

Engineering Exhibit

APPLICATION FOR A CLASS A TELEVISION STATION LICENSE REQUEST TO TRANSFER PRIMARY STATUS

prepared for

Polnet Communications, LTD.

WPVN-CA Aurora, Illinois

Facility ID 168237

Ch. 20 10 kW

Table of Contents

FCC Form 302-CA, Section III – Engineering

Exhibit 7

Statement A	Engineering Statement
Table I	Interference Study Results Summary - WPVN-LD License Facility
Table II	Interference Study Results Summary - WPVN-LD CP Facility

This material supplies a "hard copy" of the engineering portions of this application as entered September 2, 2011 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**TECHNICAL SPECIFICATIONS**

Ensure that the specifications below are accurate. All items must be completed. The response "on file" is not acceptable.

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

TECH BOX

1.	Channel: 20														
2.	Frequency Offset (analog stations): <input type="radio"/> No offset <input type="radio"/> Zero offset <input type="radio"/> Plus offset <input type="radio"/> Minus offset														
3.	Antenna Location Coordinates: (NAD 27) Latitude: Degrees 42 Minutes 2 Seconds 39 <input checked="" type="radio"/> North <input type="radio"/> South Longitude: Degrees 88 Minutes 2 Seconds 36 <input checked="" type="radio"/> West <input type="radio"/> East														
4.	<table border="1"> <tr> <td colspan="2">Operating Constants:</td> <td></td> <td></td> </tr> <tr> <td colspan="2">Transmitter power output (after vestigial sideband filter, if used, and after multiplexer, if combined) 1.97 dBk 1.57 kW</td> <td>Multiplexer loss in dB, if separate dB</td> <td>Input to transmission line 1.97 dBk</td> </tr> <tr> <td>Transmission line power loss 1.00 dB</td> <td>Antenna Input power 0.97 dBk</td> <td>Maximum antenna power gain 9.03 dB</td> <td>Maximum effective radiated power 10 dBk 10kW</td> </tr> </table>			Operating Constants:				Transmitter power output (after vestigial sideband filter, if used, and after multiplexer, if combined) 1.97 dBk 1.57 kW		Multiplexer loss in dB, if separate dB	Input to transmission line 1.97 dBk	Transmission line power loss 1.00 dB	Antenna Input power 0.97 dBk	Maximum antenna power gain 9.03 dB	Maximum effective radiated power 10 dBk 10kW
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Transmission line power loss 1.00 dB	Antenna Input power 0.97 dBk	Maximum antenna power gain 9.03 dB	Maximum effective radiated power 10 dBk 10kW												
5.	Antenna Data: Manufacturer: DIE Model TLP-8A														
6.	Height of radiation center above mean sea level: 320.7 meters														

CERTIFICATIONS

Part A: For LPTV licensees seeking to convert their licensed or authorized construction permit facilities to Class A status or to cover a displacement application for construction permit for Class A facilities.

1.	Interference. The facility authorized in the license or construction permit or proposed in the construction permit application, complies with the following applicable interference protection rule sections. Analog TV broadcast station protection. See 47 C.F.R. Section 73.6011. <input checked="" type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 9]	
	Digital TV station and DTV Table of Allotments protection. See 47 C.F.R. Section 73.6013. <input checked="" type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 10]	
	Low Power TV, TV translator, Class A, and Digital Class A station protection. See 47 C.F.R. Sections 73.6012 and 73.6014. <input checked="" type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 11]	
	Land mobile station protection. See 47 C.F.R. Section 73.6020. <input checked="" type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 12]	
2.	Changed Circumstances. Apart from changes already reported, no cause or circumstance has arisen since the grant of the underlying LPTV construction permit which would result in any statement or representation contained in the construction permit application to be now incorrect. <input checked="" type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 13]	
Part B: For Class A licensees seeking a license to cover their authorized Class A construction permit facilities.		
1.	Constructed Facility. The facility was constructed as authorized in the underlying construction permit. <input type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 14]	
2.	Special Operating Conditions. The facility was constructed in compliance with all special operating conditions, terms, and obligations described in the construction permit. <input type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 15]	
	An exhibit may be required. Review the underlying construction permit. [Exhibit 16]	
3.	Changed Circumstances. Apart from changes already reported, no cause or circumstance has arisen since the grant of the underlying Class A construction permit which would result in any statement or representation contained in the construction permit application to be now incorrect. <input type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 17]	

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.

true to the best of my knowledge and belief.

