

Remarks of Gary M. Epstein

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First, I want to thank Patrick Maines and the Media Institute for inviting me to join you today to talk about the broadcast television spectrum incentive auction. I am also pleased to see so many familiar and venerable faces in the audience. But I mostly want you all to know how honored I am to be back at the FCC, working with Chairman Genachowski, the other Commissioners, and the FCC staff on the very important and innovative incentive auction proceeding.

As you know, the Commission just kicked-off the incentive auction rulemaking on September 28. This item is a critical part of meeting our country's need for more spectrum for flexible use as we look to ensure that the speed, capacity, and accessibility of our wireless broadband networks keeps pace with the increasing demands of our fast-paced, mobile economy. These networks need more spectrum in order to support the critical economic, public safety, health care, and other indispensable services on which we all increasingly rely. There is no doubt about it, meeting this challenge is essential to continuing U.S. leadership in technological innovation, growing our economy, and maintaining our global competitiveness.

Building from the 2010 National Broadband Plan's recommendations, the FCC has worked to free up spectrum for wireless broadband use through traditional approaches

such as auctions and working with other federal agencies to clear and reallocate government spectrum. At the same time, the Commission has removed regulatory and other barriers and pursued numerous innovative efforts to facilitate the deployment of wireless networks and enable more efficient use of spectrum. These efforts include expanding the reach of robust, affordable broadband by: (1) easing and expediting access to utility poles, rights of way, and other infrastructure; (2) modernizing and refocusing the Universal Service Fund and the intercarrier compensation systems to make affordable broadband available to all Americans; and (3) establishing the Mobility Fund to finance the expansion of current-generation or better wireless broadband service into currently unserved areas.

But we are running out of “low hanging fruit” and more creative thinking is required. The National Broadband Plan thus introduced the idea of incentive auctions as a tool to help meet the nation’s spectrum needs. Incentive auctions are a voluntary, market-based means of repurposing spectrum by encouraging licensees to voluntarily relinquish spectrum usage rights in exchange for a share of the proceeds from an auction of new licenses to use the repurposed spectrum. The incentive auction idea is the latest in a series of world-leading spectrum policies pioneered in the U.S., including unlicensed spectrum uses such as WiFi, Bluetooth, near field communication, and other innovations and, of course, the original FCC spectrum auctions in the 1990s. In February, Congress authorized the Commission to conduct incentive auctions, and directed that we use this innovative tool for a single incentive auction of broadcast television spectrum. We are actively working towards holding this auction in 2014.

Some critics have claimed that incentive auctions will be too complex and won't work. Critics were making these claims before we released the NPRM, they were making them before Congress passed the Spectrum Act authorizing incentive auctions, and, as a matter of history, some made the same allegations in 1993 when Congress first gave the FCC the authority to auction spectrum licenses.

I was there -- it took eight long years from then-FCC Chairman Fowler's first call for wireless auction authority to legislation. After a long period of costly, time consuming and utterly unproductive comparative hearings and a disastrous experience with lotteries, the time finally came and the FCC received authority to award licenses through competitive bidding. Now, many years after the Commission held its first spectrum auction in 1994 under then-Chairman Hundt, the once-controversial auction policy is widely heralded as an unqualified success. Since those humble beginnings, the Commission has conducted over 80 spectrum auctions which together have raised over \$50 billion for the U.S. Treasury.

Now, Congress' passage of the Spectrum Act in 2012 and the authorization for incentive auctions gives the FCC another opportunity for the successful implementation of a novel program for increasing spectrum efficiency and improving the licensing process. We at the Commission do not doubt the challenges we face, but we are determined to succeed.

To this end, we are trying to replicate the success we achieved with the original auction design by initiating a dialog between the agency and outside experts in order to address the sometimes complex economic, engineering, and legal issues undergirding the incentive auction. The lessons from the current auctions process will guide us as we implement this important legislation. The FCC has consulted with some of the world's leading economics and auctions experts to begin the process of designing the incentive auction and, with our NPRM, we seek comment from experts around the country to further improve, refine, and even replace our current proposals. Just as public input helped the original spectrum auctions reach unexpected heights, we believe that collaboration between the government, industry, leading academics, consumers and others will lead to similar success for the incentive auction.

