

ENGINEERING REPORT RE
APPLICATION FOR CONSTRUCTION PERMIT
FOR CLASS A TELEVISION STATION
WOCK-CA, CHANNEL 13, CHICAGO, ILLINOIS

NOVEMBER 2001

COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington)
) ss
District of Columbia)

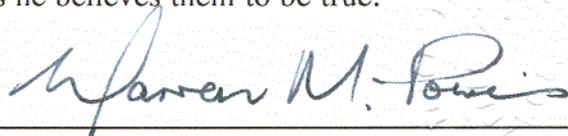
Warren M. Powis, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer of the University of Canterbury, New Zealand, a Registered Professional Engineer in the District of Columbia, the State of Virginia, the State of South Carolina, and Vice President of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005; previously employed for 15 years with the New Zealand Broadcasting Corporation; a member of the Institution of Professional Engineers New Zealand (IPENZ), the Association of Federal Communications Consulting Engineers (AFCCE), and the National Society of Professional Engineers (NSPE).

That his qualifications are a matter of record in the Federal Communications Commission;

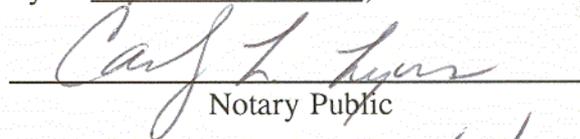
That the attached engineering report was prepared by him or under his supervision and direction and,

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.



Warren M. Powis
District of Columbia
Professional Engineer
Registration No. 8339

Subscribed and sworn to before me this 30th day of November, 2001.



Notary Public

My Commission Expires: 2/28/2003

This engineering report prepared on behalf of KM LPTV of Chicago-13, LLC, licensee of Class A television station WOCK-CA, Channel 13, Chicago, Illinois, and is in support of its application for construction permit for Class A television station WOCK-CA to change its directional antenna pattern.

WOCK-CA is licensed to operate on Channel 13 (-) with a maximum ERP of 3 kW and a radiation center of 542 meters using a composite array of Scala, Type CL-713 antennas. It is proposed to operate with separate 4-bay Scala, Type CL-713 antennas, each oriented at N 220° E and N 350° E. The transmitting site (unchanged) is at the John Hancock Building, 875 North Michigan Avenue, Chicago, Cook County, Illinois.

The NAD-27 geographic coordinates of the site are as follows:

North Latitude: 41° 53' 56"

West Longitude: 87° 37' 23"

Allocation Situation

An allocation study was performed in accordance with Sections 73.6011, 73.6012, and 73.6013 of the FCC Rules. Table I lists pertinent stations considered in the study. Exhibit 4 demonstrates compliance with the interference provisions based on the Commission's Longley-Rice terrain dependent propagation model in accordance with FCC OET Bulletin 69.

Transmitting Equipment

The following equipment will be used for the proposed operation.

Transmitter: Acrodyne, Model TRH/1KM

Antenna: Scala, Type CL-713, log periodic antennas (eight), four oriented at N 220° E and four at N 350° E (Gain=11.48, 10.6 dBd)

Transmission Line: Andrew, Type HJ7-50A, 50 meters in length, efficiency = 89.3%

The transmitter will be operated at a power output of 292.6 watts to achieve a maximum ERP of 3.0 kW. The overall structure height above ground level is 443.6 meters and 624.3 meters above mean sea level. No increase in overall height will result.

Unattended Operation

The applicant will comply with the requirements of Section 73.1300 of the FCC Rules concerning unattended operation of the TV transmitter.

EXHIBIT 4
ANALOG BROADCAST STATION PROTECTION
NOVEMBER 2001

Under Section 73.6011 of the Commission's rules, Class A television stations are required to provide the same interference protection to analog full power television stations as low power television ("LPTV") stations are required to provide to analog full power television stations under Section 74.705 of the Commission's rules. Section 74.705(e) permits LPTV stations, and therefore Class A television stations, to use Longley-Rice terrain dependent propagation prediction methods as an alternate means of demonstrating that proposed Class A television station facilities would not be likely to cause interference to TV broadcast stations, in support of a request for waiver of Section 74.705 interference protection requirements. See Section 74.705(e).

