

# ***REQUEST FOR SPECIAL TEMPORARY AUTHORITY***

---

AM BROADCAST STATION KCLN  
CLINTON, IOWA  
1390 KHz  
FACILITY ID: 33055

WPW BROADCASTING, INC.

APRIL, 2014

## **REQUEST FOR SPECIAL TEMPORARY AUTHORITY**

The following engineering statement and attached exhibits have been prepared for **WPW Broadcasting, Inc.** ("WPW"), licensee of AM broadcast station KCLN at Clinton, Iowa, and are in support of their request for special temporary authority to operate that facility with parameters at variance.<sup>1</sup>

Vehicular contact was made with one of the guy wires supporting tower #2 in the array. The contact with the guy wire resulted in the collapse of this tower. As a result of this damage, WPW is unable to operate KCLN according to the technical parameters specified in its license.<sup>2</sup>

The current authorization for KCLN specifies that the facility operate on 1390 kHz utilizing a two-tower directional antenna. KCLN is a class D facility with a nominal antenna input power during daytime hours of 1.0 kW. At night, the facility is authorized to operate with the same directional pattern, but at an antenna input power of 91 Watts.

Since tower #2 in the array is no longer standing, it is impossible at this time for WPW to operate KCLN in the authorized directional mode. As a result, WPW requests a special temporary authority to operate KCLN with the undamaged tower #1 as a non-directional facility until such time as the collapsed tower can be restored, and the facility returned to directional operation. WPW respectfully requests that the initial term of the special temporary authority be no less than 180 days in length. Restoration efforts are currently underway

---

<sup>1</sup> The Facility ID for KCLN at Clinton, Iowa is 33055.

<sup>2</sup> Co-located FM station KMCN(FM) at Clinton, Iowa (Facility ID:33054) utilizes the undamaged tower #1 as the supporting structure for its transmitting antenna. The operation of KMCN(FM) is unaffected by the tower failure, and that facility will continue to operate in accordance with the terms of its license.

JEREMY RUCK & ASSOCIATES, INC.

P.O. Box 415  
221 S. 1st Avenue  
Canton, IL 61520

Tel: 309.647.1200  
Fax: 855.332.9537  
jeremyruck.com

Since KCLN is authorized to operate during daytime hours with a nominal power of 1.0 kW, WPW requests that it be granted special temporary authority to operate with a non-directional antenna input power of 250 Watts using tower #1 in the array. It should be noted that this configuration would not only cause KCLN to exceed its authorized monitor point limits, but also exceed the authorized inverse field along several azimuths.

Although the radiated field would exceed the authorized augmented standard pattern along several azimuths, this increase in radiation would not result in impermissible interference to adjacent facilities in the region. In fact, the temporary non-directional operation with an input power of 250 Watts would actually *reduce* the level of contour overlap with other facilities in the region. Exhibit E-1 is a map depicting the daytime allocation situation for KCLN based on the licensed facilities and M-3 ground conductivities for all relevant facilities. This study is tabulated in the table following Exhibit E-1. These two exhibits illustrate the current allocation/interference situation for the facility, including the amount of overlap area.

Exhibit E-3 illustrates the allocation situation that would result from the use of the single tower with an antenna input power of 0.25 kW. For KCLN, the dashed contours denoted those resulting from the licensed facility, while the solid contours denote the requested STA facilities. As demonstrated in this map, and the subsequent table, the requested technical parameters indeed reduce the level of contour overlap.

JEREMY RUCK & ASSOCIATES, INC.

P.O. Box 415  
221 S. 1st Avenue  
Canton, IL 61520

Tel: 309.647.1200  
Fax: 855.332.9537  
jeremyruck.com

It should be noted that a strict adherence to the provisions of Section 73.1680(b)(1) requiring that the radiated field in any direction would result in a situation where the predicted 5 mV/m service contour would no longer encompass of Clinton. Exhibit E-5 compares the daytime 5.0 mV/m service contours resulting from the licensed facilities, the STA facilities, and the facilities that would limit the inverse field to 68.2 mV/m at one kilometer. It is respectfully submitted that it is in the public interest to maintain the best possible signal level over the community of license without interfering with other facilities. As a result, a waiver, if necessary, of the above referenced section of the Commission's Rules is requested.