Name RICHARD H. MERTZ	Relationship to Applicant (e.g., Consulting Engineer) CONSULTANT	
Signature	Date 09/02/2011	
Mailing Address CAVELL, MERTZ & ASSOCIATES, INC. 7732 DONEGAN DRIVE		
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 1

Description: CLASS A CERTIFICATION

POLNET CERTIFIES THAT THIS LICENSED DIGITAL COMPANION CHANNEL FACILITY MEETS ALL CLASS A INTERFERENCE PROTECTION AND ELIGIBILITY REQUIREMENTS.

Attachment 1

Exhibit 9

Description: EXHIBIT 9

PLEASE SEE EXHIBIT 12

Attachment 9

Exhibit 10

Description: EXHIBIT 10

PLEASE SEE EXHIBIT 12

Attachment 10

Exhibit 11

Description: EXHIBIT 11

PLEASE SEE EXHIBIT 12

Attachment 11

Exhibit 12

Description: EXHIBIT 12

EXHIBIT 12 CONTAINS A TABLE OF CONTENTS, A COPY OF THE FCC FORM, STATEMENT A, AND TABLES I AND II.

Attachment 12

Description
Exhibit 12

Exhibit 12 - Statement A
ENGINEERING STATEMENT
prepared for
Polnet Communications, LTD.
WPVN-CA Aurora, Illinois
Facility ID 168237
Ch. 20 10 kW

Polnet Communications, LTD. (“*Polnet*”) is the licensee of analog Class A television station WPVN-CA¹, Channel 24, Facility ID 72079, Aurora, Illinois and digital companion LPTV station WPVN-LD², Channel 20, Facility ID 168237, Aurora, Illinois. *Polnet* herein seeks, in accordance with the *Second Report and Order*³, to transfer the primary status of the analog facility to that of the digital companion facility.

Nature of the Proposal

No change in the existing facility is proposed. The specifications provided in FCC Form 302-CA, Section III – Engineering, “Tech Boxes” 1 to 6 are identical to those provided in the license application for the WPVN-LD facility.

Allocation Considerations

The proposed facility provides the requisite protections to land mobile operations in the region. Specifically, land mobile operations are authorized on Channel 14 and 15 in the Chicago metropolitan area. With operation on Channel 20, WPVN-CA does not operate on the same or either of the adjacent channels. Thus, the proposed Class A television operation complies with §73.6020 of the Commission’s Rules.

The instant proposal complies with the Commission’s interference protection requirements toward all DTV, television translator, LPTV, and Class A stations. 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 No. 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*,

¹ See BLTTL-19990716JA and BPTTA-20090817ABN

² See BLDLTL-20100315ABN and BPDTL-20110809AAM

³ See paragraph 53, *Second Report and Order, Amendment of Parts 73 and 74 of the Commission’s Rules to Establish Rules for Digital Low Power Television, Television Translator, and Television Booster Stations and to Amend Rules for Digital Class A Television Stations*, MB Docket No. 03-185, FCC 11-110, released July 15, 2011.

Exhibit 12 - Statement A
ENGINEERING STATEMENT
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February 6, 2004 (“OET-69”)⁴. The interference study examined the change in interference as experienced by nearby pertinent stations that would result from the proposed facility.

In performing the OET-69 interference study, the licensed facility for the WPVN-LD digital companion facility (BLDTL-20100315ABN) and the authorized construction permit facility (BPDTL-20110809AAM) were omitted from consideration. Further, the pending application for WGN-TV, Channel 19, Chicago, Illinois (see BPCDT-20080619AFN) was also omitted since this application was dismissed by the Commission on March 23, 2011.

The interference study results, summarized in **Exhibit 12 - Table I**, shows that any new interference does not exceed the Commission’s interference limits (0.5 percent to full service and Class A stations, and 2.0 percent to secondary stations). Accordingly, the instant proposal complies with §§73.6011 to 73.6014 of the Commission’s Rules regarding interference protection to analog and digital television, low power television, television translator, and Class A television facilities.

For completeness, an additional interference study was performed for the authorized WPVN-LD construction permit facility. The interference study results, summarized in **Exhibit 12 - Table II**, shows that any new interference does not exceed the Commission’s interference limits (0.5 percent to full service and Class A stations, and 2.0 percent to secondary stations). Thus, the WPVN-LD construction permit facility will also comply with §§73.6011 to 73.6014 of the Commission’s Rules regarding interference protection to analog and digital television, low power television, television translator, and Class A television facilities.

Since the instant application requests the conveyance of primary status from the analog facility to its digital companion facility, no further allocation or environmental considerations are provided as all facilities under consideration have been authorized by the Commission.