Thus, the purpose of the Incentive Auctions Notice is to develop a rulemaking record that will enable us to meet the challenges presented by the Spectrum Act's unique grant of incentive auction authority to the Commission. It is important that we all recognize that the broadcast television spectrum incentive auction will be the first such auction ever attempted worldwide. It will be a groundbreaking event for the broadcast television, mobile wireless, and technology sectors of our economy. It presents a significant financial opportunity for broadcasters who choose to participate. We also are well aware of the valuable service provided by broadcasters who remain on the air and will continue providing the public with local, free over-the-air television service. At the same time, the spectrum reclaimed through the incentive auction will promote economic growth and enhance America's global competitiveness, increase the speed, capacity and ubiquity of

mobile broadband service, and accelerate the smartphone and tablet-led mobile revolution, benefitting consumers and businesses throughout the country. This proceeding is an important component of the Commission's commitment and efforts to make additional licensed and unlicensed spectrum available for broadband.

The incentive auction of broadcast television spectrum will have three major pieces: (1) a "reverse auction" in which broadcast television licensees submit bids to voluntarily relinquish spectrum usage rights in exchange for payments; (2) a reorganization or "repacking" of the broadcast television bands in order to free up a portion of the UHF band for other uses; and (3) a "forward auction" of initial licenses for flexible use of the newly available spectrum. Each of the three pieces presents distinct policy, auction design, implementation and other issues, and the statute in a number of cases imposes specific requirements for each piece. At the same time, all three pieces are interdependent: the amount of spectrum available in the forward auction will depend on reverse auction bids and repacking, winning reverse auction bidders will be paid from the forward auction proceeds, and our repacking methodology will help to determine which reverse auction bids we accept and what channels we assign the broadcast stations that remain on the air. For the incentive auction to succeed, all three pieces must work together, which requires a careful balancing of all interests.

Although the processes involved in conducting the incentive auction may be complex, we have proposed a structure that would place the overwhelming share of the computational burden on the Commission itself. Therefore, while the machinery "under the hood" may

require auction design experts, each part of the incentive auction is designed to be straight-forward from the bidder's perspective.

In the NPRM we seek comment on a variety of different auction design issues, each with its own set of trade-offs. For both the reverse and forward auctions, we invite comment on different procedures to collect bids, determine which bids are accepted, and what each bidder pays or receives in payment.

We intend the incentive auction to be an open process and accessible to as broad a range of participants as practicable and allowable under the Spectrum Act. Therefore, although the Act limits eligibility to participate in the reverse auction to commercial and noncommercial full power and Class A broadcast television licensees, we invite comment on how to design the incentive auction so as to facilitate the participation of a wide array of broadcasters and make it as easy as possible for them to submit successful bids. We also seek comment on whether the bidding options outlined by the Spectrum Act are sufficient, or whether we should provide additional bid options, such as bids for broadcast licensees to voluntarily accept additional interference.

The repacking process is the lynchpin joining the reverse and forward auctions and will heavily influence the determination of winners in the reverse auction. The Spectrum Act provides that the FCC must repack those television stations that: (1) do not bid in the reverse auction or, (2) if they bid, their bids are not accepted, while also obligating us to

undertake certain significant efforts to protect the coverage areas and populations served of such stations.

What repacking means is reorganizing the broadcast television bands so that the television stations that remain on the air after the incentive auction occupy a smaller portion of the UHF band. Repacking will help us configure a portion of the UHF band into contiguous blocks of spectrum suitable for flexible use. Therefore, by determining what television stations we can repack and where, the repacking methodology we establish will be an essential element in determining which reverse auction bids we accept and the channel assignments of those stations that will continue broadcasting after the incentive auction is completed.

The forward auction will resemble prior, standard, FCC spectrum auctions, but with some critical differences. Because the forward auction is interdependent with the reverse auction and the repacking, there is no way for us to know in advance the amount of spectrum we can make available in the forward auction, the specific frequencies that will be available and availability may vary by geographical area. Needless to say, this complicates things a bit.