During nighttime hours, it is proposed that the facility be permitted to operate with an antenna input power of 35 Watts, rather than the 23 Watts that would result from reducing the facility to quarter-power. A study of the nighttime allocation situation for KCLN indicates that at this power level, KCLN would not increase its existing RSS limit to WGRB at Chicago, Illinois.

Following the reconstruction of the failed tower, the array will be adjusted as necessary to ensure compliance with the terms of the current authorization. As part of the reconstructive process, WPW will perform a partial proof of performance on the array. The results of this partial proof will be filed with the Commission as part of an application for direct measurement of power.

The special temporary authority requested would not constitute a significant environmental impact, and is exempt from environmental processing. The temporary facilities would utilize the remaining tower in the array. No changes to this tower are proposed. The tower is currently

JEREMY RUCK & ASSOCIATES, INC.

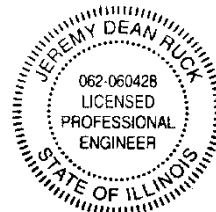
P.O. Box 415  
221 S. 1st Avenue  
Canton, IL 61520

Tel: 309.647.1200  
Fax: 855.332.9537  
jeremyruck.com

fenced appropriately per the terms of its license. The requisite fencing will be maintained during cleanup and restoration efforts.

WPW will coordinate with all other users of the site to ensure that workers and other personnel having access to the site are not exposed to levels of radiofrequency radiation in excess of the applicable safety standards. Such coordination will include, but is not necessarily limited to, a reduction in transmitter power or cessation of operation.

The preceding statement has been prepared by me, or under my direction, and is true and accurate to the best of my belief and knowledge.



Above signature is digitized copy of actual signature  
License Expires November 30, 2015

Jeremy D. Ruck, PE  
April 7, 2014

JEREMY RUCK & ASSOCIATES, INC.

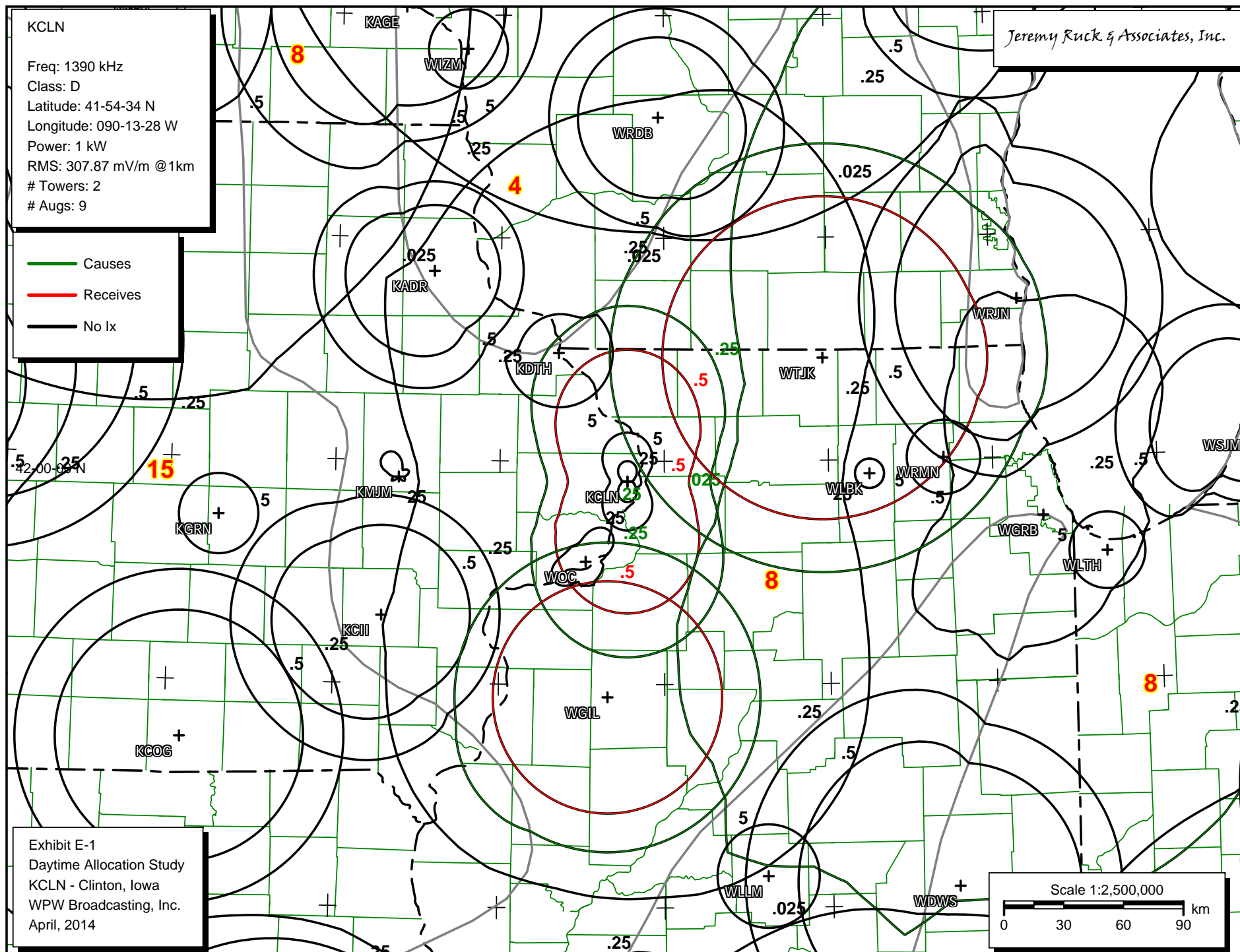
P.O. Box 415  
221 S. 1st Avenue  
Canton, IL 61520

