	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> N/A [Exhibit 6]
10. <b>Anti-Drug Abuse Act Certification.</b> Applicant certifies that neither applicant nor any party to the application is subject to denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862.	<input checked="" type="radio"/> Yes <input type="radio"/> No

I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith. I acknowledge that all certifications and attached Exhibits are considered material representations. I hereby waive any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and request an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)

Typed or Printed Name of Person Signing DENNIS WAHLSTROM	Typed or Printed Title of Person Signing DIVISIONAL VICE PRESIDENT
Signature	Date 12/3/2009

### SECTION III - ENGINEERING DATA (Digital)

#### TECHNICAL SPECIFICATIONS

Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.

#### TECH BOX

1. Channel Number: 38										
2. Translator Input Channel No. : 12										
3. Primary station proposed to be rebroadcast:										
<table border="1"> <tr> <th>Facility Identifier</th> <th>Call Sign</th> <th>City</th> <th>State</th> <th>Channel</th> </tr> <tr> <td>68853</td> <td>KEYC-TV</td> <td>MANKATO</td> <td>MN</td> <td>12</td> </tr> </table>	Facility Identifier	Call Sign	City	State	Channel	68853	KEYC-TV	MANKATO	MN	12
Facility Identifier	Call Sign	City	State	Channel						
68853	KEYC-TV	MANKATO	MN	12						
4. Antenna Location Coordinates: (NAD 27) Latitude: Degrees 44 Minutes 6 Seconds 25 <input checked="" type="radio"/> North <input type="radio"/> South  Longitude: Degrees 94 Minutes 35 Seconds 44 <input checked="" type="radio"/> West <input type="radio"/> East										

5. Antenna Structure Registration Number: 1031876  
☐ Not Applicable [Exhibit 10] ☐ Notification filed with FAA

6. Antenna Location Site Elevation Above Mean Sea Level: 317 meters

7. Overall Tower Height Above Ground Level: 303.3 meters

8. Height of Radiation Center Above Ground Level: 298 meters

9. Maximum Effective Radiated Power (ERP): 1.9 kW

10. Transmitter Output Power: 0.25 kW

11. a. Transmitting Antenna:  
 Before selecting Directional "Off-the-Shelf", refer to "Search for Antenna Information" under CDBS Public Access ([http://licensing.fcc.gov/prod/cdbbs/pubacc/prod/cdbbs\\_pa.htm](http://licensing.fcc.gov/prod/cdbbs/pubacc/prod/cdbbs_pa.htm)). Make sure that the Standard Pattern is marked Yes and that the relative field values shown match your values. Enter the Manufacturer (Make) and Model exactly as displayed in the Antenna Search.  
☒ Nondirectional ☐ Directional "Off-the-shelf" ☐ Directional composite  
 Manufacturer KAT Model 771-304

b. Electrical Beam Tilt: degrees ☒ Not Applicable

c. Directional Antenna Relative Field Values: ☒ N/A (Nondirectional or Directional "Off-the-shelf")  
 Rotation (Degrees): ☐ No Rotation

Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value
0		10		20		30		40		50	
60		70		80		90		100		110	
120		130		140		150		160		170	
180		190		200		210		220		230	
240		250		260		270		280		290	
300		310		320		330		340		350	
Additional Azimuths											

Relative Field Polar Plot

**NOTE:** In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.

12. Out-of-channel Emission Mask: ☒ Simple ☐ Stringent

**CERTIFICATION**

13. **Interference :** The proposed facility complies with all of the following applicable rule sections. 47.C.F.R Sections 74.709, 74.793(e), 74.793(f), 74.793(g), 74.793(h), 74.794(b) and 73.1030. ☒ Yes ☐ No  
See Explanation in [Exhibit 11]

14. **Environmental Protection Act.** The proposed facility is excluded from environmental processing under 47. C.F.R. Section 1.1306 (i.e., The facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the applicant can determine RF compliance, an Exhibit is required. ☒ Yes ☐ No  
See Explanation in [Exhibit 12]

By checking "Yes" above, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.