⁴ The implementation of OET-69 for this study followed the guidelines of OET-69 as specified therein. **A cell size of 1 km was employed.**

Exhibit 12 - Table I
INTERFERENCE STUDY RESULTS SUMMARY

prepared for
Polnet Communications, LTD.
 WPVN-CA Aurora, IL
 Facility Id: 168237
 Ch. 20 10 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 Population</u>	<u>Percentage</u>
18	WHNW-LD	Gary, IN	BSTA-20070309ACD			--- No Interference ---		
19	W19DE-D	Champaign/Urbana, IL	BDCCDTL-20061026ACW			--- No Interference ---		
19	WGN-TV	Chicago, IL	BMLCDT-20080201APP	9,452,847	106,628	107,031	403	0.004 %
19	WGN-TV	Chicago, IL	BPCDT-20080619AFN	9,529,644	163,629	166,319	2,690	0.028 %
19	WHOI	Peoria, IL	BLCDT-20090622AFB			--- No Interference ---		
19	W19CX	Sterling-Dixon, IL	BLTT-20070806AFB			--- No Interference ---		
19	W19CX	Sterling-Dixon, IL	BDFCDTT-20060330AMI			--- No Interference ---		
19	WMTV	Madison, WI	BLCDT-20100413AAW			--- No Interference ---		
20	K16EL	Davenport, IA	BDISDTL-20090813ACX			--- No Interference ---		
20	NEW	Chillicothe, IL	BNPDTL-20100510AGG			--- No Interference ---		
20	W20DG-D	Fort Wayne, IN	BNPDTL-20090825AVL			--- No Interference ---		
20	WHMB-DR	Indianapolis, IN	BPRM-20080619AEU			--- No Interference ---		
20	WHMB-TV	Indianapolis, IN	BPCDT-20090424ACR	2,522,189	2,398	2,398	0	0.000 %
20	WUVI-LD	West Lafayette, IN	BSTA-20100706CUS			--- No Interference ---		
20	WUVI-LD	West Lafayette, IN	BLDTL-20110120ADG			--- No Interference ---		
20	WOTV	Battle Creek, MI	BLCDT-20030721AHS	2,107,060	22,834	22,845	11	0.001 %
20	WOTV	Battle Creek, MI	BPCDT-20091104AEK	2,174,366	15,085	15,085	0	0.000 %
20	WHNE-LD	Flint, MI	BDISDTL-20101223ACD			--- No Interference ---		
20	W20DK-D	Roscommon, MI	BNPDTL-20100223ACY			--- No Interference ---		
20	W20DI-D	Traverse City, MI	BNPDTL-20100301ADA			--- No Interference ---		
20	KSMQ-TV	Austin, MN	BLEDT-20081223AAK			--- No Interference ---		
20	NEW	Findlay, OH	BDCCDTL-20061026AGA			--- No Interference ---		
20	WHA-TV	Madison, WI	BLEDT-20091229ACK	1,356,616	11,974	12,331	357	0.026 %
20	WMKE-LD	Milwaukee, WI	BDCCDTL-20061030AFR			--- No Interference ---		
21	WBKM-LP	Chana, IL	BDCCDTL-20061030AMY			--- No Interference ---		
21	WYCC	Chicago, IL	BLEDT-20030501ABC	8,979,748	18,823	62,347	43,524	0.485 %
21	WMKE-LD	Milwaukee, WI	BDISDTL-20100406AAS			--- No Interference ---		
22	W22AJ	Arlington Heights, IL	BLTT-19991020AAO			--- No Interference ---		
23	WWME-CA	Chicago, IL	BSTA-20041208ABO			--- No Interference ---		
23	WWME-CA	Chicago, IL	BPTTA-20081023AAZ			--- No Interference ---		
23	WWME-CA	Chicago, IL	BLTTA-20040129AOW			--- No Interference ---		
24	WPVN-CA	Aurora, IL	BPTTA-20090817ABN			--- No Interference ---		
24	WPVN-CA	Aurora, IL	BLTTL-19990716JA			--- No Interference ---		

Exhibit 12 - Table I
INTERFERENCE STUDY RESULTS SUMMARY
 prepared for
Polnet Communications, LTD.
 WPVN-CA Aurora, IL
 Facility Id: 168237
 Ch. 20 10 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>
24	WHVI-LP	Valparaiso, IN	BLTTL-19921102JE			---	No Interference	---
24	WMLW-CA	Milwaukee, WI	BDISTTA-20081230ACP			---	No Interference	---