The facilities proposed by KM Communications, Inc. ("KM") for Class A television station WOCK-CA, Channel 13, Chicago, Illinois (Facility ID No. 35092) fully comply with Section 73.6011 and 74.705, except with respect to analog full power television stations WREX-TV, Channel 13, Rockford, Illinois, and WZZM-TV, Grand Rapids, Michigan. Specifically, the proposed WOCK-CA facilities would not comply with Section 74.705(d)(1) of the Commission's rules, since the ratio in dB of the field strength of the proposed WOCK-CA facilities to the Grade B (56 dBu) field strengths of WREX-TV and WZZM-TV do not meet the -28 dB requirement for offset carrier frequency operation.

However, an interference study was conducted by KM's consulting engineers using a Longley-Rice terrain dependent propagation model in accordance with the Commission's OET Bulletin 69 to determine any potential impact by WOCK-CA within the present predicted WREX-TV Grade B protected contour. The baseline study which does not include WOCK-CA found a population of 1,553,800 persons served within WREX-TV's Grade B protected contour. The study was rerun including the WOCK-CA facilities proposed herein, and found that WOCK-CA is predicted to cause new interference to a population of 2,040 persons within the WREX-TV Grade B protected contour, or 0.13% new interference, which is well within the 0.49% rounding allowance permitted by the Commission for a finding of "no new interference" when using a Longley-Rice terrain dependent propagation study.

Accordingly, KM respectfully requests a waiver of Sections 73.6011 and 74.705 of the Commission's rules, based on the results of the Longley-Rice terrain dependent propagation study presented herein, as expressly permitted by Section 74.705(e) of the Commission's rules, since the proposed WOCK-CA facilities would not be likely to cause new interference to WREX-TV.

The predicted F(50,10) 28 dBu contour from the proposed operation of WOCK-CA overlaps the predicted F(50,50) 56 dBu (Grade B contour) of WZZM-TV Grand Rapids, Michigan. As shown in Exhibit 4(a), the overlap area occurs entirely across a large body of water, Lake Michigan. Accordingly, a waiver of Sections 73.6011 and 74.705 of the Commission's Rules is hereby requested.



Lake Michigan

WZZM-TV 56 dBu

PROPOSED
28 dBu INTERFERING CONTOUR
FROM WOCK-LP

EXHIBIT 4(a)
ALLOCATION SITUATION
FOR THE PROPOSED OPERATION OF
WOCK-LP CHANNEL 13
CHICAGO, ILLINOIS
DECEMBER 2001
COHEN, DIPPELL AND EVERIST, P.C. CONSULTING ENGINEERS

0 9 18 27
Kilometers
MAP SOURCE: TIGERLINE, CEHSUS FILES, 1998

EXHIBIT 9

Environmental Statement

An evaluation has been made to determine compliance with the FCC specified standards for human exposure to radio frequency levels (“RFL”) as set forth in the OET Bulletin No. 65 (Edition 97-01). For a maximum effective radiated power of 3 kW, a radiation center of 17.5 meters above roof level, the proposed Class A TV operation would have a RFL value of $18.8 \mu\text{W}/\text{cm}^2$ (based on an antenna relative field factor of 0.3) at 2 meters above the base of the supporting tower which is well below the FCC guidelines for Channel 13 of $1000 \mu\text{W}/\text{cm}^2$. The roof level is a restricted access area, not accessible by the public. Further, John Hancock has a monitoring program to ensure site RFL compliance.

Therefore, members of the public and personnel working near the proposed transmitting facility will not be exposed to RFL values above those prescribed by the FCC. With respect to work performed near the radiating elements, the licensee will establish procedures to ensure that the workers are not exposed to RFL values in excess of the current FCC guidelines.