15. **Channels 52-59.** If the proposed channel is within channels 52-59, the applicant certifies compliance with the following requirements, as applicable:
- ☐ The applicant is applying for a digital companion channel for which no suitable channel from channel 2-51 is available.
  - ☐ Pursuant to Section 74.786(d), the applicant has notified, within 30 days of filing this application, all commercial wireless licenses of the spectrum comprising the proposed TV channel and the first adjacent channels thereto, for which the proposed digital LPTV or TV translator antenna site lies inside the licensed geographic boundaries of the wireless licensees or within 75 miles and 50 miles, respectively, of the geographic boundaries of co-channel and adjacent-channel wireless licensees.
16. **Channels 60-69.** If the proposed channel is within channels 60-69, the applicant certifies compliance with the following requirements, as applicable:
- ☐ Pursuant to Section 74.786(e), the applicant has notified, within 30 days of filing this application, all commercial wireless licenses of the spectrum comprising the proposed TV channel and the first adjacent channels thereto, for which the proposed digital LPTV or TV translator antenna site lies inside the licensed geographic boundaries of the wireless licensees or within 75 miles and 50 miles, respectively, of the geographic boundaries of co-channel and adjacent-channel wireless licensees.
  - ☐ Pursuant to Section 74.786(e), the applicant proposing operation on channel 63, 64, 68 and 69 ("public safety channels") has secured a coordinated spectrum use agreements(s) with 700 MHz public safety regional planning committee(s) and state administrator(s) of the region(s) and state(s) within which the antenna site of the digital LPTV or TV translator station is proposed to locate, and those adjoining regions and states with boundaries within 75 miles of the proposed station location.
  - ☐ Pursuant to Section 74.786(e), the applicant for a channel adjacent to channel 63, 64, 68 or 69 has notified, within 30 days of filing this application, the 700 MHz public safety regional planning committee(s) and state administrator(s) of the region and state containing the proposed digital LPTV or TV translator antenna site and regions and states whose geographic boundaries lie within 50 miles of the proposed LPTV or TV translator antenna site.

**PREPARERS CERTIFICATION ON PAGE 3 MUST BE COMPLETED AND SIGNED.**

### SECTION III PREPARER'S CERTIFICATION

I certify that I have prepared Section III (Engineering Data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name RICHARD H. MERTZ	Relationship to Applicant (e.g., Consulting Engineer) CONSULTANT
Signature	Date 12/3/2009
Mailing Address CAVELL, MERTZ & ASSOCIATES, INC. 7839 ASHTON AVENUE	

City MANASSAS	State or Country (if foreign address) VA	Zip Code 20109 -
Telephone Number (include area code) 7033929090	E-Mail Address (if available) RMERTZ@CAVELLMERTZ.COM	

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

## Exhibits

### Exhibit 11

**Description:** REPLACEMENT LPTV TRANSLATOR EXHIBIT 11

EXHIBIT 11 CONTAINS STATEMENT A, NATURE OF THE PROPOSAL/ALLOCATION CONSIDERATIONS/INTERFERENCE ANALYSIS, FIGURE 1, AND TABLE I

### Attachment 11

Description
Replacement LPTV Translator Exhibit 11

### Exhibit 12

**Description:** REPLACEMENT LPTV TRANSLATOR EXHIBIT 12

EXHIBIT 47 CONTAINS THE TABLE OF CONTENTS, A COPY OF THE FCC FORM AS UPLOADED, AND STATEMENT B, ENVIRONMENTAL CONSIDERATIONS

### Attachment 12

Description
Replacement LPTV Translator Exhibit 12



Exhibit 11 - Statement A  
**NATURE OF THE PROPOSAL**  
**ALLOCATION CONSIDERATIONS**  
**INTERFERENCE ANALYSIS**

prepared for

**United Communications Corporation**  
KEYC-TV Mankato, Minnesota  
Replacement Digital Low Power Television Translator  
Ch. 38 1.9 kW

*United Communications Corporation*, (“UCC”) is the licensee of KEYC-TV, Facility ID 68853, Mankato, Minnesota. KEYC is current operating on its post-transition digital Channel 12 and is authorized<sup>1</sup> for the effective radiated power (“ERP”) of 15.2 kW. The station also has a construction permit (“CP”) to increase the ERP to 52.7kW<sup>2</sup>. Since the new transmitter equipment for the CP will not be available for operation for some time, the UCC requested an STA<sup>3</sup> to operate at 35 kW ERP using the existing transmitter and antenna. The STA application is still pending.

Since KEYC commenced digital operation on June 12, 2009, the station has received a flood of complaints from former analog viewers who can no longer receive the Channel 12 programs. The Commission is aware of the problems with reception of high-band VHF stations. Accordingly, UCC proposes herein to construct a replacement digital low power television translator<sup>4</sup> on Channel 38 to aid in restoring KEYC and CBS network programming to off-air viewers within a portion of the South-Central Minnesota area near St. James that are still unable to receive the Channel 12 digital signal.

The attached **Exhibit 11 – Figure 1** depicts the 51 dBμ service contour for the proposed translator. Also shown is the digital service contour for the currently authorized and CP facilities for KEYC-DT facility along with the Grade B contour for the former, pre-transition analog Channel 12 facility. As demonstrated, the service contour for the proposed translator is completely contained within the former KEYC-TV analog Grade B contour.