Tel: 309.647.1200  
Fax: 855.332.9537  
jeremyruck.com

Freq: 1390 kHz  
Class: D  
Latitude: 41-54-34 N  
Longitude: 090-13-28 W  
Power: 1 kW  
RMS: 307.87 mV/m @1km  
# Towers: 2  
# Augs: 9

- Causes
- Receives
- No Ix

Jeremy Ruck & Associates, Inc.



# AM Daytime Study

Reference Station:

Call: KCLN Freq: 1390 kHz CLINTON, IA, US  
 Lat: 41-54-34 N Power: 1.0 kW  
 Lng: 090-13-28 W Theo RMS: 307.87 mV/m @ 1km  
 # of Augmentations: 9

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	127.3	0	0	0.0	0.0	0.0	0.0
2	1.000	0.0	165.0	90.0	127.3	0	0	0.0	0.0	0.0	0.0

Call	Freq	City	ST	Dist	Azi	In	Out
WGIL	1400	GALESBURG	IL	107.8	185.3	-1732.50	-2053.25
WTJK	1380	SOUTH BELOIT	IL	116.2	58.7	-2525.75	-1558.25
WOC	1420	DAVENPORT	IA	45.1	207.7	17.41	17.41
KDTH	1370	DUBUQUE	IA	72.7	331.4	24.10	24.10
KADR	1400	ELKADER	IA	143.0	316.5	46.61	41.16
KCII	1380	WASHINGTON	IA	140.9	241.0	40.58	41.97
WGRB	1390	CHICAGO	IL	210.6	96.1	-0.10	52.07
WRDB	1400	REEDSBURG	WI	182.0	5.0	61.99	54.68
WRIG	1390	SCHOFIELD	WI	333.2	8.4	58.90	73.78
WRJN	1400	RACINE	WI	216.5	66.5	97.06	102.24
KMJM	1360	CEDAR RAPIDS	IA	115.4	270.4	109.55	109.55
WDWS	1400	CHAMPAIGN	IL	262.1	141.3	102.12	110.97
WLBK	1360	DEKALB	IL	122.3	89.0	111.86	111.86
KRFO	1390	OWATONNA	MN	340.5	313.9	116.25	121.09
WRMN	1410	ELGIN	IL	160.0	86.8	131.80	131.80
KAGE	1380	WINONA	MN	261.5	334.0	133.78	132.26
KCOG	1400	CENTERVILLE	IA	259.3	239.2	134.74	141.22
WLLM	1370	LINCOLN	IL	208.8	160.5	160.19	160.19
WFIW	1390	FAIRFIELD	IL	424.0	158.2	174.83	169.31
KXFN	1380	ST. LOUIS	MO	350.8	179.2	168.80	174.04
KGRN	1410	GRINNELL	IA	207.0	264.1	177.54	177.54
WIZM	1410	LA CROSSE	WI	230.0	339.0	187.44	187.44
WDUZ	1400	GREEN BAY	WI	339.8	33.1	191.47	190.02
WOTE	1380	CLINTONVILLE	WI	318.8	22.7	214.32	204.74
KJPW	1390	WAYNESVILLE	MO	483.1	199.3	198.48	207.28
KVFD	1400	FORT DODGE	IA	334.6	279.6	198.35	211.52
WLTH	1370	GARY	IN	244.7	99.8	215.37	215.37
KFRU	1400	COLUMBIA	MO	371.7	207.7	214.62	218.47
WBIZ	1400	EAU CLAIRE	WI	339.5	341.6	226.80	219.87
WSJM	1400	ST. JOSEPH	MI	313.8	87.7	215.52	221.84
KJFF	1400	FESTUS	MO	408.6	182.0	245.34	246.93
KCIM	1380	CARROLL	IA	386.5	270.6	259.50	271.83
WZZB	1390	SEYMOUR	IN	491.2	132.9	267.62	277.79
KMNV	1400	ST. PAUL	MN	415.9	323.5	301.06	297.78
WLCM	1390	HOLT	MI	448.2	82.4	311.26	298.41
WBAT	1400	MARION	IN	408.4	113.0	299.11	304.00
WKJG	1380	FORT WAYNE	IN	439.8	104.9	319.08	329.29
WGLM	1380	GREENVILLE	MI	431.2	72.9	334.99	332.59
KXSS	1390	WAITE PARK	MN	518.2	319.7	374.14	334.53
KCNW	1380	FAIRWAY	KS	492.0	228.8	327.10	339.26
WBFN	1400	BATTLE CREEK	MI	418.5	85.7	352.52	350.47
WEOA	1400	EVANSVILLE	IN	497.4	153.3	368.82	366.55
WBLL	1390	BELLEFONTAIN	OH	571.0	109.6	340.23	384.79
WLJN	1400	ELMWOOD TOW	MI	488.1	50.9	396.34	390.63