Exhibit 12 - Table II
INTERFERENCE STUDY RESULTS SUMMARY

prepared for
Polnet Communications, LTD.
 WPVN-CA Aurora, IL
 Facility Id: 168237
 Ch. 20 15 kW (MAX-DA)

<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 Population</u>	<u>Percentage</u>
18	WEID-LP	Elkhart, IN	BLTT-20001011AEF			--- No Interference ---		
18	WHNW-LD	Gary, IN	BSTA-20070309ACD			--- No Interference ---		
19	W19DE-D	Champaign/Urbana, IL	BDCCDTL-20061026ACW			--- No Interference ---		
19	WGN-TV	Chicago, IL	BMLCDT-20080201APP			--- No Interference ---		
19	W19CX	Sterling-Dixon, IL	BLTT-20070806AFB			--- No Interference ---		
19	W19CX	Sterling-Dixon, IL	BDFCDTT-20060330AMI			--- No Interference ---		
19	WXMI	Grand Rapids, MI	BLCDT-20030117ABD			--- No Interference ---		
19	WXMI	Grand Rapids, MI	BPCDT-20080619AKI			--- No Interference ---		
19	WMTV	Madison, WI	BLCDT-20100413AAW			--- No Interference ---		
20	K16EL	Davenport, IA	BDISDTL-20090813ACX			--- No Interference ---		
20	NEW	Chillicothe, IL	BNPDTL-20100510AGG			--- No Interference ---		
20	W20DG-D	Fort Wayne, IN	BNPDTL-20090825AVL			--- No Interference ---		
20	WHMB-DR	Indianapolis, IN	BPRM-20080619AEU			--- No Interference ---		
20	WHMB-TV	Indianapolis, IN	BPCDT-20090424ACR	2,522,189	2,398	2,398	0	0.000 %
20	WUVI-LD	West Lafayette, IN	BSTA-20100706CUS	71,530	893	1,385	492	0.688 %
20	WUVI-LD	West Lafayette, IN	BLDTL-20110120ADG	71,530	893	1,385	492	0.688 %
20	WOTV	Battle Creek, MI	BLCDT-20030721AHS	2,107,211	22,683	23,904	1,221	0.058 %
20	WOTV	Battle Creek, MI	BPCDT-20091104AEK	2,167,166	22,285	24,784	2,499	0.115 %
20	WHNE-LD	Flint, MI	BDISDTL-20101223ACD			--- No Interference ---		
20	W20DK-D	Roscommon, MI	BNPDTL-20100223ACY			--- No Interference ---		
20	W20DI-D	Traverse City, MI	BNPDTL-20100301ADA			--- No Interference ---		
20	WOTH-LD	Cincinnati, OH	BLDTL-20110128AAX			--- No Interference ---		
20	NEW	Findlay, OH	BDCCDTL-20061026AGA			--- No Interference ---		
20	WLWD-LP	Springfield, OH	BLTT-20051219ADW			--- No Interference ---		
20	WHA-TV	Madison, WI	BLEDT-20091229ACK	1,356,616	11,974	12,030	56	0.004 %
20	WMKE-LD	Milwaukee, WI	BDCCDTL-20061030AFR	1,449,643	30,135	40,310	10,175	0.702 %
21	WBKM-LP	Chana, IL	BDCCDTL-20061030AMY			--- No Interference ---		
21	WYCC	Chicago, IL	BLEDT-20030501ABC	8,979,748	18,823	57,195	38,372	0.427 %
21	WMKE-LD	Milwaukee, WI	BDISDTL-20100406AAS			--- No Interference ---		
22	W22AJ	Arlington Heights, IL	BLTT-19991020AAO			--- No Interference ---		
23	WWME-CA	Chicago, IL	BSTA-20041208ABO			--- No Interference ---		
23	WWME-CA	Chicago, IL	BPTTA-20081023AAZ			--- No Interference ---		
23	WWME-CA	Chicago, IL	BLTTA-20040129AOW			--- No Interference ---		

Exhibit 12 - Table II
INTERFERENCE STUDY RESULTS SUMMARY

prepared for
Polnet Communications, LTD.
 WPVN-CA Aurora, IL
 Facility Id: 168237
 Ch. 20 15 kW (MAX-DA)

<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>
24	WPVN-CA	Aurora, IL	BPTTA-20090817ABN			---	No Interference	---
24	WPVN-CA	Aurora, IL	BLTTL-19990716JA			---	No Interference	---
24	WHVI-LP	Valparaiso, IN	BLTTL-19921102JE			---	No Interference	---
24	WMLW-CA	Milwaukee, WI	BDISTTA-20081230ACP			---	No Interference	---