The proposed digital translator facility will employ an existing multi-user antenna system that is top-mounted on an existing tower structure. No tower structure or antenna installation work

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<sup>1</sup> See BPCDT-20080410ABU covered by license application BLCDT-20090622AGL.

<sup>2</sup> See BMPCDT-20080620AHS

<sup>3</sup> See BDSTA-20090708AJD

<sup>4</sup> Report and Order, *Amendment of Parts 73 and 74 of the Commission's Rules to Establish Rules for Replacement Digital*

## Exhibit 11 - Statement A

(Page 2 of 3)

will be required to implement the instant proposal. The antenna, a Kathrein model 771-304, is horizontally polarized. No electrical beam tilt will be employed. The proposed ERP for the translator is 1.9 kW.

### **Allocation Considerations**

Consistent with Commission policy regarding potential interference from LPTV and television translator facilities, a detailed interference study was conducted in accordance with the terrain dependent Longley-Rice point-to-point propagation model, per the Commission's Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, February 6, 2004 ("OET 69")<sup>5</sup>. A "simple" out-of-band emissions mask is specified.

One pending application was not considered in the interference study. The excluded facility is that for a new digital LPTV station, FCC File No. BNPDTL-20090825BEG. As processing priority is afforded replacement LPTV translators over new digital LPTV facilities<sup>6</sup>, it is appropriate to exclude this facility from evaluation. Further, the applicant for the new LPTV station, Cooperative Television Association of Southern Minnesota, has informed *UCC* that their application will be withdrawn in favor of the instant application.

The interference study examined the change in predicted interference to existing facilities, CPs and applications that would result from the proposed facility. The results from the study are summarized in **Exhibit 11 – Table I**, and indicate that the instant proposal complies with §74.793 regarding interference protection to digital television, low power television, television translator, and Class A television facilities.

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*Low Power Television Translator Stations*, MB Docket No. 08-253, FCC 09-36, released May 8, 2009.

<sup>5</sup>The implementation of OET 69 for this study followed the guidelines of OET-69 as specified therein. **A cell size of 1 km and a terrain increment of 1.0 km were employed.** Comparisons of various results of this computer program (run on a Sun processor) to the Commission's implementation of OET 69 show excellent correlation.

<sup>6</sup> See Paragraph 11 of the Report and Order referenced in Footnote 3.

**Other Allocation Considerations**

The nearest FCC monitoring station is at Grand Island, Nebraska, at a distance of 473.6 km from the proposed site. This exceeds by a great margin the threshold minimum distance specified in §73.1030(c)(3) that would suggest consideration of the monitoring station. The proposed site is also located outside the area specified in §73.1030(b)(1). Thus, notification of the instant proposal to the Table Mountain Receiving Zone at Boulder, Colorado, is not required. The facility is located 489.7 km from the nearest point of the common U.S.-Canadian border. Thus, international coordination is not believed to be necessary. There are no AM broadcast stations located within 3.2 km (2 miles) of the proposed site, according to information extracted from the Commission's engineering database.

Thus, this proposal is believed to be in compliance with the current Commission's Rules and policy with respect to allocation matters.