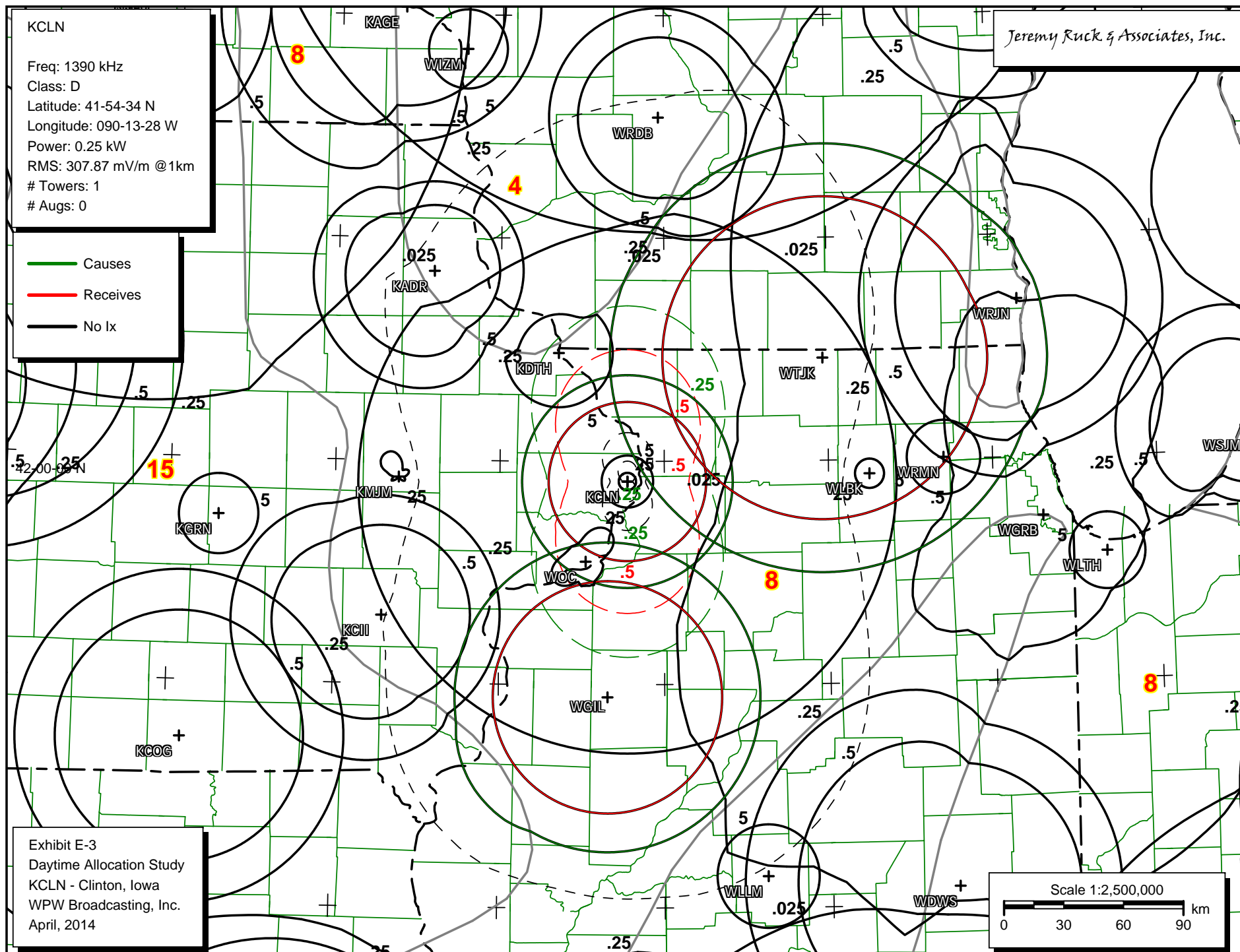
Call	Freq	City	ST	Dist	Azi	In	Out
KJAM	1390	MADISON	SD	612.8	290.0	353.08	418.34
KFFK	1390	ROGERS	AR	702.2	208.0	415.25	432.96
WTJS	1390	JACKSON	TN	705.7	170.6	459.38	445.78
WBLL	1390	GRANDVIEW HE	OH	638.3	111.4	384.08	454.68
WBLL	1390	GRANDVIEW HE	OH	638.3	111.4	406.27	464.19
KNCK	1390	CONCORDIA	KS	681.5	245.2	435.88	491.00
WANY	1390	ALBANY	KY	725.1	144.5	542.24	508.40
WMPO	1390	MIDDLEPORT-P	OH	762.8	117.6	566.86	596.31



Freq: 1390 kHz  
Class: D  
Latitude: 41-54-34 N  
Longitude: 090-13-28 W  
Power: 0.25 kW  
RMS: 307.87 mV/m @1km  
# Towers: 1  
# Augs: 0

— No lx

Exhibit E-3  
Daytime Allocation Study  
KCLN - Clinton, Iowa  
WPW Broadcasting, Inc.  
April, 2014



# AM Daytime Study

Reference Station:

Call: KCLN

Freq: 1390 kHz

CLINTON, IA, US

Lat: 41-54-34 N

Power: 0.25 kW

Lng: 090-13-28 W

Theo RMS: 307.87 mV/m @ 1km

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swrch	TL Swrch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	127.3	0	0	0.0	0.0	0.0	0.0