An environmental assessment (EA) is categorically excluded under Section 1.1307 of the FCC Rules and Regulations since the licensee indicates:

- (a)(1) The proposed facilities are not located in an officially designated wilderness area.
- (a)(2) The proposed facilities are not located in an officially designated wildlife preserve.
- (a)(3) The proposed facilities will not affect any listed threatened or endangered species or habitats.
- (a)(3)(ii) The proposed facilities will not jeopardize the continued existence of any proposed endangered or threatened species or likely to result in the destruction or adverse modification of proposed critical habitats.

- (a)(4) The proposed facilities will not affect any known districts, sites, buildings, structures, or objects significant in American history, architecture, archaeology, engineering, or culture.
- (a)(5) The proposed facilities are not located near any known Indian religious sites.
- (a)(6) The proposed facilities are not located in a flood plain.
- (a)(7) Since there will be no increase in height to the existing John Hancock Building, it will not involve a significant change in surface features of the ground in the vicinity of the tower.
- (a)(8) The existing structure/tower is not equipped with high intensity white lights.
- (b) Workers and the general public will not be subjected to RFL values in excess of the FCC guidelines. Authorized personnel will be alerted to areas of the tower where potential RFL values are in excess of the FCC guidelines outlined in OET Bulletin 65 (Edition 97-01) and Supplement A.

TABLE I
TV ALLOCATION SITUATION
FOR THE PROPOSED CHANNEL 13 LPTV OPERATION OF
WOCK-CA, CHICAGO, ILLINOIS
NOVEMBER 2001

<u>Channel</u>	<u>Call</u>	<u>City/State</u>	<u>Max. E.R.P. kW</u>	<u>HAAT meters</u>	<u>Distance km</u>
13 (-)	WOCK-CA Prop.	Chicago, IL	3.0 DA	---	---
<u>Full-Service TV Stations</u>					
12	WISN-TV	Milwaukee, WI	251	326	137.0
13 (z)	WREX-TV	Rockford, IL	316	216	140.9
13 (+)	WZZM-TV	Grand Rapids, MI	316	305	210.4
13 (-)	WTHR	Indianapolis, IN	316	299	250.2
<u>Class A/LPTV/TV Translator Stations</u>					
12	None within 100 km				
13 (+)	W13BQ	Portage, IN	0.085	---	47.1
13 (N)	K13MN	Washington, IA	0.092	---	345.3

TABLE II
DIRECTIONAL ANTENNA PATTERN
FOR THE PROPOSED OPERATION OF
WOCK-CA, CHICAGO, ILLINOIS
CHANNEL 13, 3 KW (DA)
NOVEMBER 2001

<u>Azimuth</u> N ° E, T	<u>Relative</u> <u>Field</u>	<u>Azimuth</u> N ° E, T	<u>Relative</u> <u>Field</u>	<u>Azimuth</u> N ° E, T	<u>Relative</u> <u>Field</u>
0	0.955	125	0.025	240	0.807
5	0.901	130	0.030	245	0.713
10	0.822	135	0.035	250	0.602
15	0.733	140	0.035	255	0.490
20	0.622	145	0.040	260	0.359
25	0.510	150	0.040	265	0.173
30	0.379	155	0.040	270	0.040
35	0.193	160	0.040	275	0.020
40	0.059	165	0.040	280	0.020
45	0.040	170	0.059	285	0.020
50	0.040	175	0.193	290	0.020
55	0.040	180	0.379	295	0.020
60	0.040	185	0.510	300	0.040
65	0.040	190	0.622	305	0.173
70	0.035	195	0.733	310	0.359
75	0.035	200	0.822	315	0.490
80	0.030	205	0.901	320	0.602
85	0.025	210	0.955	325	0.713
90	0.020	215	0.987	330	0.807
95	0.020	220	1.000	335	0.886
100	0.020	225	0.982	340	0.946
105	0.020	230	0.946	345	0.982
110	0.020	235	0.886	350	1.000
				355	0.987