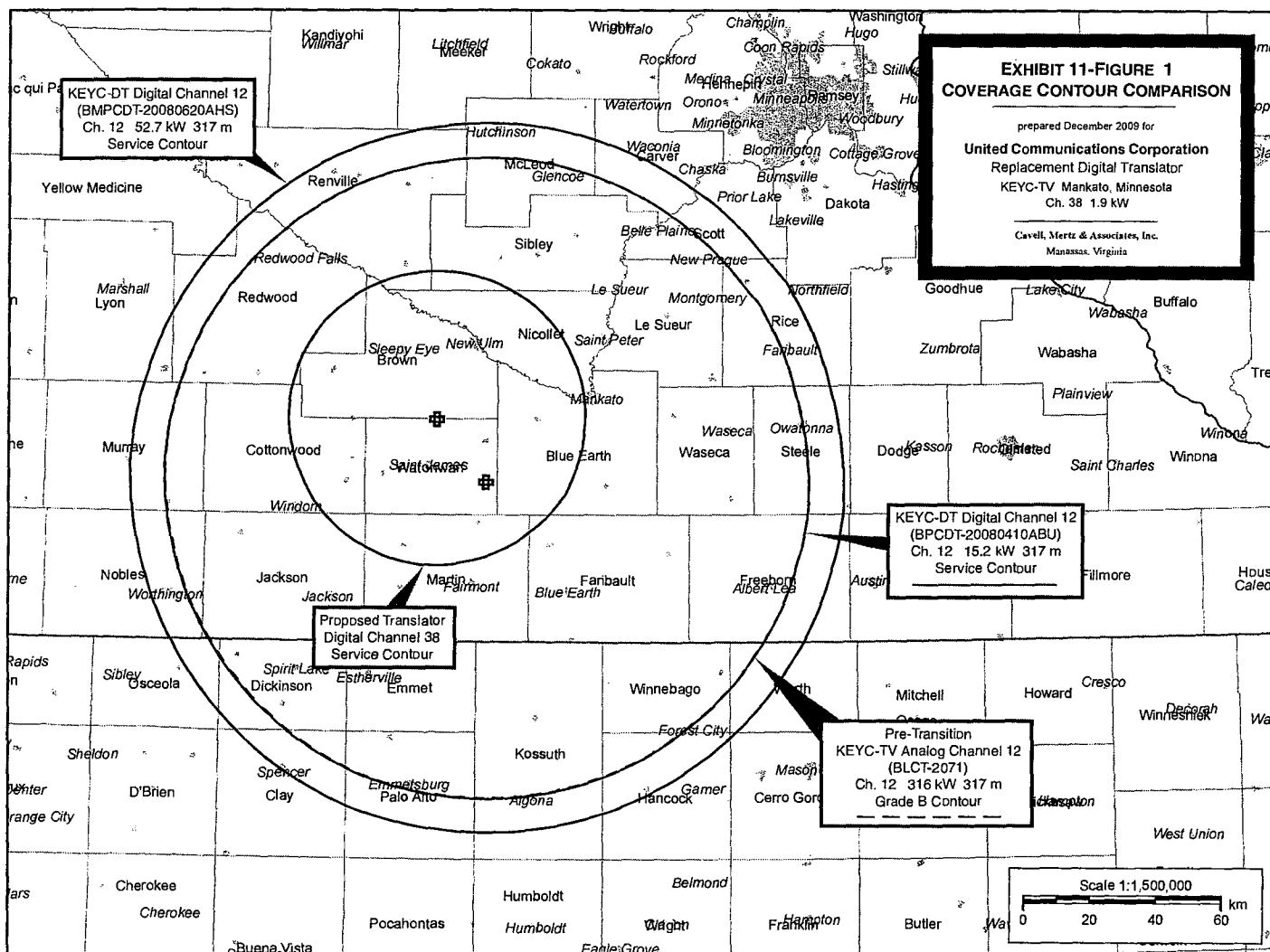


Exhibit 11 - Table I  
**INTERFERENCE STUDY RESULTS**  
 prepared for  
**United Communications Corporation**  
 New Replacement LPTV Translator St. James, MN  
 Facility Id: New  
 Ch. 38 1.9 kW

<u>Channel</u>	<u>Affected Station</u>	<u>City, State</u>	<u>File Number</u>	<u>Calculated Baseline (2000 Census)</u>	<u>Interference Population without Proposal (2000 Census)</u>	<u>Interference Population with Proposal (2000 Census)</u>	<u>New Interference</u>	
							<u>Population</u>	<u>Percentage</u>
23	K63AU	Granite Falls, MN	BDISTTL-20060720ADF			--- No Interference ---		
23	K23FP	Olivia, MN	BLTTL-20030110ADA			--- No Interference ---		
24	K24CS	Granite Falls, MN	BLTTL-19910227KC			--- No Interference ---		
24	K24CP	St. James, MN	BLTT-20050908ABZ			--- No Interference ---		
24	K24CP	St. James, MN	BPTTL-20080602AHJ			--- No Interference ---		
30	K30FZ	Willmar, MN	BLTT-20000920ADB			--- No Interference ---		
34	K34HO	Willmar, MN	BLTTL-20040901ACS			--- No Interference ---		
35	K35DK	Granite Falls, MN	BLTTL-19930217JP			--- No Interference ---		
35	K35IZ-D	Jackson, MN	BDISTTL-20060720ACV			--- No Interference ---		
35	K35DC	St. James, MN	BLTTL-19970522JJ			--- No Interference ---		
35	K35DC	St. James, MN	BPTTL-20090916ACT			--- No Interference ---		
36	K36FI	Frost, MN	BLTTL-20020426AAV			--- No Interference ---		
38	K41AD	Lansing, IA	BDISDTT-20090528AEA			--- No Interference ---		
38	K38AC	Alexandria, MN	BLTTL-19790216ID			--- No Interference ---		
38	WDSE	Duluth, MN	BDRTEDT-20090710ARN			--- No Interference ---		
38	K62BH-D	Max, MN	BDISDTT-20090824AKQ			--- No Interference ---		
38	K55CK	Olivia, MN	BDISDTT-20090504ABS			--- No Interference ---		
38	KTCL-DR	St. Paul, MN	BPRM-20080620AFM	3,346,631	0	9,157	9,157	0.275 %
38	KXVO	Omaha, NE	BPCDT-20090202AGZ			--- No Interference ---		
38	KXVO-DR	Omaha, NE	BPRM-20080623ADT			--- No Interference ---		
38	K38CQ	Huron, SD	BLTT-19920619JL			--- No Interference ---		
39	K39JI	Frost, MN	BLTTL-20070316AAP			--- No Interference ---		
39	K39JI	Frost, MN	BSTA-20061006AAF			--- No Interference ---		
39	K69DP	Granite Falls, MN	BDISTTL-20060720ADB			--- No Interference ---		
39	K39CH	Redwood Falls, MN	BLTTL-19890831IG			--- No Interference ---		
39	K39FE	Willmar, MN	BDFCDTT-20090617ADD			--- No Interference ---		
39	K39FE	Willmar, MN	BLTT-20020212AAC			--- No Interference ---		
40	K40JT	Albert Lea, MN	BLTT-20070427ADN			--- No Interference ---		
40	K40JT	Albert Lea, MN	BDISTT-20060703AAX			--- No Interference ---		
40	K40JS-D	Frost, MN	BDISTTL-20060912AEO			--- No Interference ---		
40	K18HP	Jackson, MN	BSTA-20090727AFK			--- No Interference ---		
40	K40BU	St. James, MN	BMPITL-20090916ACU			--- No Interference ---		
40	K40BU	St. James, MN	BLTTL-19951120JZ			--- No Interference ---		
41	K41IZ-D	St. James, MN	BPTTL-20080604AAS			--- No Interference ---		
42	K42AV	St. James, MN	BLTTL-19970507JP			--- No Interference ---		
42	K42AV	St. James, MN	BMPITL-20090916ACR			--- No Interference ---		
45	K45DJ	Granite Falls, MN	BLTTL-19920529IC			--- No Interference ---		