Call	Freq	City	ST	Dist	Azi	In	Out
WTJK	1380	SOUTH BELOIT	IL	116.2	58.7	-1589.75	-767.75
WGIL	1400	GALESBURG	IL	107.8	185.3	-247.25	-46.50
WOC	1420	DAVENPORT	IA	45.1	207.7	21.76	21.76
WGRB	1390	CHICAGO	IL	210.6	96.1	8.53	26.09
KDTH	1370	DUBUQUE	IA	72.7	331.4	32.74	32.74
KCII	1380	WASHINGTON	IA	140.9	241.0	41.27	42.88
KADR	1400	ELKADER	IA	143.0	316.5	58.63	57.09
WRDB	1400	REEDSBURG	WI	182.0	5.0	87.87	89.00
WRJN	1400	RACINE	WI	216.5	66.5	96.09	100.98
KMJM	1360	CEDAR RAPIDS	IA	115.4	270.4	107.79	107.79
WLBK	1360	DEKALB	IL	122.3	89.0	110.28	110.28
WRMN	1410	ELGIN	IL	160.0	86.8	128.14	128.14
WDWS	1400	CHAMPAIGN	IL	262.1	141.3	115.74	129.01
WRIG	1390	SCHOFIELD	WI	333.2	8.4	84.39	135.19
KCOG	1400	CENTERVILLE	IA	259.3	239.2	136.29	143.26
KRFO	1390	OWATONNA	MN	340.5	313.9	127.51	149.39
KAGE	1380	WINONA	MN	261.5	334.0	154.69	159.09
WLLM	1370	LINCOLN	IL	208.8	160.5	170.21	170.21
KGRN	1410	GRINNELL	IA	207.0	264.1	173.44	173.44
WIZM	1410	LA CROSSE	WI	230.0	339.0	197.41	197.41
KVFD	1400	FORT DODGE	IA	334.6	279.6	191.27	202.33
KXFN	1380	ST. LOUIS	MO	350.8	179.2	194.85	208.58
WSJM	1400	ST. JOSEPH	MI	313.8	87.7	207.25	211.12
WLTH	1370	GARY	IN	244.7	99.8	212.02	212.02
WDUZ	1400	GREEN BAY	WI	339.8	33.1	209.47	213.90
WOTE	1380	CLINTONVILLE	WI	318.8	22.7	236.45	234.11
WFIW	1390	FAIRFIELD	IL	424.0	158.2	196.47	235.59
KFRU	1400	COLUMBIA	MO	371.7	207.7	233.82	243.95
WBIZ	1400	EAU CLAIRE	WI	339.5	341.6	250.25	250.07
KCIM	1380	CARROLL	IA	386.5	270.6	250.14	259.71
KJPW	1390	WAYNESVILLE	MO	483.1	199.3	221.01	276.07
WLCM	1390	HOLT	MI	448.2	82.4	304.61	277.66
KJFF	1400	FESTUS	MO	408.6	182.0	271.34	281.41
WBAT	1400	MARION	IN	408.4	113.0	295.68	299.53
WZZB	1390	SEYMOUR	IN	491.2	132.9	275.31	301.87
KMNV	1400	ST. PAUL	MN	415.9	323.5	317.66	319.77
WKJG	1380	FORT WAYNE	IN	439.8	104.9	312.55	320.79
WGLM	1380	GREENVILLE	MI	431.2	72.9	331.77	328.39
WBFN	1400	BATTLE CREEK	MI	418.5	85.7	344.91	340.59
KCNW	1380	FAIRWAY	KS	492.0	228.8	333.68	347.94
WBLL	1390	BELLEFONTAIN	OH	571.0	109.6	335.00	368.53
KXSS	1390	WAITE PARK	MN	518.2	319.7	389.13	370.44
WEOA	1400	EVANSVILLE	IN	497.4	153.3	388.26	392.36
WLJN	1400	ELMWOOD TOW	MI	488.1	50.9	405.72	403.03
KJAM	1390	MADISON	SD	612.8	290.0	351.20	412.54
WBLL	1390	GRANDVIEW HE	OH	638.3	111.4	379.40	440.14
WBLL	1390	GRANDVIEW HE	OH	638.3	111.4	401.58	449.64

Call	Freq	City	ST	Dist	Azi	In	Out
KNCK	1390	CONCORDIA	KS	681.5	245.2	431.83	478.44
KFFK	1390	ROGERS	AR	702.2	208.0	433.79	492.34
WTJS	1390	JACKSON	TN	705.7	170.6	484.55	518.90
WANY	1390	ALBANY	KY	725.1	144.5	556.55	554.19
WMPO	1390	MIDDLEPORT-P	OH	762.8	117.6	564.34	588.53

