Cohen, Dippell and Everist, P.C.

Before The
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Expanding the Economic and Innovation	)	
Opportunities of Spectrum Through	)	GN Docket No. 12-268
Incentive Auctions	)	
Comment Sought on Competitive Bidding	)	
Procedures for Broadcast Incentive Auction	)	AU Docket No. 14-252
1000, Including Auctions 1001 and 1002	)	

Comments
on Behalf of
COHEN, DIPPELL AND EVERIST, P.C.

The following comments are submitted on behalf of Cohen, Dippell and Everist, P.C. ("CDE") and is in response to the Public Notice released by the Commission on December 17, 2014. CDE and its predecessors have practiced before the Federal Communications Commission ("FCC") for over 75 years in broadcast and telecommunications matters. The firm or its predecessors have been located in Washington, DC since 1937 and performed professional consulting engineering services to the communications industry.

The undersigned is licensed as a Professional Engineer in the District of Columbia and has been in continuous employment with this firm or its predecessors for over fifty (50) years.

It is noted that Mr. Charles Rhodes authored an article in the February 4, 2015 edition of *TV Technology*.[1] The article is entitled, "Eleven FCC Scenarios for The 600 MHz Band Plan".

[1]Pages 22 and 24, "The article indicates that Charles Rhodes is a consultant in the field of television broadcast technologies and planning."

Briefly Mr. Rhodes has redescribed Figure 1 of the broadplan scenarios contained on Page 7 in AU Docket No. 14-252 and GN Docket 12-268 which depicts the band plan scenarios associated with clearing 42 through 144 MHz of spectrum. Mr. Rhodes's Figure 1 indicates the highest remaining TV channel will be one of Channels 26 to 44 depending upon the outcome of the spectrum auction.

Figure 2 in Mr. Rhodes's article entitled, "Figure 2 Number of DTV Channels After Repacking as a Function of the Number of 5 MHz Blocks Available for Auction" under Mr. Rhodes's analysis the number of UHF television channels remaining after repacking ranges from 6 to 23.

Figure 3 of Mr. Rhodes's article is the crux of the deriving the most efficient spectrum usage per dollar to the U.S. Treasury.

Conclusion

Mr. Rhodes draws the following conclusion. The amount of spectrum available in the upcoming spectrum auction cannot be forecast or yet determined. The FCC has released 11 scenarios that cover a range of two through twelve--5 MHz pairs that could be available for broadband operators. Every scenario requires a certain amount of bandwidth to be used as guard band. These guard bands are designed to prevent interference between DTV signals and cellular signals, cellular signals and channel 37 (radio astronomy and medical telemetry), and cellular uplink and downlink signals. The amount of bandwidth required for guard bands varies from a low of 14 MHz to a high of 28 MHz. Figure 3 of Mr. Rhodes's article shows the "lost spectrum" as a function of the number of 5 MHz pairs. This "lost spectrum" is bandwidth the FCC will have to purchase from broadcasters. This lost spectrum will not be able to be resold to

broadband operators. The optimal scenario to minimize lost spectrum is when seven 5 MHz pairs are made available to broadband operators. Any scenario with eight or more pairs has more lost spectrum than any scenario with seven or less pairs. It will be more difficult for the FCC to recoup expenses if the FCC has to purchase more lost spectrum.

Mr. Rhodes further indicates in addition, a wider range of available spectrum for cellular providers to operate means that the cellular devices must be able to operate on a wider range of frequencies. This is a problem that must be solved with hardware. More hardware means larger devices that use more energy, reducing the convenience and utility of cellular devices.

Respectfully Submitted,

Donald G. Everist

Date: February 20, 2015