Exhibit 11 - Table I  
**INTERFERENCE STUDY RESULTS**  
 prepared for  
**United Communications Corporation**  
 New Replacement LPTV Translator St. James, MN  
 Facility Id: New  
 Ch. 38 1.9 kW

<u>Channel</u>	<u>Affected Station</u>	<u>City, State</u>	<u>File Number</u>	<u>Calculated Baseline (2000 Census)</u>	<u>Interference Population without Proposal (2000 Census)</u>	<u>Interference Population with Proposal (2000 Census)</u>	<u>New Interference</u>	
							<u>Population</u>	<u>Percentage</u>
45	K45FR	Olivia, MN	BLTTL-20030110ACY			--- No Interference ---		
46	K46FY	Redwood Falls, MN	BLTTL-20011219AAH			--- No Interference ---		
46	K46AA	St. James, MN	BLTTL-19970522JG			--- No Interference ---		
46	K46AA	St. James, MN	BPTTL-20080602AHX			--- No Interference ---		

# ENGINEERING EXHIBIT

## Application for Construction Permit For A Replacement Digital Low Power Television Translator

prepared for  
**United Communications Corporation**

KEYC-TV Mankato, Minnesota  
Ch. 38 1.9 kW

### Table of Contents

FCC Form 346, Section III – Engineering Data (Digital)

#### Exhibit 11

Statement A	Nature of the Proposal, Allocation Considerations, Interference Analysis
Figure 1	Coverage Contour Comparison
Table I	Interference Analysis Results Summary

#### Exhibit 12

Statement B	Environmental Considerations
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*This material supplies a "hard copy" of the engineering portions of this application as entered December 3, 2009 for filing electronically. Since the FCC's electronic filing system may be accessed by anyone with the applicant's name and password, and electronic data may otherwise be altered in an unauthorized fashion, we cannot be responsible for changes made subsequent to our entry of this data and related attachments.*

**SECTION III - ENGINEERING DATA (Digital)****TECHNICAL SPECIFICATIONS**

Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.

