

APPLICATION FOR LICENSE

DIGITAL CLASS A TELEVISION STATION
WEDE-CA - ARLINGTON HEIGHTS, ILLINOIS
FACILITY ID: 66978

FIRST UNITED, INC.

APRIL, 2014

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JEREMY RUCK & ASSOCIATES, INC.

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04.29.2014

APPLICATION FOR LICENSE

The following engineering statement and attached exhibits have been prepared for **First United, Inc.** ("First United"), licensee of class A television station WEDE-CA at Arlington Heights, Illinois, and are in support of their application for licensed to cover changes authorized under the outstanding construction permit for that facility.

Under FCC File No. BDFCDTA-20081014AAM, First United was authorized to flash-cut WEDE-CA from analog to digital operation. The construction permit as issued authorized the use of the existing antenna and transmission line for digital operation. Construction authorized under the construction permit has been completed, and the facility has commenced operation under program test authority as a digital class A television station.

The facility is located at Willis Tower, formerly known as Sears Tower, in downtown Chicago. The antenna is mounted to the structures at that building, which are assigned antenna structure registration number 1032959. The center of radiation for WEDE-CA is at 444 meters above mean sea level. The antenna in use by the facility is an MCI model 9552312 directional panel antenna.

The specified transmitter power output of 231 Watts, or -6.36 dBk, yields the authorized effective radiated power. The transmission line feeding the antenna has an insertion loss or attenuation of 1.47 dB. This results in an antenna input power of -7.83 dBk or 0.165 kW. The manufacturer of the antenna specifies a maximum power gain of 14.16 dB. This results in a

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maximum effective radiated power of 6.33 dBk. This value is equivalent to an effective radiated power of 4.3 kW.

The facility was constructed in accordance with the terms of the construction permit. As was previously mentioned, First United needed only to change transmitters in order to complete construction on the facility. That change has been made. No circumstances have arisen since the original grant of the flash-cut construction permit that would render any representation made in the CP application invalid. In addition, the construction permit did not specify any special conditions or restrictions.

First United will coordinate with all other users of the site to ensure that workers and other personnel are not exposed to levels of radiofrequency radiation in excess of the applicable safety standards. Willis Tower is a substantial broadcast platform with numerous broadcasters. The management of the building has established an RF safety program that is coordinated by a licensed professional engineer under contract with the building. First United follows the protocol established by Willis Tower, and ceases operation or reduces transmitter power as necessary during periods of work or maintenance.

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The preceding statement and attached exhibits have been prepared by me, or under my direction, and are 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 29, 2014

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