First, it may mean that it makes sense for us to conduct the forward auction concurrently with the reverse auction. The two auctions could be in stages. This would have the

advantage of providing reverse and forward auction bidders with relevant information from the other side of the market while they are bidding.

Second, unlike in standard spectrum auctions, the forward auction will require a flexible band plan. Instead of a single band plan with identified frequencies, a set number of spectrum blocks and a uniform set of geographic area licenses, the auction design must provide a framework that is flexible enough to accommodate indeterminate, and varying amounts of newly available spectrum in different geographic areas.

We have proposed a band plan that uses fungible 5 megahertz blocks, and in which the uplink band would begin at channel 51 and expand downward toward channel 37, depending on the amount of reclaimed spectrum, and the downlink band would begin at channel 36 and likewise expand downward. We propose establishing 6-10 megahertz guard bands between mobile broadband use and broadcast use, which we believe to be “technically reasonable” as required by the Spectrum Act, and propose to make this spectrum available for unlicensed use. Because we expect to reclaim different amounts of spectrum in different geographic areas, our proposed band plan accounts for such variation by keeping the downlink spectrum band consistent nationwide while allowing variations in the amount of uplink spectrum available in any geographic area. This enables us to simultaneously allow more broadcasters the opportunity to voluntarily relinquish their spectrum usage rights, allow wireless providers to obtain additional wireless spectrum, and help ensure as a technical matter that wireless providers would be able to offer mobile devices that can operate across the country, thereby minimizing

device cost and interoperability concerns, and allowing for greater economies of scale. That said, we have proposed and are seeking comment on a number of alternative band plan and guard band approaches.

As many of you are probably aware, the Commission has long considered white spaces and unlicensed spectrum a critical part of the wireless broadband ecosystem. Therefore, in the NPRM, we propose measures that, taken together, would make a substantial amount of spectrum available for unlicensed uses, including a significant portion that would be available on a uniform nationwide basis for the first time. Television white spaces will continue to be available for unlicensed use in the repacked television band, and we propose making two channels currently designated for wireless microphone use available for white space devices. In addition, we propose to make the guard band spectrum in our proposed 600 MHz band plan available for unlicensed use, and propose to allow unlicensed operations in channel 37, with protections for incumbent radioastronomy and wireless medical telemetry operations.

Finally, we understand that the incentive auction process has the potential to significantly change the wireless broadband landscape; however, we believe that it is nonetheless possible to accomplish this while creating tremendous benefits for those broadcast television licensees that seek to participate in the auction and minimal disruptions for those that do not. We therefore ask how to implement the repacking and clear the reclaimed spectrum as expeditiously as possible while minimizing disruption to broadcast television stations and their viewers. In particular, we propose streamlined broadcast

license modification procedures, invite comment on reasonable deadlines for stations to transition to any new channel assignments or cease broadcasting, and propose to allow stations eligible for reimbursement of relocation costs to elect between actual cost-based payments or advance payments based on estimated costs.

We also are very much focused on the outreach efforts the Commission must undertake in order to ensure an orderly transition and minimize disruptions in service to consumers. We have already launched our Broadcaster LEARN (“Learning Everything About Incentive Auctions Now”) Program to ensure that broadcasters have available to them the information they need to best participate in this proceeding, but we are always striving to provide better outreach. We are planning our first Broadcaster LEARN Workshop for October 26th at the Commission, and other workshops and webinars will follow.

Together, we are shaping policies that could revolutionize how spectrum is allocated around the world. Just like in the early 90s, we believe it is critical to work with all interested parties to develop a thorough record and to carefully balance all interests. Our goal is to repurpose the maximum amount of the 600 MHz band spectrum for flexible licensed and unlicensed use in order to unleash investment and innovation, benefit consumers, drive economic growth, and enhance our global competitiveness, while at the same time preserving a healthy broadcast television service. We will only be able to achieve these goals with your help. We look forward to your comments and assistance in ensuring that this auction process is a success for us all.