**TECH BOX**

1.	Channel Number: 38																																																																																																
2.	Translator Input Channel No. : 12																																																																																																
3.	Primary station proposed to be rebroadcast:																																																																																																
	<table border="1"> <tr> <td>Facility Identifier</td> <td>Call Sign</td> <td>City</td> <td>State</td> <td>Channel</td> </tr> <tr> <td>68853</td> <td>KEYC-TV</td> <td>MANKATO</td> <td>MN</td> <td>12</td> </tr> </table>	Facility Identifier	Call Sign	City	State	Channel	68853	KEYC-TV	MANKATO	MN	12																																																																																						
Facility Identifier	Call Sign	City	State	Channel																																																																																													
68853	KEYC-TV	MANKATO	MN	12																																																																																													
4.	Antenna Location Coordinates: (NAD 27) Latitude: Degrees 44 Minutes 06 Seconds 25 <input checked="" type="radio"/> North <input type="radio"/> South  Longitude: Degrees 94 Minutes 35 Seconds 44 <input checked="" type="radio"/> West <input type="radio"/> East																																																																																																
5.	Antenna Structure Registration Number: 1031876 <input type="checkbox"/> Not Applicable [Exhibit 10] <input type="checkbox"/> Notification filed with FAA																																																																																																
6.	Antenna Location Site Elevation Above Mean Sea Level: 317 meters																																																																																																
7.	Overall Tower Height Above Ground Level: 303.3 meters																																																																																																
8.	Height of Radiation Center Above Ground Level: 298 meters																																																																																																
9.	Maximum Effective Radiated Power (ERP): 1.9 kW																																																																																																
10.	Transmitter Output Power: 0.25 kW																																																																																																
11.	a. Transmitting Antenna: Before selecting Directional "Off-the-Shelf", refer to "Search for Antenna Information" under CDBS Public Access ( <a href="http://licensing.fcc.gov/prod/cdb/publicacc/prod/cdb_pa.htm">http://licensing.fcc.gov/prod/cdb/publicacc/prod/cdb_pa.htm</a> ). Make sure that the Standard Pattern is marked Yes and that the relative field values shown match your values. Enter the Manufacturer (Make) and Model exactly as displayed in the Antenna Search. <input checked="" type="radio"/> Nondirectional <input type="radio"/> Directional "Off-the-shelf" <input type="radio"/> Directional composite  Manufacturer KAT Model 771-304  b. Electrical Beam Tilt: degrees <input checked="" type="checkbox"/> Not Applicable  c. Directional Antenna Relative Field Values: <input checked="" type="checkbox"/> N/A (Nondirectional or Directional "Off-the-shelf") Rotation (Degrees): <input type="checkbox"/> No Rotation <table border="1"> <thead> <tr> <th>Degrees</th> <th>Value</th> <th>Degrees</th> <th>Value</th> <th>Degrees</th> <th>Value</th> <th>Degrees</th> <th>Value</th> <th>Degrees</th> <th>Value</th> <th>Degrees</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>0</td> <td></td> <td>10</td> <td></td> <td>20</td> <td></td> <td>30</td> <td></td> <td>40</td> <td></td> <td>50</td> <td></td> </tr> <tr> <td>60</td> <td></td> <td>70</td> <td></td> <td>80</td> <td></td> <td>90</td> <td></td> <td>100</td> <td></td> <td>110</td> <td></td> </tr> <tr> <td>120</td> <td></td> <td>130</td> <td></td> <td>140</td> <td></td> <td>150</td> <td></td> <td>160</td> <td></td> <td>170</td> <td></td> </tr> <tr> <td>180</td> <td></td> <td>190</td> <td></td> <td>200</td> <td></td> <td>210</td> <td></td> <td>220</td> <td></td> <td>230</td> <td></td> </tr> <tr> <td>240</td> <td></td> <td>250</td> <td></td> <td>260</td> <td></td> <td>270</td> <td></td> <td>280</td> <td></td> <td>290</td> <td></td> </tr> <tr> <td>300</td> <td></td> <td>310</td> <td></td> <td>320</td> <td></td> <td>330</td> <td></td> <td>340</td> <td></td> <td>350</td> <td></td> </tr> <tr> <td>Additional Azimuths</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	0		10		20		30		40		50		60		70		80		90		100		110		120		130		140		150		160		170		180		190		200		210		220		230		240		250		260		270		280		290		300		310		320		330		340		350		Additional Azimuths											
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**Relative Field Polar Plot**

**NOTE:** In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.

12. Out-of-channel Emission Mask: ☒ Simple ☐ Stringent

**CERTIFICATION**



13.	<b>Interference :</b> The proposed facility complies with all of the following applicable rule sections. 47.C.F.R Sections 74.709, 74.793(e), 74.793(f), 74.793(g), 74.793(h), 74.794(b) and 73.1030.	<input checked="" type="radio"/> Yes <input type="radio"/> No  See Explanation in [Exhibit 11]
14.	<b>Environmental Protection Act.</b> The proposed facility is excluded from environmental processing under 47. C.F.R. Section 1.1306 (i.e., The facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the applicant can determine RF compliance, an <b>Exhibit is required.</b>  By checking "Yes" above, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.	<input checked="" type="radio"/> Yes <input type="radio"/> No  See Explanation in [Exhibit 12]
15.	<b>Channels 52-59.</b> If the proposed channel is within channels 52-59, the applicant certifies compliance with the following requirements, as applicable:  <input type="checkbox"/> The applicant is applying for a digital companion channel for which no suitable channel from channel 2-51 is available.  <input type="checkbox"/> Pursuant to Section 74.786(d), the applicant has notified, within 30 days of filing this application, all commercial wireless licenses of the spectrum comprising the proposed TV channel and the first adjacent channels thereto, for which the proposed digital LPTV or TV translator antenna site lies inside the licensed geographic boundaries of the wireless licensees or within 75 miles and 50 miles, respectively, of the geographic boundaries of co-channel and adjacent-channel wireless licensees.	
16.	<b>Channels 60-69.</b> If the proposed channel is within channels 60-69, the applicant certifies compliance with the following requirements, as applicable:  <input type="checkbox"/> Pursuant to Section 74.786(e), the applicant has notified, within 30 days of filing this application , all commercial wireless licenses of the spectrum comprising the proposed TV channel and the first adjacent channels thereto, for which the proposed digital LPTV or TV translator antenna site lies inside the licensed geographic boundaries of the wireless licensees or within 75 miles and 50 miles, respectively, of the geographic boundaries of co-channel and adjacent-channel wireless licensees.  <input type="checkbox"/> Pursuant to Section 74.786(e), the applicant proposing operation on channel 63, 64, 68 and 69 ("public safety channels") has secured a coordinated spectrum use agreements(s) with 700 MHz public safety regional planning committee(s) and state administrator(s) of the region(s) and state(s) within which the antenna site of the digital LPTV or TV translator station is proposed to locate, and those adjoining regions and states with boundaries within 75 miles of the proposed station location.  <input type="checkbox"/> Pursuant to Section 74.786(e), the applicant for a channel adjacent to channel 63, 64, 68 or 69 has notified, within 30 days of filing this application, the 700 MHz public safety regional planning committee(s) and state administrator(s) of the region and state containing the proposed digital LPTV or TV translator antenna site and regions and states whose geographic boundaries lie within 50 miles of the proposed LPTV or TV translator antenna site.	
<b>PREPARERS CERTIFICATION ON PAGE 3 MUST BE COMPLETED AND SIGNED.</b>		

SECTION III PREPARER'S CERTIFICATION

I certify that I have prepared Section III (Engineering Data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name RICHARD H. MERTZ	Relationship to Applicant (e.g., Consulting Engineer) CONSULTANT	
Signature	Date 12/3/2009	
Mailing Address CAVELL, MERTZ & ASSOCIATES, INC. 7839 ASHTON AVENUE		
City MANASSAS	State or Country (if foreign address) VA	Zip Code 20109 -
Telephone Number (include area code) 7033929090	E-Mail Address (if available) RMERTZ@CAVELLMERTZ.COM	

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

## Exhibits

### Exhibit 11

**Description:** REPLACEMENT LPTV TRANSLATOR EXHIBIT 11

EXHIBIT 11 CONTAINS STATEMENT A, NATURE OF THE PROPOSAL/ALLOCATION CONSIDERATIONS/INTERFERENCE ANALYSIS, FIGURE 1, AND TABLE I

### Attachment 11

Description
Replacement LPTV Translator Exhibit 11

### Exhibit 12

**Description:** REPLACEMENT LPTV TRANSLATOR EXHIBIT 12

EXHIBIT 47 CONTAINS THE TABLE OF CONTENTS, A COPY OF THE FCC FORM AS UPLOADED, AND STATEMENT B, ENVIRONMENTAL CONSIDERATIONS

### Attachment 12

Description
Replacement LPTV Translator Exhibit 12

Exhibit 12 - Statement B  
**ENVIRONMENTAL CONSIDERATIONS**  
prepared for  
**United Communications Corporation**  
KEYC-TV Mankato, Minnesota  
Replacement Digital Low Power Television Translator  
Ch. 38 1.9 kW

The instant proposal is not believed to have a significant environmental impact as defined under §1.1306 of the Commission's Rules. Consequently, preparation of an Environmental Assessment is not required.

**Nature of The Proposal**

*United Communications Corporation*, ("UCC") proposes herein to construct a new replacement low power television translator at an existing transmitter site (Antenna Structure Registration No. 1031876). The transmitting antenna will be an existing multi-user antenna, top-mounted on an existing antenna support structure. No change in structure overall height is necessary to carry out this proposal. The use of existing transmitting locations has been characterized as being environmentally preferable by the Commission, according to Note 1 of §1.1306 of the FCC Rules. Since no change in overall structure height is proposed, no change in current structure marking and lighting requirements is anticipated.

**Human Exposure to Radiofrequency Radiation**

The proposed operation was evaluated for human exposure to radiofrequency energy using the procedures outlined in the Commission's OET Bulletin No. 65 ("OET 65"). OET 65 describes a means of determining whether a proposed facility exceeds the radiofrequency exposure guidelines adopted in §1.1310. Under present Commission policy, a facility may be presumed to comply with the limits specified in §1.1310 if it satisfies the exposure criteria set forth in OET 65. Based upon that methodology, and as demonstrated in the following, the proposed transmitting system will comply with the cited adopted guidelines.

The proposed translator antenna has a center of radiation 298 meters above ground level. An ERP of 1.9 kilowatts, horizontally polarized, will be employed utilizing a Kathrein model 771-304 non-directional antenna. A value of 100 percent vertical plane relative field is used for this calculation.

**Cavell, Mertz & Associates, Inc.**

Exhibit 12 - Statement B  
**ENVIRONMENTAL CONSIDERATIONS**  
(Page 2 of 3)

The “uncontrolled/general population” limit specified in §1.1310 for Channel 38 (center frequency 617 MHz) is 411.3  $\mu\text{W}/\text{cm}^2$ .

OET 65’s formula for television transmitting antennas is based on the NTSC transmission standards, where the average power is normally much less than the peak power. For the DTV facility in the instant proposal, the peak-to-average ratio is different than the NTSC ratio. The DTV ERP figure herein refers to the *average* power level. The formula used for calculating DTV signal density in this analysis is essentially the same as equation (10) in OET 65.

$$S = (33.4098) (F^2) (ERP) / D^2$$

Where:

S	=	power density in microwatts/cm <sup>2</sup>
ERP	=	total (average) ERP in Watts
F	=	relative field factor
D	=	distance in meters

Using this formula, the proposed facility would contribute a power density of 0.72  $\mu\text{W}/\text{cm}^2$  at two meters above ground level near antenna support structure, or 0.18 percent of the general population/uncontrolled limit. At ground level locations away from the base of the tower, the calculated RF power density is even lower, due to the increasing distance from the transmitting antenna.

§1.1307(b)(3) states that facilities at locations with multiple transmitters (such as the case at hand) are categorically excluded from responsibility for taking any corrective action in the areas where their contribution is less than five percent. Since the instant situation meets the five percent exclusion test at all ground level areas, the impact of any other facilities using this site may be considered independently from this proposal. Accordingly, it is believed that the impact of the proposed operation should not be considered to be a factor at or near ground level as defined under §1.1307(b).

**Safety of Tower Workers and the General Public**

**Cavell, Mertz & Associates, Inc.**

Exhibit 12 - Statement B  
**ENVIRONMENTAL CONSIDERATIONS**  
(Page 3 of 3)

As demonstrated herein, excessive levels of RF energy attributable to the proposal will not be caused at publicly accessible areas at ground level near the antenna supporting structure. Consequently, members of the general public will not be exposed to RF levels in excess of the Commission's guidelines. Nevertheless, tower access will continue to be restricted and controlled through the use of a locked fence. Additionally, appropriate RF exposure warning signs will continue to be posted.

With respect to worker safety, it is believed that based on the preceding analysis, excessive exposure attributable to the instant proposal would not occur in areas at ground level. A site exposure policy will continue to be employed protecting maintenance workers from excessive exposure when work must be performed on the tower or in areas where high RF levels may be present. Such protective measures may include, but will not be limited to, restriction of access to areas where levels in excess of the guidelines may be expected, power reduction, or the complete shutdown of facilities when work or inspections must be performed in areas where the exposure guidelines would otherwise be exceeded. On-site RF exposure measurements may also be undertaken to establish the bounds of safe working areas. The applicant will coordinate exposure procedures with all pertinent stations.

**Conclusion**

Based on the preceding, it is believed that the instant proposal may be categorically excluded from environmental processing under §1.1306 of the Rules, hence preparation of an Environmental Assessment is not required.

**FCC MB - CDBS Electronic Filing**  
**Application Reference Number: 20091215ABA**  
**Successfully filed at Dec 15 2009 11:12AM**

**A Fee Payment is Required for this application. The Total Fee is \$705.**

You can use the FCC's Electronic Form 159 System to pay electronically and/or to print out an appropriate Form 159. Press the button below now or return to this screen later by pressing the "Pay Fee" button on the CDBS Main Menu/ Informal Menu. See the [CDBS User's Guide](#) for more information about fee payment.

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Payment must be received by US Bank within 14 (calendar) days of the date that the application is officially received by the Media Bureau's electronic filing system (indicated by the reference number above). This deadline applies to any payment submission method (electronic or via a paper check). If payment is not received in time, the filed application will be considered to be **not paid** and will therefore not be processed by the MB.